Available at
www.ElsevierComputerScience.com
POWERED BY SCIENCE DIRECT®

Signal Processing 85 (2005) 2233–2303

SIGNAL PROCESSING

www.elsevier.com/locate/sigpro

Bibliography on cyclostationarity

Erchin Serpedin[a,*], Flaviu Panduru[a], Ilkay Sarı[a], Georgios B. Giannakis[b]

[a] *Department of Electrical Engineering, Texas A&M University, College Station, TX 77843-3128, USA*
[b] *Department of Electrical and Computer Engineering, University of Minnesota, 200 Union Street SE, Minneapolis, MN 55455, USA*

Received 19 August 2004; received in revised form 9 May 2005
Available online 2 June 2005

Abstract

The present bibliography represents a comprehensive list of references on cyclostationarity and its applications. An attempt has been made to make this bibliography complete by listing most of the existing references up to the year 2005 and by providing a detailed classification group.

Keywords: Cyclostationarity; Cyclostationary; Periodically correlated processes; Cyclic correlation; Spectral correlation; Cyclic moments; Higher-order cyclostationarity

Contents

*Corresponding author. Tel.: +1 979 458 2287; fax: +1 979 862 4630.
E-mail addresses: erchin@spcom.tamu.edu, serpedin@ee.tamu.edu (E. Serpedin), fpanduru@wclf.tamu.edu (F. Panduru), ilkay@ee.tamu.edu (I. Sarı), georgios@ece.umn.edu (G.B. Giannakis).

0165-1684/$ - see front matter
doi:10.1016/j.sigpro.2005.05.002

Introduction

Cyclostationary processes are those signals whose statistics vary almost periodically, and they are present in numerous physical and man-made processes: ultrasonic imaging of materials and biological tissues, medicine (EEG, ECG, circadian rhythm), solid state and plasma physics, radio-astronomy, mechanics (vibration and noise analysis for condition-based monitoring of rotating machineries: engines, turbines), radar, sonar, telemetry, and communications systems, modeling and performance evaluation of the noise figure in electronic and optic devices, etc. In communication systems, operations like sampling, modulation, mixing, multiplexing, coding, and scanning create an information bearing signal with periodic or almost periodic characteristics; in ultrasonic imaging, regular scatterer spacings induce a quasi-periodicity on ultrasonic pulse echo scans; in electronics, noise at the output of a nonlinear electronic device is excited by periodic signals (noise currents in MOSFET vary periodically with the oscillating waveform) and many circuits present time-varying operating points (mixers, oscillators, samplers, and switched filters); in climatology, presence of rhythmic or seasonal behavior in nature results in repetitive climatological data; in rotating machinery vibration signals produced by IC engines have cyclic nature. In short, cyclostationary signals are frequently encountered in a broad range of applications and since exploitation of the periodic features present in cyclostationary signals generally leads to algorithms with substantially improved performance relative to the case when the processed signals are viewed as stationary, cyclostationary signals appear as the most suited framework for modeling and processing such periodically correlated processes. In literature, cyclostationary processes are named in multiple different ways such as periodically correlated, periodically nonstationary, periodically nonstationary or cyclic correlated processes.

Historically, it appears that Bennett (1958) [77] observed for the first time the presence of cyclostationary signals in the design of synchronization algorithms for communications systems. Shortly after (1959–1980), several mathematicians from the former Soviet Union (Gladyshev, Gudzenko, Dragan, etc.) introduced key concepts for representation of cyclostationary processes [345–350,556–559,585,586]. More specifically, in 1959 Gudzenko [586], presented a study on non-parametric spectral estimation of cyclostationary processes. Later in 1961 and 1963, Gladyshev [556,559], worked on spectral analysis recognizing relation between periodically correlated processes and stationary vector sequences, and he also introduced the concept of almost periodically correlated processes. In 1963, Nedoma [1005] presented cycloergodicity for cyclostationary processes with single period and later in 1983, Boyles and Gardner [145] extended it to general cyclostationary processes with multiple periods. After Bennett's first usage of cyclostationarity in communication context, Franks (1969) [424] devoted a relatively detailed section of his book to cyclostationarity in communication. Then, in 1969 Hurd's thesis [663] appeared as a very good introduction to continuous time cyclostationary processes. In 1975, Gardner and Franks [449] studied benefits of series representation of cyclostationary processes especially in the context of optimum filtering. First comprehensive treatment of cyclostationarity in communication and signal processing appeared in Gardner's book [452] in 1985. In 1987, Gardner presented his nonprobabilistic statistical theory of

cyclostationarity in [461]. In parallel, Giannakis and Dandawate [295,297,547], approached cyclostationarity within the framework of stochastic processes. In 1992, Spooner [1272] considered the theory of higher-order cyclostationarity.

As the theory of cyclostationary developed, lots of related works appeared in many different areas such as climatology in Hurd [676], hydrology in Kacimov [763], medicine and biology in Finelli [413], oceanology in Dragan [352], economics in Pagano [1047], mechanics in Sherman [1241] and many fields in communication and signal processing like crosstalk in Campbell [173] and parameter estimation in Gardner [461]. Also, the last decade marked a renewed interest in cyclostationarity through the pioneering works of Tong [1324], [1327], Tugnait [1361], Ding [333] and Giannakis [547], which generated an intensive research activity in the area of blind estimation and equalization of communications channels.

In short, after the early treatment, mainly two research groups have contributed significantly in USA to the theory and applications of cyclostationary signal processing in the engineering community, namely the research centers of Professors W. Gardner and G.B. Giannakis. Basically, Gardner builds the theory of CS signals within a "nonprobabilistic" approach, referred to as the fraction-of-time (FOT) approach [461]. In contrast to the FOT-approach, Giannakis assumes a probabilistic approach, namely the framework of stochastic processes [295,297,547]. Fundamental research contributions in the area of cyclostationary signal processing were also reported by Izzo and Napolitano [713–734].[1]

The authors hope that this bibliography on cyclostationarity will help the researchers, especially the ones from the signal processing and communications communities, to find new research problems and interesting practical applications. To the best knowledge of the authors, this bibliography appears to be the most complete source of references on cyclostationary processes. The authors have also tried to fit the presented references in a classification group and to design a detailed classification group. Despite authors' huge efforts to include all the existing references that deal with cyclostationarity, a number of references might have not been included. We would like to apologize in advance to all the researchers whose works have not been cited in this bibliography.

[1]For more detailed historical remarks the reader is encouraged to consult the reference [461].

Classification

1. Statistical theory of cyclostationarity

1.1. Theory of periodically and almost periodically correlated processes

[28] [35] [36] [42] [77] [80] [95] [134] [136] [261] [280] [312] [314] [317] [320] [345] [347] [348] [353] [359] [373] [393] [400] [473] [491] [547] [557] [558] [640] [642] [665] [670] [680] [686] [689] [712] [731] [733] [735] [766] [772] [778] [804] [805] [843] [909] [913] [967] [970] [1007] [1058] [1134] [1137] [1147] [1165] [1225] [1255] [1272] [1279] [1280] [1281] [1310] [1392] [1396] [1446] [1496] [1497] [1501] [1506]

1.2. Stochastic processes theory

[26] [27] [30] [36] [37] [42] [50] [103] [135] [291] [346] [414] [429] [449] [450] [458] [460] [473] [480] [585] [641] [642] [643] [644] [645] [666] [667] [673] [675] [677] [765] [822] [845] [907] [962] [964] [995] [1018] [1021] [1372] [1401] [1403] [1444] [1446] [1455] [1494] [1556]

1.3. Time series theory

[25] [37] [46] [107] [136] [151] [152] [157] [296] [306] [355] [370] [418] [429] [430] [453] [456] [466] [467] [470] [472] [476] [480] [482] [486] [489] [490] [492] [513] [523] [529] [536] [541] [542] [547] [633] [667] [676] [687] [694] [695] [723] [724] [727][728] [730] [732] [733] [788] [852] [897] [898] [899] [934] [984] [995] [999] [1047] [1065] [1096] [1123] [1224] [1239] [1273] [1276] [1280] [1282] [1285] [1288] [1303] [1318] [1335] [1382] [1383] [1445] [1558]

1.4. Ergodic theory of cyclostationary sequences

[145] [480] [582] [583] [645] [848]

1.5. Tests for cyclostationarity

[49] [154] [156] [157] [159] [161] [289] [295] [385] [454] [547] [573] [671] [682] [691] [983] [1100] [1144] [1383] [1556]

1.6. Stationarization

[83] [171] [172] [181] [183] [438] [450] [457] [458] [663] [664] [925] [960]

1.7. EOF—empirical orthogonal functions

[788] [789] [790] [791] [792] [793]

1.8. Random fields

[29] [318] [354] [392] [444] [685] [688] [844]

1.9. Law of large numbers

[171] [172] [444] [854] [909]

1.10. Asymptotic normality

[285] [288] [296] [316] [319] [678] [847] [849] [1146] [1148] [1383] [1548]

1.11. Second and higher-order statistics

1.11.1. SOCS—Second-order cyclostationarity

[7] [10] [12] [56] [59] [68] [70] [72] [124] [137] [146] [147] [148] [223] [224] [231] [234] [251] [255] [291] [330] [331] [333] [334] [404] [405] [409] [466] [470] [478] [481] [487] [491] [504] [507] [510] [520] [536] [550] [552] [555] [580] [611] [628] [673] [678] [685] [687] [688] [694] [771] [798] [799] [807] [818] [843] [863] [864] [867] [870] [871] [874] [883] [890] [907] [916] [920] [921] [923] [924] [1024] [1046] [1070] [1114] [1115] [1194] [1201] [1309] [1320] [1321] [1322] [1324] [1327] [1328] [1335] [1336] [1359] [1361] [1365] [1387] [1418] [1421] [1457] [1525] [1552]

1.11.2. HOCS—higher-order cyclostationarity

[16] [26] [39] [56] [74] [109] [139] [142] [144] [178] [205] [223] [224] [256] [275] [279] [281] [283] [284] [285] [286] [287] [288] [289] [291] [292] [293] [296] [297] [298] [335] [336] [388] [401] [402] [403] [404] [405] [408] [409] [410] [411] [418] [421] [427] [470] [478] [488] [489] [490] [503] [507] [519] [525] [526] [527] [528] [531] [535] [536] [538] [539] [541] [542] [564] [615] [678] [701] [719] [722] [723] [724] [725] [727] [728] [729] [732] [734] [745] [747] [748] [797] [853] [854] [855] [869] [873] [886] [925] [926] [927] [928] [937] [938] [939] [942] [943] [989] [990] [991] [992] [993] [994] [996] [999] [1000] [1053] [1070] [1081] [1082] [1092] [1098] [1101] [1148] [1159] [1194] [1195] [1196] [1197] [1226] [1228] [1231] [1232] [1234] [1235] [1236] [1237] [1263] [1271] [1272] [1273] [1274] [1275] [1276] [1280] [1281] [1282] [1283] [1284] [1314] [1338] [1340] [1341] [1350] [1362] [1442] [1463] [1464] [1504] [1505] [1490] [1539] [1544] [1552] [1554] [1557] [1559]

1.11.3. Cyclic correlation

[7] [19] [20] [92] [252] [256] [297] [371] [432] [433] [462] [470] [473] [482] [511] [524] [537] [547] [550] [551] [556] [559] [599] [600] [610] [672] [676] [785] [856] [883] [890] [919] [925] [934] [945] [946] [1059] [1060] [1126] [1162] [1181] [1182] [1195] [1196] [1309] [1402] [1418] [1431] [1439] [1471] [1503] [1509] [1530] [1532] [1539]

2. Signal processing

2.1. Estimation

2.1.1. Parameter estimation

[7] [17] [27] [43] [85] [86] [92] [127] [242] [246] [269] [270] [282] [283] [310] [312] [313] [319] [431] [445] [447] [448] [451] [476] [478] [511] [528] [529] [536] [541] [547] [551] [552] [574] [594] [597] [605] [648] [667] [678] [777] [809] [820] [823] [834] [895] [923] [948] [993] [994] [997] [998] [1001] [1006] [1027] [1125] [1126] [1188] [1217] [1227] [1229] [1230] [1232] [1235] [1300] [1331] [1335] [1336] [1362] [1407] [1410] [1432] [1543] [1556]

2.1.2. General spectral analysis

[14] [27] [29] [30] [32] [44] [53] [79] [106] [109] [155] [179] [180] [182] [183] [216] [308] [311] [312] [316] [318] [341] [346] [382] [383] [389] [396] [397] [415] [461] [493] [538] [585] [615] [634] [669] [672]

[711] [752] [754] [797] [847] [849] [875] [908] [985] [986] [979] [1000] [1002] [1003] [1008] [1022] [1023] [1065] [1067] [1097] [1103] [1131] [1132] [1133] [1160] [1162] [1164] [1271] [1275] [1329] [1330] [1331] [1332] [1333] [1334] [1403] [1424] [1444] [1455] [1541] [1542] [1550]

2.1.3. Spectral redundancy

[73] [344] [478] [620] [656] [922] [1377] [1378]

2.1.4. Harmonics retrieval

[251] [256] [259] [287] [314] [389] [519] [521] [533] [535] [541] [683] [853] [893] [902] [1399] [1442] [1507] [1537] [1538] [1539] [1540] [1547] [1548] [1549] [1551]

2.1.5. Spectral line generation

[105] [190] [390] [453] [455] [465] [947] [1097] [1253] [1273]

2.1.6. Doppler spectrum

[44] [269] [415] [552] [660] [733] [769] [1503]

2.1.7. Spectral correlation analysis

[3] [18] [19] [21] [22] [23] [42] [106] [159] [161] [206] [215] [242] [270] [332] [341] [342] [343] [385] [393] [453] [454] [455] [456] [457] [458] [459] [460] [461] [463] [464] [465] [468] [473] [474] [475] [477] [478] [482] [485] [497] [499] [513] [548] [560] [579] [580] [607] [612] [616] [620] [656] [666] [674] [682] [684] [717] [718] [754] [868] [910] [957] [1002] [1003] [1077] [1109] [1123] [1134] [1186] [1270] [1295] [1309] [1313] [1326] [1376] [1378] [1387] [1400] [1401] [1402] [1486] [1487] [1489]

2.1.8. Periodogram

[156] [625] [643] [933] [999] [1002] [1003] [1160] [1162]

2.1.9. Timing estimation

[73] [81] [111] [115] [150] [164] [250] [382] [390] [411] [425] [426] [446] [500] [524] [547] [549] [550] [648] [786] [821] [828] [878] [890] [891] [892] [896] [901] [916] [917] [954] [980] [987] [1020] [1050] [1061] [1062] [1097] [1102] [1121] [1126] [1200] [1214] [1219] [1220] [1221] [1244] [1274] [1315] [1316] [1358] [1414] [1415] [1418] [1419] [1420] [1421] [1483] [1503] [1533] [1535] [1546]

2.1.10. Jitter

[180] [197] [320] [379] [380] [381] [383] [425] [576] [595] [626] [627] [682] [786] [813] [837] [947] [1020] [1097] [1220] [1221] [1244] [1444]

2.1.11. Carrier frequency offset estimation

[5] [48] [75] [76] [81] [105] [111] [115] [250] [251] [254] [257] [258] [259] [260] [267] [268] [275] [276] [315] [416] [426] [439] [520] [541] [549] [550] [651] [657] [863] [901] [916] [918] [936] [954] [981] [988] [989] [990] [992] [1061] [1119] [1126] [1200][1201] [1208] [1210] [1211] [1212] [1213] [1214] [1215] [1216] [1218] [1222] [1414] [1415] [1416] [1417] [1418] [1509] [1516] [1534] [1544] [1551]

2.1.12. Clock recovery

[47] [440] [655] [868] [945] [946] [981]

2.1.13. Sequence estimation

[252] [761] [762] [1477]

2.1.14. Channel estimation

[9] [14] [24] [66] [68] [69] [72] [112] [113] [116] [139] [148] [169] [175] [228] [229] [231] [235] [246] [248] [251] [331] [332] [333] [334] [360] [361] [406] [479] [497] [516] [518] [532] [537] [544] [545] [546] [588] [589] [593] [599] [611] [618] [619] [650] [697] [718] [721] [782] [828] [857] [859] [860] [864] [865] [883] [900] [904] [922] [949] [961] [1004] [1051] [1070] [1088] [1089] [1091] [1092] [1094] [1114] [1115] [1181] [1193] [1205] [1207] [1208] [1210] [1211] [1298] [1320] [1321] [1322] [1324] [1325] [1326] [1327] [1349] [1357] [1359] [1361] [1364] [1365] [1366] [1367] [1368] [1369] [1422] [1457] [1473] [1482] [1492] [1493] [1552]

2.1.15. ML—maximum likelihood framework

[81] [110] [216] [267] [268] [441] [455] [487] [528] [552] [597] [605] [817] [845] [855] [890] [940] [991] [1189] [1191] [1270] [1283] [1290] [1291] [1421] [1498] [1509]

2.1.16. CRB—Cramer–Rao bound

[551] [552] [890] [994] [1185] [1186] [1188] [1189] [1291] [1421] [1509] [1547] [1548] [1552]

2.1.17. MMSE—minimum mean square error framework

[5] [6] [94] [190] [232] [236] [245] [368] [475] [507] [514] [516] [517] [696] [777] [829] [905] [959] [974] [1074] [1157] [1224] [1240] [1285] [1372] [1429] [1447] [1459]

2.1.18. Convergence rate of iterative algorithms

[707] [739] [853] [866] [880] [976] [1025] [1087] [1249] [1250] [1337]

2.2. Detection

[3] [16] [31] [87] [94] [127] [153] [166] [167] [185] [206] [208] [262] [270] [284] [290] [294] [295] [366] [384] [388] [465] [473] [481] [487] [499] [501] [502] [503] [526] [548] [578] [597] [607] [630] [631] [671] [696] [713] [715] [716] [717] [792] [798] [861] [868] [879] [876] [890] [906] [923] [972] [977] [991] [1016] [1020] [1043] [1044] [1045] [1112] [1129] [1136] [1142] [1143] [1145] [1146] [1147] [1148] [1203] [1230] [1232] [1240] [1251] [1254] [1261] [1269] [1270] [1274] [1276] [1278] [1291] [1293] [1301] [1313] [1343] [1385] [1423] [1425] [1426] [1436] [1443] [1445] [1449] [1479] [1502] [1556]

2.3. System identification

[8] [9] [59] [67] [81] [104] [137] [138] [146] [147] [205] [209] [210] [211] [234] [279] [281] [286] [297] [398] [418] [469] [486] [494] [527] [539] [555] [574] [579] [610] [628] [687] [712] [851] [867] [869] [872] [873] [877] [941] [942] [943] [1024] [1026] [1085] [1090] [1093] [1180] [1206] [1296] [1297] [1328] [1329] [1330] [1332] [1333] [1334] [1350] [1408] [1431]

2.3.1. Blind identification

[52] [56] [137] [234] [251] [335] [408] [537] [588] [589] [628] [697] [782] [799] [817] [860] [949] [1004] [1037] [1051] [1181] [1193] [1206] [1296] [1325] [1361] [1364] [1365] [1366] [1369] [1473]

2.3.2. Source separation and identification

[3] [12] [55] [208] [301] [405] [540] [547] [652] [655] [694] [738] [740] [871] [1238] [1251] [1504] [1532]

2.3.3. BSS—blind source separation

[10] [11] [12] [21] [22] [23] [56] [190] [220] [224] [225] [234] [263] [401] [402] [403] [404] [407] [408] [409] [611] [653] [700] [737] [739] [870] [874] [1039] [1078] [1158] [1191] [1458] [1411] [1412] [1413]

2.3.4. Modulation classification

[74] [110] [284] [336] [337] [466] [481] [487] [526] [528] [798] [923] [925] [926] [927] [928] [973] [1084] [1149] [1202] [1282] [1284]

2.4. Prediction

[97] [98] [99] [151] [274] [328] [478] [595] [635] [773] [793] [852] [861] [900] [908] [912] [931] [962] [965] [966] [967] [1010] [1026] [1087] [1258] [1364] [1366] [1369] [1464] [1466] [1468]

2.5. Period analysis

2.5.1. Period determination

[154] [157] [295] [625] [632] [816] [932] [933] [940] [1267] [1314] [1498]

2.5.2. Almost periodic functions and processes

[96] [101] [292] [307] [356] [624] [669] [675] [682] [770] [811] [886] [1031] [1168] [1171] [1172] [1173] [1174] [1175] [1176] [1177] [1234] [1335]

2.6. Signal processing systems

2.6.1. Multirate systems

[1] [44] [67] [81] [517] [518] [569] [570] [594] [618] [652] [722] [727] [1023] [1122] [1156] [1157] [1178] [1179] [1203] [1285] [1311] [1373]

2.6.2. Signal deconvolution

[50] [196] [217] [264] [611] [700] [703] [1166] [1521]

2.6.3. Missing observations

[282] [285] [292] [370] [529] [536] [1067]

2.6.4. Oversampling

[255] [256] [257] [258] [400] [412] [435] [446] [520] [547] [550] [565] [600] [601] [701] [710] [866] [905] [938] [1048] [1124] [1126] [1181] [1201] [1296] [1347]

[1357] [1358] [1359] [1361] [1362] [1373] [1418] [1428] [1493] [1552]

2.6.5. Nonlinear systems
[42] [163] [186] [193] [249] [266] [322] [323] [324] [416] [486] [543] [941] [947] [958] [1028] [1031] [1050] [1088] [1089] [1091] [1096] [1103] [1136] [1138] [1140] [1170] [1180] [1209] [796] [1253] [1281] [1352] [1431] [1439] [1486] [1487] [1529] [1548]

2.6.6. Volterra systems
[472] [486] [494] [543] [941] [942] [943] [1138]

2.6.7. CFE—cycle frequency error
[88] [830] [831] [832] [835] [839]

2.6.8. TV—time varying
[19] [85] [103] [118] [159] [161] [167] [281] [286] [296] [297] [327] [328] [329] [345] [372] [373] [374] [375] [377] [399] [423] [428] [453] [461] [467] [473] [479] [505] [506] [520] [527] [547] [550] [587] [595] [696] [723] [729] [730] [732] [733] [734] [741] [774] [803] [837] [842] [856] [873] [900] [901] [905] [935] [943] [951] [953] [957] [987] [996] [1029] [1036] [1079] [1117] [1120] [1122] [1155] [1178] [1179] [1197] [1234] [1235] [1284] [1299] [1346] [1349] [1350] [1363] [1364] [1365] [1366] [1369] [1373] [1374] [1418]

2.6.9. System stability
[131] [132] [133] [165] [842] [885] [894] [1265] [1266]

2.7. Image processing

[131] [132] [133] [540] [758] [759] [760] [816] [1017] [1252]

3. Communications

3.1. Modeling and transforms

3.1.1. Signal modeling
[100] [145] [193] [243] [244] [457] [458] [530] [726] [1047] [1225] [1293] [1345] [1371]

3.1.2. Representation of processes
[102] [198] [349] [358] [448] [451] [642] [668] [781] [911] [914] [1021] [1204] [1495]

3.1.3. AR—auto regressive systems
[17] [37] [45] [78] [80] [99] [103] [151] [152] [156] [302] [467] [523] [536] [541] [546] [606] [691] [693] [820] [852] [861] [867] [910] [931] [995] [1008] [1046] [1206] [1224] [1239] [1242] [1318] [1335] [1382] [1435] [1525]

3.1.4. Lamperti transformation
[126] [127] [128] [129] [130]

3.1.5. Wavelet transformation
[826] [827] [903] [1041] [1095] [1252] [1262] [1339] [1350]

3.1.6. Wold isomorphism and decomposition
[480] [685] [687] [688] [691] [694] [1010] [1011]

3.1.7. Entropy modeling
[192] [1525]

3.1.8. Harmonizable processes
[198] [307] [350] [392] [513] [573] [663] [668] [789] [814] [875] [963] [968] [969] [1086]

3.1.9. Noise modeling and analysis
[62] [63] [118] [119] [120] [121] [122] [123] [166] [186] [195] [218] [230] [239] [389] [445] [595] [715] [800] [837] [930] [1015] [1030] [1079] [1080] [1130] [1155] [1170] [1245] [1247] [1306] [1307] [1394] [1405] [1430] [1441]

3.2. Modulation, multiple access and coding

3.2.1. OFDM
[68] [69] [81] [111] [112] [114] [115] [116] [117] [165] [169] [254] [259] [260] [267] [268] [360] [361] [618] [619] [636] [650] [776] [828] [857] [901] [904] [918] [988] [1016] [1027] [1060] [1061] [1094] [1139] [1200] [1294] [1299] [1407] [1409] [1410] [1473]

3.2.2. CDMA
[16] [41] [94] [191] [208] [246] [254] [259] [335] [365] [442] [505] [514] [515] [516] [517] [518] [568] [569] [593] [597] [639] [657] [696] [711] [769] [776]

[859] [860] [905] [906] [948] [974] [975] [977] [978] [997] [998] [1044] [1045] [1105] [1156] [1157] [1203] [1240] [175] [1260] [1261] [1278] [1298] [1352] [1353] [1370] [1384] [1385] [1432] [1438] [1477] [1482] [1510] [1519]

3.2.3. TDMA
[272] [273] [936] [997] [998] [938]

3.2.4. FDMA
[622] [997] [998]

3.2.5. CPM
[421] [580] [1000] [1387]

3.2.6. PPM
[379] [380] [381] [382] [383] [1444]

3.2.7. Coding theory
[81] [113] [179] [181] [235] [236] [304] [367] [414] [423] [433] [434] [698] [1052] [1053] [1054] [1055] [1347]

3.2.8. Band-limited systems and signals
[48] [209] [211] [238] [251] [305] [334] [372] [725] [884] [958] [981] [982] [1037] [1062] [1103] [1136] [1307] [1464] [1466] [1492]

3.2.9. Broad-band systems and signals
[43] [163] [184] [269] [443] [502] [507] [508] [623] [706] [752] [753] [815] [944] [949] [1084] [1136] [1192] [1315] [1316] [1317] [1434] [1456] [1483] [1502] [1535]

3.3. Noise and interference

3.3.1. Cyclostationary interference
[4] [18] [93] [649] [762] [810] [1034] [1035] [1071] [1072] [1073] [1074] [1076] [1120] [1352] [1353] [1404] [1426] [1447] [1462] [1519]

3.3.2. Interference cancellation
[5] [6] [94] [153] [160] [191] [238] [266] [272] [335] [443] [449] [468] [471] [475] [495] [505] [506] [568] [569] [571] [612] [613] [614] [623] [639] [777] [905] [906] [957] [959] [976] [1012] [1039] [1112] [1116] [1117] [1118] [1198] [1240] [1249] [1250] [1260] [1277] [1319] [1351] [1370] [1426] [1427] [1438] [1532]

3.3.3. Crosstalk
[5] [6] [173] [174] [436] [629] [707] [709] [741] [762] [786] [810] [878] [887] [888] [1074] [1075] [1077] [1104] [1141] [1169] [1447]

3.3.4. Interference tolerant systems
[207] [262] [418] [482] [499] [501] [717] [1105] [1119] [1448] [1530]

3.4. Channels

3.4.1. Multipath channels
[9] [162] [188] [220] [366] [368] [406] [439] [514] [515] [697] [718] [751] [787] [887] [888] [901] [921] [949] [974] [1039] [1049] [1105] [1114] [1115] [1183] [1200] [1299] [1359] [1361] [1410] [1409] [1467] [1472] [1503] [1505] [1531]

3.4.2. Channel capacity
[64] [226] [233] [442] [483] [622] [637] [638] [906] [1453]

3.4.3. Magnetic recording channel
[64] [959] [1102]

3.4.4. Optical communications channel
[379] [380] [382] [779]

3.5. Equalization

[19] [38] [39] [40] [41] [71] [81] [82] [94] [114] [117] [140] [247] [248] [226] [227] [230] [231] [233] [235] [251] [253] [274] [332] [335] [360] [361] [368] [411] [414] [506] [509] [532] [534] [543] [564] [565] [570] [598] [600] [601] [602] [604] [611] [628] [636] [646] [651] [654] [704] [707] [710] [777] [817] [829] [866] [880] [883] [884] [887] [888] [920] [921] [922] [982] [1012] [1036] [1038] [1040] [1044] [1045] [1048] [1049] [1068] [1071] [1072] [1073] [1074] [1075] [1076] [1094] [1124] [1149] [1195] [1193] [1198] [1205] [1207] [1209] [1258] [1259] [1299] [1320] [1321] [1323] [1324] [1326] [1340] [1341] [1342] [1344] [1346] [1347] [1348] [1350] [1357] [1358] [1360] [1362] [1363] [1428] [1429] [1434] [1447]

[1448] [1473] [1484] [1485] [1515] [1520] [1523] [1524]

3.5.1. DFE—decision feedback equalizer
[4] [5] [6] [232] [368] [371] [611] [620] [774] [777] [959] [1071] [1073] [1074] [1519]

3.6. Filtering

[19] [44] [47] [125] [131] [160] [216] [218] [327] [372] [374] [375] [377] [386] [422] [427] [442] [473] [505] [507] [510] [649] [730] [757] [758] [759] [760] [803] [951] [953] [1020] [1036] [1062] [1068] [1195] [1277] [1285] [1510] [1532]

3.6.1. Wiener filters
[18] [19] [65] [81] [140] [376] [399] [469] [485] [547] [620] [1156] [1448] [1519] [1528]

3.6.2. Kalman filters
[103] [1242]

3.6.3. Adaptive filtering
[81] [266] [328] [329] [341] [398] [413] [471] [483] [517] [584] [620] [639] [703] [774] [846] [851] [952] [957] [1025] [1116] [1117] [1120] [1124] [1164] [1192] [1216] [1222] [1240] [1268] [1311] [1319] [1404] [1440] [1459] [1486] [1501] [1515] [1517] [1526] [1527] [1528]

3.6.4. Spatial smoothing
[1462] [1468] [1469]

3.6.5. Optimum filtering
[58] [93] [274] [338] [447] [449] [471] [475] [485] [958] [1056] [1064] [1117] [1118] [1311]

3.6.6. Optimum receiver
[81] [93] [167] [239] [387] [435] [514] [584] [622] [878] [1074] [1120]

3.6.7. Joint transmitter and receiver optimization
[239] [240] [241] [562] [563] [742] [810] [1150] [1481]

3.6.8. Filterbanks
[1] [58] [141] [245] [423] [544] [818] [861] [905] [922] [1022] [1023] [1053] [1054] [1056] [1252] [1258] [1262] [1285] [1339] [1345] [1360] [1371] [1372] [1504]

3.7. Algorithms

[249] [498] [1236]

3.7.1. Gradient algorithm
[736] [738] [740] [1411]

3.7.2. MUSIC
[88] [170] [200] [202] [462] [581] [795] [835] [840] [944] [1182] [1184] [1194]

3.7.3. ESPRIT
[462] [748] [795] [1489]

3.7.4. SCORE
[21] [22] [23] [89] [785] [831] [832] [833] [1450] [1512]

3.7.5. CMA—constant modulus algorithm
[90] [783] [784] [957] [977] [1337] [1360] [1524] [1531] [1555]

3.7.6. SVD—singular values decomposition
[363] [498] [623] [699] [1466]

3.7.7. EVD—eigenvalue decomposition
[136] [795] [1303] [1447] [1462] [1469] [1513] [1515]

3.8. Cellular and microcellular systems

[39] [138] [139] [191] [422] [483] [496] [605] [612] [613] [614] [622] [637] [638] [878] [881] [882] [936] [937] [938] [939] [954] [1039] [1070] [1077] [1319] [1341] [1356] [1381]

3.9. Military communications

[262] [488] [616] [630] [631] [690] [713] [876] [1009] [1043] [1083] [1129] [1286] [1287] [1508]

4. Antenna array processing

[21] [23] [114] [168] [221] [272] [301] [362] [462] [500] [502] [504] [773] [782] [831] [919] [938] [1105] [1114] [1115] [1182] [1184] [1231] [1234] [1237] [1249] [1251] [1323] [1354] [1355] [1456] [1459] [1461] [1462] [1469] [1470] [1477] [1512] [1555]

4.1. Adaptive arrays

[783] [784] [785] [1077] [1356] [1531]

4.2. MIMO systems

[41] [68] [69] [72] [117] [146] [147] [148] [232] [234] [247] [360] [361] [368] [387] [540] [543] [587] [719] [996] [1024] [1026] [1150] [1285] [1432] [1457]

4.3. Beamforming

[90] [91] [214] [219] [364] [1105] [1386] [1449] [1460] [1489] [1555]

4.3.1. Cyclic beamforming algorithms

[21] [23] [212] [213] [363] [577] [637] [638] [699] [831] [839] [937] [939] [1191] [1302] [1388] [1451] [1452] [1453] [1511]

4.3.2. Adaptive beamforming algorithms

[187] [188] [189] [190] [201] [212] [213] [617] [701] [830] [831] [832] [839] [881] [882] [937] [939] [978] [1063] [1191] [1249] [1250] [1302] [1388] [1450] [1451] [1452] [1453] [1511] [1512] [1513] [1514]

4.4. DOA—direction of arrival

[2] [88] [170] [201] [203] [204] [206] [222] [236] [406] [462] [464] [473] [498] [502] [504] [508] [531] [577] [578] [581] [647] [648] [658] [659] [661] [708] [714] [717] [745] [746] [747] [748] [749] [750] [751] [753] [795] [787] [833] [835] [840] [855] [919] [1127] [1182] [1183] [1184] [1186] [1187] [1188] [1190] [1192] [1194] [1195] [1196] [1233] [1234] [1236] [1251] [1354] [1355] [1453] [1456] [1459] [1461] [1462] [1463] [1464] [1465] [1466] [1467] [1468] [1469] [1471] [1475] [1488] [1489] [1490] [1491] [1504] [1514] [1555]

4.5. TDOA—time difference of arrival

[207] [420] [469] [473] [478] [482] [484] [487] [501] [660] [720] [815] [1270] [1289] [1290] [1291] [1317] [1472] [1530]

5. Mechanics

[51] [53] [61] [65] [176] [177] [299] [178] [512] [606] [684] [803] [816] [843] [879] [902] [1013] [1099] [1101] [1180] [1241] [1505]

5.1. Mechanical vibrations

[54] [124] [143] [144] [149] [277] [278] [300] [378] [743] [950] [1098] [1390] [1395] [1554]

5.1.1. Vibration analysis of internal combustion engines

[57] [58] [60] [744]

5.2. Rotating mechanisms

[60] [802] [856] [1078] [1106] [1107] [1108] [1109] [1110] [1241] [1243]

6. Oceanography and hydrology

[43] [129] [152] [167] [290] [352] [354] [355] [357] [391] [526] [553] [554] [609] [676] [763] [764] [815] [824] [898] [902] [929] [984] [1018] [1085] [1123] [1167] [1239] [1248] [1304] [1312] [1382] [1383] [1433] [1522]

7. Climatology and meteorology

[107] [303] [522] [791] [897] [898] [1018] [1199] [1288] [1522]

8. Economics

[156] [429] [430] [523] [850] [1047]

9. Astronomy and satellite communications

[141] [153] [273] [679] [681] [769] [1112] [1426] [1427] [1454]

10. Magnetism and electromagnetism

[971] [1499] [1500]

11. Geography, seismology and environment

[302] [1042] [1437]

12. Medicine, biology

[342] [343] [344] [394] [413] [415] [656] [755] [801] [823] [893] [1158] [1163] [1223] [1253] [1268] [1376] [1378] [1440]

13. Optics

[163] [193] [194] [237] [379] [380] [381] [382] [437] [441] [540] [629] [709] [741] [779] [809] [896] [1104] [1141] [1159] [1161] [1246] [1313] [1518] [1530]

14. Acoustics and speech

[391] [566] [567] [690] [691] [692] [702] [780] [808] [1006] [1123] [1145] [1159] [1161] [1256] [1257] [1388] [1389] [1391] [1393] [1394] [1397] [1398] [1404] [1431]

15. Networks

15.1. Telecommunications and computer networks

[591] [592] [825] [1104] [1264]

15.2. Subscriber lines

[5] [6] [173] [339] [436] [649] [705] [761] [762] [774] [786] [982] [1072] [1073] [1074]

15.3. Power lines

[340] [776] [1014] [1015] [1294] [1405] [1406]

15.4. Queueing

[15] [775]

15.5. Neural networks

[214] [362] [363] [617] [699] [931] [1128]

15.6. ATM networks

[706] [707] [903] [1111]

16. Electronics

[33] [34] [62] [63] [118] [119] [120] [122] [123] [195] [321] [323] [325] [326] [339] [395] [706] [765] [837] [915] [930] [935] [972] [1028] [1030] [1080] [1130] [1140] [1155] [1170] [1292] [1307] [1479] [1529] [1553]

16.1. RF circuits

[369] [603] [806] [838] [841] [858] [862] [955] [956] [1019] [1151] [1152] [1153] [1154] [1305] [1478] [1480]

16.2. Switched-capacitor networks

[1030] [1379] [1380]

16.3. PLL—phase locked loop

[197] [199] [380] [440] [576] [595] [626] [813] [837] [960] [980] [981]

16.4. Integrated circuits and semiconductors

[369] [572] [603] [709] [800] [812] [838] [841] [862] [956] [1245] [1247]

16.5. Cyclostationary noise in mixers and oscillators

[121] [321] [323] [325] [326] [596] [603] [662] [836] [838] [1019] [1113] [1151] [1152] [1153] [1154] [1374] [1375]

17. Books on cyclostationarity

[81] [108] [140] [351] [352] [357] [417] [452] [461] [474] [492] [583] [596] [771] [961] [1019] [1043] [1066] [1096] [1474]

18. Thesis and dissertations on cyclostationarity

[4] [19] [54] [84] [129] [139] [151] [158] [166] [170] [206] [230] [251] [265] [287] [419] [432] [447] [578] [608] [621] [636] [637] [663] [819] [824] [876] [923] [932] [956] [983] [1031] [1076] [1101] [1131] [1147] [1186] [1231] [1269] [1272] [1289] [1290] [1301] [1352] [1424] [1486] [1536] [1545]

19. Miscellaneous

[756] [889] [1012] [1069] [1135] [1224] [1504]

References

[1] T. Aach, Shift variance and cyclo-stationarity in multirate filter banks, in: Proceedings of the Sixth IEEE Nordic Signal Processing Symposium, NORSIG '04, Meripuisto, Espoo, 9–11 June 2004, pp. 85–88.

[2] T.J. Abatzoglou, B.F. Rice, Application of CTLS for estimating the direction of arrival of cyclostationary signals, 25th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 1, 4–6 November 1991, pp. 247–251.

[3] A.M. Abdulla, Identification of push to talk transmitters using wavelets and spectral correlation, Tech. Rep. A928023. Available online at http://www.stormingmedia.us/92/9280/A928023.html (September 1996).

[4] M. Abdulrahman, Decision feedback equalization with cyclo stationary interference for DSL, Master's Thesis, Carleton University, Ottawa, ON, Canada (June 1989).

[5] M. Abdulrahman, D.D. Falconer, Crosstalk suppression by DFE on digital subscriber loops, Canadian Conference on Electrical and Computer Engineering, Ottawa, ON, Canada, vol. 2, 4–6 September 1990, pp. 1–4.

[6] M. Abdulrahman, D.D. Falconer, Cyclostationary crosstalk suppression by decision feedback equalization on digital subscriber loops, IEEE Journal on Selected Areas in Communications 10 (3) (April 1992) 640–649.

[7] K. Abed-Meraim, A. Belouchrani, A. Mansour, Y. Hua, Parameter estimation of exponentially damped sinusoids using second order statistics, in: European Signal Processing Conference, EUSIPCO '96, Trieste, Italy, 10–13 September 1996, pp. 2025–2028.

[8] K. Abed-Meraim, Y. Hua, Combining cyclostationarity and spatial diversity for blind system identification, 30th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 1, 3–6 November 1996, pp. 325–328.

[9] K. Abed-Meraim, Blind identification of sparse multipath channels using cyclostationary statistics, in: European Signal Processing Conference, EUSIPCO '98, Rhodes, Greece, 1998.

[10] K. Abed-Meraim, Y. Xiang, Y. Hua, Blind source separation using second-order cyclostationary statistics, Information, Decision and Control, IDC '99, 8–10 February 1999, pp. 321–326.

[11] K. Abed-Meraim, Y. Xiang, J.H. Manton, Y. Hua, A new approach to blind separation of cyclostationary sources, Second IEEE Workshop on Signal Processing Advances in Wireless Communications, SPAWC '99, Annapolis, MD, 9–12 May 1999, pp. 114–117.

[12] K. Abed-Meraim, Y. Xiang, J.H. Manton, Y. Hua, Blind source separation using second-order cyclostationary statistics, IEEE Transactions on Signal Processing 49 (4) (April 2001) 694–701.

[14] S.S. Abeysekera, Novel blind channel amplitude and phase spectra estimation technique using second order statistics, vol. 1, IEEE Global Telecommunications Conference, GLOBECOM '02, Taipei, Taiwan, 17–21 November 2002, pp. 326–330.

[15] M.H. Ackroyd, Stationary and cyclostationary finite buffer behaviour computation via Levinson's method, AT&T Bell Lab. Tech. 63 (December 1984) 2159–2170.

[16] E.R. Adams, M. Gouda, P.C. Hill, Detection and characterisation of DS/SS signals using higher-order correlation, Fourth IEEE International Symposium on Spread Spectrum Techniques and Applications, Mainz, Germany, vol. 1, 22–25 September 1996, pp. 27–31.

[17] G.J. Adams, G.C. Goodwin, Parameter estimation for periodic ARMA models, Journal of Time Series Analysis 16 (2) (1995) 127–145.

[18] J.F. Adlard, T.C. Tozer, A.G. Burr, Interference rejection in impulsive noise for VLF communications, IEEE Military Communications Conference, MILCOM '99, Atlantic City, NJ, vol. 1, 31 October–3 November 1999, pp. 296–300.

[19] J.F. Adlard, Frequency shift filtering for cyclostationary signals, Ph.D. Thesis, University of York, York, UK, 1 September 2000.

[20] B.G. Agee, W.A. Gardner, Cyclic spectrum analysis study: executive summary and final briefing, Tech. Rep. B83-0014, ARGOSystems (June 1984).
[21] B.G. Agee, S.V. Schell, W.A. Gardner, Spectral self-coherence restoral: a new approach to blind adaptation of antenna arrays, in: 21st Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, 1987, pp. 589–593.
[22] B.G. Agee, S.V. Schell, W.A. Gardner, The SCORE approach to blind adaptive signal extraction: an application of the theory of spectral correlation, Fourth IEEE ASSP Workshop on Spectral Estimation and Modeling, Minneapolis, MN, 3–5 August 1988, pp. 277–282.
[23] B.G. Agee, S.V. Schell, W.A. Gardner, Spectral self-coherence restoral: a new approach to blind adaptive signal extraction using antenna arrays, Proceedings of the IEEE 78 (4) (April 1990) 753–767.
[24] H. Aghajan, B. Hassibi, B. Khalaj, A. Paulraj, T. Kailath, Blind identification of FIR channels with multiple users via spatio-temporal processing, IEEE Global Telecommunications Conference, GLOBECOM '94, San Francisco, CA, vol. 3, 28 November–2 December 1994, pp. 1899–1903.
[25] Y. Akdi, The discrete Fourier transform approximation for periodically correlated time series, Journal of the Turkish Statistical Association (ISTATISTIK) 1 (3) (1998) 47–53.
[26] V.G. Alekseev, Symmetry properties of higher-order spectral densities of stationary and periodic-nonstationary stochastic processes, Problems of Information Transmission 23 (1987) 48–53.
[27] V.G. Alekseev, Estimating the spectral densities of a Gaussian periodically correlated stochastic process, Problems of Information Transmission 24 (2) (1988) 109–115.
[28] V.G. Alekseev, On the construction of spectral densities of a periodically correlated random process, Problemy Peredachi Informatsii 26 (3) (1990) 106–108 (in Russian).
[29] V.G. Alekseev, On spectral density estimates of a Gaussian periodically correlated random fields, Probability and Mathematical Statistics 11 (2) (1991) 157–167.
[30] V.G. Alekseev, Spectral density estimators of a periodically correlated stochastic process, Problems of Information Transmission 26 (1991) 286–288.
[31] J.C. Allen, S.L. Hobbs, Detecting target motion by frequency-plane smoothing, 26th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 2, 26–28 October 1992, pp. 1042–1047.
[32] J.C. Allen, S.L. Hobbs, Spectral estimation of non-stationary white noise, Journal of the Franklin Institute 334 (1) (January 1997) 99–116.
[33] E. Alon, V. Stojanovic, M. Horowitz, Circuits and techniques for high-resolution measurement of on-chip power supply noise, Symposium on VLSI Circuits Digest of Technical Papers, Honolulu, Hawaii, 17–19 June 2004, pp. 102–105.
[34] E. Alon, V. Stojanovic, M.A. Horowitz, Circuits and techniques for high-resolution measurement of on-chip power supply noise, IEEE Journal of Solid-State Circuit 40 (4) (April 2005) 820–828.
[35] D. Alpay, V. Bolotnikov, P. Loubaton, An interpolation problem with symmetry and related questions, Z. Anal. Anwendungen 15 (1) (1996) 19–29.
[36] D. Alpay, B. Freydin, P. Loubaton, An extension problem for discrete-time almost periodically correlated stochastic processes, Linear Algebra and its Applications 308 (1–3) (15 March 2000) 163–182.
[37] D. Alpay, A. Chevreuil, P. Loubaton, An extension problem for discrete-time periodically correlated stochastic processes, Journal of Time Series Analysis 22 (1) (January 2001) 1–11.
[38] J. Altuna, B. Mulgrew, A comparison of cyclostationary blind equalization techniques, IEE Colloquium on Multipath Countermeasures, London, UK, vol. 8, 23 May 1996, pp. 1–6.
[39] J. Altuna, Cyclostationary blind equalization in mobile communications, Ph.D. Thesis, University Of Edinburgh, Edinburgh, Scotland, October 1997.
[40] J. Altuna, B. Mulgrew, A comparison of cyclostationary blind equalization algorithms in the mobile radio environment, International Journal of Adaptive Control and Signal Processing 12 (3) (May 1998) 267–282.
[41] J. Altuna, B. Mulgrew, J.M. Zabalegui, Semi-blind equalization for multiple-input multiple-output MC-CDMA, in: Second International Conference on 3G Mobile Communication Technologies, London, UK, March 2001, pp. 387–391.
[42] P.-O. Amblard, S. Zozor, Cyclostationarity and stochastic resonance in threshold devices, Physical Review E 59 (5) (May 1999) 5009–5020.
[43] H. Amindavar, P.P. Moghaddam, Estimation of propeller shaft rate and vessel classification in multipath environment, IEEE Sensor Array and Multichannel Signal Processing Workshop, Cambridge, MA, 16–17 March 2000, pp. 125–128.
[44] A. Anastasopoulos, K.M. Chugg, An efficient method for simulation of frequency selective isotropic Rayleigh fading, 47th IEEE Vehicular Technology Conference, VTC '97, Phoenix, AZ, vol. 3, 4–7 May 1997, pp. 2084–2088.
[45] P.L. Anderson, A.V. Vecchia, Asymptotic results for periodic autoregressive moving average processes, Journal of Time Services Analysis 14 (1) (1993) 1–18.
[46] P.L. Anderson, M.M. Meerschaert, A.V. Vecchia, Innovations algorithm for periodically stationary time series, Stochastic Processes and their Applications 83 (1) (1999) 149–169.
[47] A.N. d'Andrea, U. Mengali, M. Moro, Nearly optimum prefiltering in clock recovery, IEEE Transactions on Communications 34 (11) (November 1986) 1081–1088.

[48] A.N. d'Andrea, U. Mengali, R. Reggiannini, Carrier phase recovery for narrow-band polyphase shift keyed signals, Alta Freq 57 (December 1988) 575–581.
[49] C. Andrieu, P. Duvaut, Measure of cyclostationarity for Gaussian processes based on the likelihood ratio test, Eighth IEEE Signal Processing Workshop on Statistical Signal and Array Processing, SSAP '96, Corfu, Greece, 24–26 June 1996, pp. 416–419.
[50] C. Andrieu, P. Duvaut, A. Doucet, Bayesian deconvolution of cyclostationary processes based on point processes, in: European Signal Processing Conference, EUSIPCO '96, Trieste, Italy, 10–13 September 1996.
[51] J. Antoni, J. Daniere, F. Guillet, Estimation de statistiques spectrales synchrones sur des signaux cyclostationnaires de moteur diesel, Dix-Septieme Colloque GRETSI sur le Traitment du Signal et des Images, Vannes, France, 13–17 September 1999 (in French).
[52] J. Antoni, J. Daniere, F. Guillet, Blind identification of non-minimum phase systems driven by cyclostationary transients, IEEE Workshop on Statistical Signal and Array Processing, SSAP '00, Poconos, PA, 14–16 August 2000.
[53] J. Antoni, J. Daniere, F. Guillet, Analyse spectrale fine des processus cyclostationnaires—application au diagnostic d'un train d'engrenages, Cinquieme Congres Francais d'Acoustique, CFA '00, Lausanne, France, 3–6 September 2000 (in French).
[54] J. Antoni, Apport de l'echantillonnage angulaire et de la cyclostationnarite au diagnostic par analyse vibratoire des moteurs thermiques, Ph.D. Thesis, Institute National Polytechnique, Grenoble, France, December 2000 (in French).
[55] J. Antoni, M. El Badaoui, Identification de filtres inverses lineaires periodiques pour la deconvolution et la separation de processus cyclostationnaires, Dix-Huitieme Colloque GRETSI sur le Traitment du Signal et des Images, Toulouse, France, September 2001 (in French).
[56] J. Antoni, J. Daniere, F. Guillet, M. El Badaoui, Blind separation and identification of cyclostationary processes, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '02, Orlando, FL, vol. 3, 13–17 May 2002, pp. 3077–3080.
[57] J. Antoni, J. Daniere, F. Guillet, Effective vibration analysis of IC engines using cyclostationarity: Part I—A methodology for condition monitoring, Journal of Sound and Vibration 257 (5) (7 November 2002) 815–837.
[58] J. Antoni, J. Daniere, F. Guillet, R.B. Randall, Effective vibration analysis of IC engines using cyclostationarity: Part II—New results on the reconstruction of the cylinder pressures, Journal of Sound and Vibration 257 (5) (7 November 2002) 839–856.
[59] J. Antoni, P. Wagstaff, J.-C. Henrio, H_α—A consistent estimator for frequency response functions with input and output noise, IEEE Transactions on Instrumentation and Measurement 53 (2) (April 2004) 457–465.
[60] J. Antoni, F. Bonnardot, A. Raad, M. El Badaoui, Cyclostationary modelling of rotating machine vibration signals, Mechanical Systems and Signal Processing 18 (6) (November 2004) 1285–1314.
[61] I. Antoniades, G. Glossiotis, Cyclostationarity analysis of rolling-element bearing vibration signals, Journal of Sound and Vibration 248 (5) (13 December 2001) 829–845.
[62] R. Aparicio, A. Hajimiri, A CMOS differential noise-shifting Colpitts VCO, IEEE International Solid-State Circuits Conference, ISSCC '02, San Francisco, CA, vol. 1, 3–7 February 2002, pp. 288–289.
[63] R. Aparicio, A. Hajimiri, A noise-shifting differential Colpitts VCO, IEEE Journal of Solid-State Circuits 37 (12) (December 2002) 1728–1736.
[64] D. Arnold, E. Eleftheriou, On the information-theoretic capacity of magnetic recording systems in the presence of medium noise, IEEE Transactions on Magnetics 38 (5) (September 2002) 2319–2321.
[65] P. Azzoni, M. Marseguerra, Assessment of the potential of a Wiener–Hilbert filter for automatic diagnosis of spark ignition engine faults, Mechanical Systems and Signal Processing 9 (2) (March 1995) 119–128.
[66] L.A. Baccala, S. Roy, A new blind time-domain channel identification method based on cyclostationarity, IEEE Signal Processing Letters 1 (6) (June 1994) 89–91.
[67] L.A. Baccala, S. Roy, Blind identification of multi-user multi-rate FIR systems, IEEE International Symposium on Circuits and Systems, ISCAS '97, Hong Kong, vol. 4, 9–12 June 1997, pp. 2521–2524.
[68] W. Bai, C. He, L. Jiang, H. Zhu, Blind channel estimation in MIMO-OFDM systems, IEICE Transactions 85 (9) (2002) 1849–1853.
[69] W. Bai, C. He, L. Jiang, H. Zhu, Blind channel estimation in MIMO-OFDM systems, IEEE Global Telecommunications Conference, GLOBECOM '02, Taipei, Taiwan, vol. 1, 17–21 November 2002, pp. 317–321.
[70] K. Barner, A. Gonzalo, Second-order Cyclostationary Statistics, in Nonlinear Signal and Image Processing: Theory, Methods, and Applications, CRC Press, Boca Raton, FL, 1 November 2003, pp. 267–269 (Chapter 8.3.4).
[71] M. Baro, J. Ilow, Cyclostationary-based diversity combining for blind channel equalization using multiple receive antennas, Canadian Conference on Electrical and Computer Engineering, Niagara Falls, Canada, vol. 4, 2–5 May 2004, pp. 2375–2378.
[72] V. Barroso, J. Xavier, Blind identification of MIMO channels: a closed form solution based on second order statistics, 33rd Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 1, 24–27 October 1999, pp. 70–74.
[73] S.K. Barton, Y.O. Al-Jalili, A symbol timing recovery scheme based on spectral redundancy, IEE Colloquium on Advanced Modulation and Coding Techniques for

Satellite Communications, London, UK, vol. 3, 27 January 1992, pp. 1–6.
[74] B.F. Beidas, C.L. Weber, Higher-order correlation based approach to modulation classification of digitally frequency-modulated signals, IEEE Journal on Selected Areas in Communications 13 (1) (January 1995) 89–101.
[75] S. Bellini, C. Molinari, G. Tartara, Digital frequency estimation in burst mode QPSK transmission, IEEE Transactions on Communications 38 (7) (July 1990) 959–961.
[76] S. Bellini, Frequency estimators for M-PSK operating at one sample per symbol, in: IEEE Global Telecommunications Conference, GLOBECOM '94, San Francisco, CA, 28 November–2 December 1994, pp. 962–966.
[77] W.R. Bennett, Statistics of regenerative digital transmission, Bell System Technical Journal 37 (November 1958) 1501–1542.
[78] M. Bentarzi, M. Hallin, Locally optimal tests against periodic autoregression parametric and nonparametric approaches, Econometric Theory 12 (1) (1996) 88–112.
[79] M. Bentarzi, M. Hallin, Spectral factorization of periodically correlated MA(1) processes, Journal of Applied Probability 35 (1) (1998) 46–54.
[80] M. Bentarzi, Model-building problem of periodically correlated m-variate moving average processes, Journal of Multivariate Analysis 66 (1) (July 1998) 1–21.
[81] N. Benvenuto, G. Cherubini, Algorithms for Communications Systems and their Applications, Wiley, Hoboken, NJ, 4 October 2002.
[82] J.W. Bergmans, Partial response equalization, Philips Journal of Research 42 (2) (1987) 209–245.
[83] J.W. Bergmans, S. Mita, M. Izumita, N. Doi, Partial-response decoding of rate 1/2 modulation codes for digital storage, IEEE Transactions on Communications 39 (11) (November 1991) 1569–1581.
[84] R.F. Bernstein Jr., A pipelined vector processor and memory architecture for cyclostationary processing, Ph.D. Thesis, Naval Postgraduate School, Monterey, CA, 1995.
[85] O. Besson, M. Ghogho, A. Swami, On estimating random amplitude chirp signals, in: IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '99, Phoenix, AZ, 1999, pp. 1561–1564.
[86] O. Besson, M. Ghogho, A. Swami, Parameter estimation for random amplitude chirp signals, IEEE Transactions on Signal Processing 47 (12) (December 1999) 3208–3219.
[87] J.W. Betz, On the detection of Gaussian cyclostationary random processes, IEEE International Symposium on Information Theory, ISIT '93, 17–22 January 1993, p. 18.
[88] T.E. Biedka, B.G. Agee, Subinterval cyclic MUSIC - robust DF with error in cycle frequency knowledge, in: 25th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, 4–6 November 1991, pp. 262–266.
[89] T.E. Biedka, Subspace-constrained SCORE algorithms, 27th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 1, 1–3 November 1993, pp. 716–720.
[90] T.E. Biedka, M.F. Kahn, Methods for constraining a CMA beamformer to extract a cyclostationary signal, Second Workshop on Cyclostationary Signals, Monterey, CA, August 1994.
[91] T.E. Biedka, A method for reducing computations in cyclostationarity-exploiting beamforming, International Conference on Acoustics, Speech, and Signal Processing, ICASSP '95, Detroit, MI, vol. 3, 9–12 May 1995, pp. 1828–1831.
[92] T.E. Biedka, L. Mili, J.H. Reed, Robust estimation of cyclic correlation in contaminated Gaussian noise, 29th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol.1, 30 October–2 November 1995, pp. 511–515.
[93] E. Biglieri, M. Elia, L. Lopresti, The optimal linear receiving filter for digital transmission over nonlinear channels, IEEE Transactions on Information Theory 35 (3) (May 1989) 620–625.
[94] T. Bing, D. Dahlhaus, M. Latva-aho, M. Nabhan, Advanced receiver algorithms, in: R. Prasad, W. Mohr, W. Konhauser (Eds.), Third Generation Mobile Communication Systems, Artech House Publisher, Boston, 1 March 2000, pp. 91–133 (Chapter 4).
[95] S. Bittanti, G. Guardabassi, Optimal cyclostationary control: a parameter-optimization frequency-domain approach, Proceedings of the Eighth IFAC World Congress, Kyoto, Japan, vol. 2, 24–28 August 1981, pp. 857–862.
[96] S. Bittanti, P. Bolzern, Discrete-time linear periodic systems: Gramian and modal criteria for reachability and controllability, International Journal of Control 41 (4) (April 1985) 909–928.
[97] S. Bittanti, The periodic prediction problem for cyclostationary processes: an introduction, NATO Advanced Research Workshop, Groningen, Netherland, 1–5 December 1986, pp. 239–249.
[98] S. Bittanti, P. Colaneri, G. de Nicolao, The difference periodic Riccati equation for the periodic prediction problem, IEEE Transactions on Automatic Control 33 (8) (1988) 706–712.
[99] S. Bittanti, P. Bolzern, G. de Nicolao, L. Piroddi, D. Purassanta, A minimum prediction error algorithm for estimation of periodic ARMA models, in: European Control Conference, ECC '91, Grenoble, France, July 1991, pp. 1200–1203.
[100] S. Bittanti, F. Lorito, S. Strada, Markovian representations of cyclostationary processes, in: L. Gerencser, P.E. Caines (Eds.), Topics in Stochastic Systems: Modelling, Estimation, and Adaptive Control, Springer, Berlin, Germany, vol. 161, 1991, pp. 31–46.
[101] S. Bittanti, D.B. Hernandez, G. Zerbi, The simple pendulum and the periodic LQC control problem,

Journal of the Franklin Institute 328 (2–3) (1991) 299–315.

[102] S. Bittanti, G. de Nicolao, A note on the periodic Riccati equation and innovations representations of cyclostationary processes, 31st IEEE Conference on Decision and Control, IDC '92, Tucson, AZ, vol. 1, 16–18 December 1992, pp. 1243–1244.

[103] S. Bittanti, G. de Nicolao, Spectral factorization of linear periodic systems with application to the optimal prediction of periodic ARMA models, Automatica 29 (2) (March 1993) 517–522.

[104] S. Bittanti, P. Bolzern, G. de Nicolao, L. Piroddi, Representation, prediction, and identification of cyclostationary processes—a state-space approach, in: W.A. Gardner (Ed.), Cyclostationarity in Communications and Signal Processing, IEEE Press, New York, NY, 1994, pp. 267–295 (Chapter 5).

[105] N.M. Blachman, S.H. Mousavinezhad, The spectrum of the square of a synchronous random pulse train, IEEE Transactions on Communications 38 (1) (January 1990) 13–17.

[106] N.M. Blachman, Beneficial effects of spectral correlation on synchronization, in: W.A. Gardner (Ed.), Cyclostationarity in Communications and Signal Processing, IEEE Press, New York, NY, 1994, pp. 362–391 (Chapter 2, Part II).

[107] P. Bloomfield, H.L. Hurd, R.B. Lund, Periodic correlation in stratospheric ozone time series, Journal of Time Series Analysis 15 (2) (1994) 127–150.

[108] B. Boashash, E.J. Powers, A.M. Zoubir, Higher-Order Statistical Signal Processing, Longman, Australia, 1995.

[109] B. Boashash, Time-frequency signal processing: methods and algorithms, Fifth International Symposium on Signal Processing and its Applications, ISSPA '99, Brisbane, Australia, vol. 1, 22–25 August 1999, pp. 5.

[110] D. Boiteau, C. Le Martret, A general maximum likelihood framework for modulation classification, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '98, Seattle, WA, vol. 4, 12–15 May 1998, pp. 2165–2168.

[111] H. Bolcskei, Blind estimation of symbol timing and carrier frequency offset in pulse shaping OFDM systems, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '99, Phoenix, AZ, vol. 5, 15–19 March 1999, pp. 2749–2752.

[112] H. Bolcskei, P. Duhamel, R. Hleiss, Blind channel identification in high-data-rate pulse shaping OFDM/OQAM systems, Second IEEE Workshop on Signal Processing Advances in Wireless Communications, SPAWC '99, Annapolis, MD, 9–12 May 1999, pp. 154–157.

[113] H. Bolcskei, R.W. Heath Jr., A.J. Paulraj, Blind channel estimation in spatial multiplexing systems using non-redundant antenna precoding, 33rd Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 2, 24–27 October 1999, pp. 1127–1132.

[114] H. Bolcskei, R.W. Heath Jr., A.J. Paulraj, Blind equalization in OFDM-based multi-antenna systems, Proceedings of IEEE Adaptive Systems for Signal Processing, Communications, and Control Symposium, AS-SPCC '00, 1–4 October 2000, pp. 58–63.

[115] H. Bolcskei, Blind estimation of symbol timing and carrier frequency offset in wireless OFDM systems, IEEE Transactions on Communications 49 (6) (June 2001) 988–999.

[116] H. Bolcskei, P. Duhamel, R. Hleiss, A subspace-based approach to blind channel identification in pulse shaping OFDM/OQAM systems, IEEE Transactions on Signal Processing 49 (7) (July 2001) 1594–1598.

[117] H. Bolcskei, R.W. Heath Jr., A.J. Paulraj, Blind channel identification and equalization in OFDM-based multi-antenna systems, IEEE Transactions on Signal Processing 50 (1) (January 2002) 96–109.

[118] F. Bonani, S.D. Guerrieri, G. Ghione, Noise source modeling for cyclostationary noise analysis in large-signal device operation, IEEE Transactions on Electron Devices 49 (9) (September 2002) 1640–1647.

[119] F. Bonani, S.D. Guerrieri, G. Ghione, Compact modelling of cyclostationary noise in semiconductor devices: a critical discussion, International Electron Devices Meeting, IEDM '02, San Francisco, CA, 8–11 December 2002, pp. 133–136.

[120] F. Bonani, S.D. Guerrieri, G. Ghione, New, closed-form compact model for the cyclostationary noise and LS conversion behaviour of RF junction diodes, International Electron Devices Meeting, IEDM '02, 8–11 December 2002, pp. 137–140.

[121] F. Bonani, S.D. Guerrieri, G. Ghione, Author's reply to comment on "Noise source modeling for cyclostationary noise analysis in large-signal device operation", by Delage and Obregon, IEEE Transactions on Electron Devices 50 (10) (October 2003) 2184.

[122] F. Bonani, S.D. Guerrieri, G. Ghione, Compact conversion and cyclostationary noise modeling of pn-junction diodes in low-injection. Part I. Model derivation, IEEE Transactions on Electron Devices 51 (3) (March 2004) 467–476.

[123] F. Bonani, S.D. Guerrieri, G. Ghione, Compact conversion and cyclostationary noise modeling of pn-junction diodes in low-injection. Part II. Discussion, IEEE Transactions on Electron Devices 51 (3) (March 2004) 477–485.

[124] F. Bonnardot, J. Antoni, R.B. Randall, M. El Badaoui, Enhancement of second-order cyclostationary signals: application to vibration analysis, Proceedings IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '04, Montreal, Quebec, Canada, vol. 2, 17–21 May 2004, pp. 781–784.

[125] P. Boonyanant, S. Tantaratana, Design and hybrid realization of FIR Nyquist filters with quantized coefficients and low sensitivity to timing jitter, IEEE Transactions on Signal Processing 53 (1) (January 2005) 208–221.

[126] P. Borgnat, P. Flandrin, P.-O. Amblard, Stochastic discrete scale invariance and Lamperti transformation, 11th IEEE Signal Processing Workshop on Statistical Signal Processing, Singapore, 6–8 August 2001, pp. 66–69.

[127] P. Borgnat, P. Flandrin, P.-O. Amblard, Stochastic discrete scale invariance, IEEE Signal Processing Letters 9 (6) (June 2002) 181–184.

[128] P. Borgnat, P. Flandrin, P.O. Amblard, Generalized Lamperti transformation of broken scale invariance, 36th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 2, 3–6 November 2002, pp. 1576–1580.

[129] P. Borgnat, Modeles et outils pour les invariances d'echelle brisees: variations sur la transformation de Lamperti et contributions aux modeles statistiques de vortex en turbulence, Ph.D. Thesis, Ecole Normale Superieure de Lyon, Lyon, France, 22 November 2002 (in French).

[130] P. Borgnat, P. Flandrin, P.O. Amblard, Lamperti transformation for finite scale invariance, in: International Conference on Physics in Signal and Image Processing, PSIP '03, Grenoble, France, 29–31 January 2003, pp. 177–180.

[131] T. Bose, M.-Q. Chen, Stability of 2-D periodically shift variant digital filters, IEEE International Symposium on Circuits and Systems, ISCAS '97, Hong Kong, vol. 4, 9–12 June 1997, pp. 2449–2452.

[132] T. Bose, M.-Q. Chen, K.S. Joo, G.-F. Xu, Stability of two-dimensional discrete systems with periodic coefficients, IEEE Transactions on Circuits and Systems II: Analog and Digital Signal Processing 45 (7) (July 1998) 839–847.

[133] T. Bose, R. Thamvichai, M. Radenkovic, Stability of the 2D Fornasini–Marchesini model with periodic coefficients, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '01, Salt Lake City, UT, vol. 3, 7–11 May 2001, pp. 1925–1928.

[134] G. Boshnakov, Periodically correlated sequences: some properties and recursions, Tech. Rep. 1, Lulea University, Lulea, Sweden, 1994.

[135] G. Boshnakov, Periodically correlated solutions to a class of stochastic difference equations. Stochastic differential and difference equations, Progress in Systems Control Theory, Boston, MA, vol. 23, 1997, pp. 1–9.

[136] G. Boshnakov, Multi-companion matrices, Linear Algebra and its Applications 354 (1) (15 October 2002) 53–83.

[137] D. Boss, M. Boe, K.D. Kammeyer, Exploiting second order cyclostationarity or higher order statistics for the blind identification of mixed phase FIR systems?, Quinzieme Colloque GRETSI sur le Traitment du Signal et des Images, Juan-les-Pins, France, vol. 1, 18–22 September 1995, pp. 57–60.

[138] D. Boss, K.D. Kammeyer, Blind identification of mixed-phase FIR systems with application to mobile communication channels, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '97, Munich, Germany, vol. 5, 21–24 April 1997, pp. 3589–3592.

[139] D. Boss, Referenzdatenfreie systemidentifikation mit anwendung auf mobilfunkkanaele, Ph.D. Thesis, University of Bremen, Bremen, Germany, 1 June 2000 (in German).

[140] J.-M. Bossier, Signal et Communication Numerique: Egalisation et Synchronisation, Hermes, Paris, France, 1997.

[141] M.-L. Boucheret, I. Mortensen, H. Favaro, Fast convolution filter banks for satellite payloads with on-board processing, IEEE Journal on Selected Areas in Communications 17 (2) (February 1999) 238–248.

[142] L. Bouillaut, M. Sidahmed, Comparison of the cyclostationary and the bilinear approaches: theoretical aspects and applications to industrial signals, 10th IEEE Workshop on Statistical Signal and Array Processing, SSAP '00, Pocono Manor, PA, 14–16 August 2000, pp. 702–706.

[143] L. Bouillaut, M. Sidahmed, Helicopter gearbox vibrations: cyclostationary analysis or bilinear approach?, Sixth International Symposium on Signal Processing and its Applications, ISSPA '01, Kuala-Lumpur, Malaysia, vol. 1, 13–16 August 2001, pp. 367–370.

[144] L. Bouillaut, M. Sidahmed, Cyclostationary approach and bilinear approach: comparison, applications to early diagnosis for helicopter gearbox and classification method based on HOCS, Mechanical Systems and Signal Processing 15 (5) (September 2001) 923–943.

[145] R. Boyles, W.A. Gardner, Cycloergodic properties of discrete-parameter nonstationary stochastic processes, IEEE Transactions on Information Theory 29 (1) (January 1983) 105–114.

[146] I. Bradaric, A.P. Petropulu, K.I. Diamantaras, On blind identifiability of FIR-MIMO systems with cyclostationary inputs using second order statistics, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '02, Orlando, FL, vol. 2, 2002, pp. 1745–1748.

[147] I. Bradaric, A.P. Petropulu, K.I. Diamantaras, On blind identifiability of FIR-MIMO systems with cyclostationary inputs using second order statistics, IEEE Transactions on Signal Processing 51 (2) (February 2003) 434–441.

[148] I. Bradaric, A.P. Petropulu, K.I. Diamantaras, Blind MIMO FIR channel identification based on second-order spectra correlations, IEEE Transactions on Signal Processing 51 (6) (June 2003) 1668–1674.

[149] S. Braun, J. Rotberg, E. Lenz, Signal processing for single tooth milling monitoring, Mechanical Systems and Signal Processing 1 (2) (April 1987) 185–196.

[150] M.B. Breinholt, M.D. Zoltowski, An open-loop cyclostationarity-based timing recovery algorithm for accelerated timing acquisition in frequency-selective channels, IEEE International Conference on Acoustics, Speech,

and Signal Processing, ICASSP '02, Orlando, FL, vol. 3, 13–17 May 2002, pp. 2293–2296.
[151] W.M. Brelsford, Probability predictions and time series with periodic structure, Ph.D. Thesis, John Hopkins University, Baltimore, MD, 1967.
[152] W.M. Brelsford, R.H. Jones, Time series with periodic structure, Biometrika 54 (1967) 403–407.
[153] S. Bretteil, R. Weber, Comparison between two cyclostationary detectors for RFI mitigation in radio astronomy, in: European Signal Processing Conference, EUSIPCO '04, Vienna, Austria, September 2004.
[154] E. Broszkiewicz-Suwaj, Methods for determining the presence of periodic correlation based on the bootstrap methodology, Tech. Rep. HSC/03/2, Wroclaw University of Technology, Wroclaw, Poland, 2003.
[155] E. Broszkiewicz-Suwaj, Wykrywanie okresowej korelacji danych z TGE SA w oparciu o analize spektralna, Rynek Terminowy 20 (2003) 92–95 (in Polish).
[156] E. Broszkiewicz-Suwaj, A. Makagon, R. Weron, A. Wylomanska, On detecting and modeling periodic correlation in financial data, Physica A 336 (2004) 196–205.
[157] E. Broszkiewicz-Suwaj, A. Wylomanska, Periodic correlation–integration and cointegration, Tech. Rep. HSC/04/4, Wroclaw University of Technology, Wroclaw, Poland, 2004 (in Polish).
[158] W.A. Brown, On the theory of cyclostationary signals, Ph.D. Thesis, University of California, Davis, CA, September 1987.
[159] W.A. Brown, H.H. Loomis, Digital implementations of spectral correlation analyzers, Fourth IEEE ASSP Workshop Spectrum Estimation Modeling, Minneapolis, MN, 3–5 August 1988, pp. 264–270.
[160] W.A. Brown, W.A. Gardner, Frequency-shift filtering theory for adaptive co-channel interference removal, in: 23rd Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, 30 October–1 November 1989, pp. 562–567.
[161] W.A. Brown, H.H. Loomis Jr., Digital implementations of cyclic spectrum analyzers, IEEE Transactions on Signal Processing 41 (2) (February 1993) 703–720.
[162] W.A. Brown, D.L. Knepp, The effect of multipath propagation on cyclostationary signals, Workshop on Cyclostationary Signal Processing, Monterey, CA, August 1994, pp. 91–94.
[163] L. Brzozowski, E.H. Sargent, Nonlinear disordered media for broad-band optical limiting, IEEE Journal of Quantum Electronics 36 (11) (November 2000) 1237–1242.
[164] K. Bucket, M. Moeneclaey, Tracking performance analysis of feedback timing synchronizers operating on interpolated signals, in: IEEE Global Telecommunications Conference, GLOBECOM '96, London, UK, 18–22 November 1996, pp. 67–71.
[165] M. Budsabathon, S. Hara, Robustness of OFDM system against temporally localized man-made noises, IEICE Transactions 85 (10) (2002) 2336–2344.
[166] D.C. Bukofzer, Coherent and noncoherent detection of signals in cyclostationary noise and cyclostationary signals in stationary noise, Ph.D. Thesis, University of California, Davis, CA, 1979.
[167] D.C. Bukofzer, Optimum and suboptimum detector performance for signals in cyclostationary noise, IEEE Journal of Oceanic Engineering 12 (1) (January 1987) 97–115.
[168] P. Burns, Z. Ding, Robustification of cyclostationary array processing techniques, International Conference on Acoustics, Speech, and Signal Processing, ICASSP '95, Detroit, MI, vol. 3, 9–12 May 1995, pp. 1589–1592.
[169] X. Cai, A.N. Akansu, A subspace method for blind channel identification in OFDM systems, IEEE International Conference on Communications, ICC '00, New Orleans, LA, vol. 2, 18–22 June 2000, pp. 929–933.
[170] R.A. Calabretta, On cyclic MUSIC algorithms for signal-selective direction estimation, Master's Thesis, University of California, Davis, CA, 1989.
[171] S. Cambanis, C.H. Houdre, H.L. Hurd, J.P. Leskow, Laws of large numbers for periodically and almost periodically correlated processes, Tech. Rep. 334, Center for Stochastic Processes, University of North Carolina, Chapel Hill, NC, 1991.
[172] S. Cambanis, C.H. Houdre, H.L. Hurd, J.P. Leskow, Laws of large numbers for periodically and almost periodically correlated processes, Stochastic Processes and their Applications 53 (1) (September 1994) 37–54.
[173] J. Campbell, A. Gibbs, B. Smith, The cyclostationary nature of crosstalk interference from digital signals in multipair cable—Part I: Fundamentals, IEEE Transactions on Communications 31 (5) (May 1983) 629–637.
[174] J. Campbell, A. Gibbs, B. Smith, The cyclostationary nature of crosstalk interference from digital signals in multipair cable—Part II: Applications and further results, IEEE Transactions on Communications 31 (5) (May 1983) 638–649.
[175] S. Cao, L. Zhang, Blind channel estimation for CDMA based on modulation-induced cyclostationarity, International Conference on Communication Technology, ICCT '03, Beijing, China, vol. 2, 9–11 April 2003, pp. 1804–1808.
[176] C. Capdessus, M. Sidahmed, J.L. Lacoume, Apport de la theorie des processus cyclostationnaires a l'analyse et au diagnostic des engrenages, in: Second Symposium on Acoustical and Vibratory Surveillance Methods and Diagnostic Techniques, Senlis, France, 1995, pp. 391–401 (in French).
[177] C. Capdessus, M. Sidahmed, J.L. Lacoume, Cyclostationary processes: application in gear faults early diagnosis, Mechanical Systems and Signal Processing 14 (3) (May 2000) 371–385.
[178] C. Capdessus, E. Sekko, A estimation of cyclic cumulants by moving average, application to the diagnosis of rotating machinery, in: International Seminar on Modal Analysis, Leuven, Belgium, 16–18 September 2002.

[179] G.L. Cariolaro, G.P. Tronca, Spectra of block coded digital signals, IEEE Transactions on Communications 22 (10) (1974) 1555–1564.
[180] G.L. Cariolaro, F. Todero, A general spectral analysis of time jitter produced in a regenerative repeater, IEEE Transactions on Communications 25 (4) (April 1977) 417–426.
[181] G.L. Cariolaro, G.L. Pierobon, G.P. Tronca, Analysis of codes and spectra calculations, International Journal of Electronics 55 (1) (1983) 35–79.
[182] G.L. Cariolaro, T. Erseghe, L. Vangelista, Stationary model of pulse interval modulation and exact spectral evaluation, IEEE International Conference on Communications, ICC '00, New Orleans, LA, vol. 2, 18–22 June 2000, pp. 660–664.
[183] G.L. Cariolaro, T. Erseghe, L. Vangelista, Exact spectral evaluation of the family of digital pulse interval modulated signals, IEEE Transactions on Information Theory 47 (7) (November 2001) 2983–2992.
[184] T.L. Carroll, Using the cyclostationary properties of chaotic signals for communications, IEEE Transactions on Circuits and Systems I: Fundamental Theory and Applications 49 (3) (March 2002) 357–362.
[185] T.L. Carroll, Chaotic communications that are difficult to detect, Physical Review E 67 (026207) (February 2003) 1–6.
[186] G. Casinovi, Advanced simulation techniques: An algorithm for frequency-domain noise analysis in nonlinear systems, in: 39th Conference on Design Automation, New Orleans, LA, June 2002, pp. 514–517.
[187] L. Castedo, C.-Y. Tseng, L.J. Griffiths, A new cost function for adaptive beamforming using cyclostationary signal properties, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '93, Minneapolis, MN, vol. 4, 27–30 April 1993, pp. 284–287.
[188] L. Castedo, A.R. Figueiras-Vidal, C.-Y. Tseng, L.J. Griffiths, Behavior of adaptive beamformers based on cyclostationary signal properties in multipath environments, 27th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 1, 1–3 November 1993, pp. 653–657.
[189] L. Castedo, C.-Y. Tseng, A.R. Figueiras-Vidal, L.J. Griffiths, Linearly constrained adaptive beamforming using cyclostationary signal properties, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '94, Adelaide, Australia, vol. 4, 19–22 April 1994, pp. 249–252.
[190] L. Castedo, A.R. Figueiras-Vidal, An adaptive beamforming technique based on cyclostationary signal properties, IEEE Transactions on Signal Processing 43 (7) (July 1995) 1637–1650.
[191] P. Castoldi, Multiuser Detection in CDMA Mobile Terminals, Artech House Publishers, Norwood, MA, 15 June 2002.
[192] G. Castro, V. Girardin, Maximum of entropy and extension of covariance matrices for periodically correlated and multivariate processes, Statistics and Probability Letters 59 (1) (2002) 37–52.
[193] S.B. Cavalcanti, M. Yu, G.P. Agrawal, Self-phase modulation of incoherent nonstationary pulses, SPIE '99, Eighteenth Congress of the International Commission for Optics, San Francisco, CA, vol. 3749, 2–6 August 1999, pp. 370–371.
[194] S.B. Cavalcanti, Theory of incoherent self-phase modulation of non-stationary pulses, New Journal of Physics 4 (19) (27 March 2002) 1–11.
[195] F. Centurelli, A. Ercolani, P. Tommasino, A. Trifiletti, A new model to analyze the effects of noise in a real oscillator, Microwave and Optical Technology Letters 32 (4) (20 February 2002) 305–307.
[196] L. Cerrato, B. Eisenstein, Deconvolution of cyclostationary signals, IEEE Transactions on Acoustics, Speech, and Signal Processing 25 (6) (December 1977) 466–476.
[197] H.H.Y. Chan, Z. Zilic, Estimating phase-locked loop jitter due to substrate coupling: a cyclostationary approach, in: Fifth International Symposium on Quality Electronic Design, San Jose, CA, 22–24 March 2004, pp. 309–314.
[198] D.K. Chang, M.M. Rao, Special representations of weakly harmonizable processes, Stochastic Anal. Appl. 6 (2) (1988) 169–189.
[199] Y. Chang, W. Lindsey, Phase-Locked Loop performance in the presence of CW interference and additive noise, IEEE Transactions on Communications 30 (10) (October 1982) 2305–2311.
[200] P. Charge, Y. Wang, J. Saillard, An extended cyclic MUSIC algorithm, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '02, Orlando, FL, vol. 3, 13–17 May 2002, pp. 3025–3028.
[201] P. Charge, Y. Wang, J. Saillard, Adaptive beamforming for cyclostationary signals, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '03, Hong Kong, vol. 5, 6–10 April 2003, pp. 349–352.
[202] P. Charge, Y. Wang, J. Saillard, An extended cyclic MUSIC algorithm, IEEE Transactions on Signal Processing 51 (7) (July 2003) 1695–1701.
[203] P. Charge, Y. Wang, J. Saillard, Cyclostationarity-exploiting direction finding algorithms, IEEE Transactions on Aerospace and Electronic Systems 39 (3) (July 2003) 1051–1056.
[204] P. Charge, Y. Wang, A Root-MUSIC-like direction finding method for cyclostationary signals, Proceedings IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '04, Montreal, Quebec, Canada, vol. 2, 17–21 May 2004, pp. 225–228.
[205] B.-N. Chen, X.-D. Zhang, FIR system identification based on higher-order cyclic cumulants, IEEE International Symposium on Circuits and Systems, ISCAS '97, Hong Kong, vol. 4, 9–12 June 1997, pp. 2437–2440.
[206] C.-K. Chen, Spectral correlation characterization of modulated signals with application to signal detection

and source location, Ph.D. Thesis, University of California, Davis, CA, 1988.
[207] C.-K. Chen, W.A. Gardner, Signal-selective time-difference of arrival estimation for passive location of man-made signal sources in highly corruptive environments. II. Algorithms and performance, IEEE Transactions on Signal Processing 40 (5) (May 1992) 1185–1197.
[208] H. Chen, Asynchronous orthogonal decision-feedback multiuser detector (AODFD) and its alternative decoding strategies, International Journal of Communication Systems 14 (6) (August 2001) 561–574.
[209] Y. Chen, C.L. Nikias, Blind identifiability of a bandlimited nonminimum phase system from its output autocorrelation, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '93, Minneapolis, MN, vol. 4, April 1993, pp. 444–447.
[210] Y. Chen, C.L. Nikias, On blind system identification from its output autocorrelation, 27th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 1, 1–3 November 1993, pp. 731–735.
[211] Y. Chen, C.L. Nikias, Identifiability of a band-limited system from its cyclostationary output autocorrelation, IEEE Transactions on Signal Processing 42 (2) (February 1994) 483–485.
[212] Y. Chen, Z. He, T.S. Ng, P.C.K. Kwok, RLS adaptive blind beamforming algorithm for cyclostationary signals, Electronics Letters 35 (14) (8 July 1999) 1136–1138.
[213] Y. Chen, Z. He, T.S. Ng, P.C.K. Kwok, Fast adaptive blind beamforming technique for cyclostationary signals, IEEE Region 10 Conference TENCON '99, Cheju Island, Korea, vol. 1, 15–17 September 1999, pp. 530–533.
[214] Y. Chen, Z. He, Blind robust neural network beamformer, International Joint Conference on Neural Networks, IJCNN '99, Washington DC, MD, vol. 5, 10–16 July 1999, pp. 3348–3351.
[215] Q. Cheng, H. Li, Parametric methods of cyclic-polyspectrum estimation for AM signals, Third International Conference on Signal Processing, ICSP '96, Beijing, China, vol. 1, 14–18 October 1996, pp. 19–22.
[216] W. Chengyi, W. Hongyu, Estimation of cyclic spectra using maximum likelihood filters, Fourth International Conference on Signal Processing, ICSP '98, Beijing, China, vol. 1, 12–16 October 1998, pp. 39–42.
[217] K.M. Cheung, S.F. Yau, Blind deconvolution of system with unknown response excited by cyclostationary impulses, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '95, Detroit, MI, vol. 3, 9–12 May 1995, pp. 1984–1987.
[218] P. Chevalier, Filtrage d'antenne en environnement cyclostationnaire, in: ISIS, Information, Signal, Images et Vision, Paris, France, 14 March 1996 (in French).
[219] P. Chevalier, A. Maurice, Constrained beamforming for cyclostationary signals, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '97, Munich, Germany, vol. 5, 21–24 April 1997, pp. 3789–3792.
[220] P. Chevalier, V. Capdevielle, P. Comon, Behaviour of higher order blind source separation methods in the presence of cyclostationary correlated multipaths, IEEE Signal Processing Workshop on Higher-Order Statistics, SPW-HOS '97, Banff, AB, Canada, 21–23 July 1997, pp. 363–367.
[221] P. Chevalier, A. Maurice, Blind and informed cyclic array processing for cyclostationary signals, in: European Signal Processing Conference, EUSIPCO '98, Rhodes, Greece, September 1998, pp. 1645–1648.
[222] P. Chevalier, A. Ferreol, On the virtual array concept for the fourth-order direction finding problem, IEEE Transactions on Signal Processing 47 (9) (September 1999) 2592–2595.
[223] P. Chevalier, A. Ferreol, Correction to "On the behavior of current second and higher order blind source separation methods for cyclostationary sources", IEEE Transactions on Signal Processing 50 (4) (April 2002) 990.
[224] P. Chevalier, A. Ferreol, L. Albera, On the behavior of current second order blind source separation methods for first and second order cyclostationary sources—application to CPFSK sources, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '02, Orlando, FL, vol. 3, 13–17 May 2002, pp. 3081–3084.
[225] P. Chevalier, A. Ferreol, L. Albera, Methodologie generale pour la separation aveugle de sources cyclostationnaires arbitraires application a l'ecoute passive des radiocommunications, Colloque GRETSI sur le Traitment du Signal et des Images, Paris, France, vol. 1, 8–11 September 2003, pp. 43–46.
[226] A. Chevreuil, Utilisation de la cyclostationnarite en egalisation aveugle, in: ISIS, Information, Signal, Images et Vision, Paris, France, 14 March 1996 (in French).
[227] A. Chevreuil, P. Loubaton, On the use of conjugate cyclo-stationarity: a blind second-order multi-user equalization method, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '96, Atlanta, GA, vol. 5, 7–10 May 1996, pp. 2439–2442.
[228] A. Chevreuil, P. Loubaton, Blind second-order identification of FIR channels: forced cyclo-stationarity and structured subspace method, First IEEE Workshop on Signal Processing Advances in Wireless Communications, SPAWC '97, Paris, France, 16–18 April 1997, pp. 121–124.
[229] A. Chevreuil, P. Loubaton, Blind second-order identification of FIR channels: forced cyclostationarity and structured subspace method, IEEE Signal Processing Letters 4 (7) (July 1997) 204–206.
[230] A. Chevreuil, Egalisation aveugle en milieu cyclostationnaire, Ph.D. Thesis, Ecole Nationale Superieure des Telecommunications (ENST), France (10 December 1997) (in French).
[231] A. Chevreuil, F. Desbouvries, A. Gorokhov, P. Loubaton, C. Vignat, Blind equalization in the presence of

jammers and unknown noise: solutions based on second-order cyclostationary statistics, IEEE Transactions on Signal Processing 46 (1) (January 1998) 259–263.

[232] A. Chevreuil, L. Vandendorpe, MIMO MMSE-DFE: a general framework, Ninth IEEE Signal Processing Workshop on Statistical Signal and Array Processing, SSAP '98, Portland, OR, 14–16 September 1998, pp. 368–371.

[233] A. Chevreuil, P. Loubaton, Repetition/modulation of the symbols: blind equalization versus capacity, SPIE '98, Advanced Signal Processing Algorithms, Architectures, and Implementations 8 (3461) (October 1998) 47–54.

[234] A. Chevreuil, P. Loubaton, MIMO blind second-order equalization method and conjugate cyclostationarity, IEEE Transactions on Signal Processing 47 (2) (February 1999) 572–578.

[235] A. Chevreuil, E. Serpedin, P. Loubaton, G.B. Giannakis, Blind channel identification and equalization using periodic modulation precoders: performance analysis, IEEE Transactions on Signal Processing 48 (6) (June 2000) 1570–1586.

[236] A. Chevreuil, P. Loubation, L. Vandendorpe, Performance of general transmitter induced cyclostationarity precoders: analysis based on a MMSE-DF receiver, IEEE Transactions on Signal Processing 48 (11) (November 2000) 3072–3086.

[237] K.-C. Chiu, Z.-Q. Zhang, Statistics of amplified light in periodically correlated layered systems with randomness, Waves in Random Media 7 (4) (1997) 635–642.

[238] J.H. Cho, Y.K. Jeong, J.S. Lehnert, Linear interference suppression for band-limited DS/SS communications with spectral overlapping, IEEE Military Communications Conference, MILCOM '02, Anaheim, CA, vol. 1, 7–10 October 2002, pp. 743–747.

[239] J.H. Cho, Joint transmitter and receiver optimization for PAM in additive cyclostationary noise, in: International Symposium on Information Theory, ISIT '03, Yokohama, Japan, 29 June–4 July 2003, p. 96.

[240] J.H. Cho, W. Gao, Continuous-Time Equivalents of Welch Bound equality sequences, IEEE International Conference on Communications, ICC '04, Paris, France, vol. 1, 20–24 June 2004, pp. 316–320.

[241] J.H. Cho, Joint transmitter and receiver optimization in additive cyclostationary noise, IEEE Transactions on Information Theory 50 (12) (December 2004) 3396–3405.

[242] Y.S. Cho, S.B. Kim, E.L. Hixson, E.J. Powers, A digital technique to estimate second-order distortion using higher order coherence spectra, IEEE Transactions on Signal Processing 40 (5) (May 1992) 1029–1040.

[243] G. Choi, R.A. Haddad, Quantization model for multiresolution dyadic subband tree structure, 28th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 1, 31 October–2 November 1994, pp. 177–181.

[244] G. Choi, R.A. Haddad, Two-dimensional dyadic subband tree modeling with embedded quantizers, 29th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 2, 30 October–2 November 1995, pp. 1025–1029.

[245] G. Choi, R.A. Haddad, Theory and design of dyadic subband tree structures with embedded PDF-optimized quantizers, IEEE Transactions on Signal Processing 46 (5) (May 1998) 1260–1274.

[246] J. Choi, A moment-based blind method for identification of FIR down-link DS-CDMA channels, IEEE Transactions on Signal Processing 48 (4) (April 2000) 966–981.

[247] J. Choi, MIMO equalization for space-time coded signals using cyclostationarity, 57th IEEE Vehicular Technology Conference, VTC '03-Spring, vol. 1, 22–25 April 2003, pp. 272–276.

[248] J. Choi, Equalization and semi-blind channel estimation for space-time block coded signals over a frequency-selective fading channel, IEEE Transactions on Signal Processing 52 (3) (March 2004) 774–785.

[249] L. Chua, A. Ushida, Algorithms for computing almost periodic steady-state response of nonlinear systems to multiple input frequencies, IEEE Transactions on Circuits and Systems 28 (10) (October 1981) 953–971.

[250] J.C.-I. Chuang, N.R. Sollenberger, Burst coherent demodulation with combined symbol timing, frequency offset estimation, and diversity selection, IEEE Transactions on Communications 39 (7) (1991) 1157–1164.

[251] P. Ciblat, Quelques problemes d'estimation relatifs aux telecommunications non-cooperatives, Ph.D. Thesis, Universite de Marne-la-Vallee, Marne-la-Vallee, France, 5 July 2000 (in French).

[252] P. Ciblat, P. Loubaton, E. Serpedin, G.B. Giannakis, Cyclic correlation based symbol estimation: asymptotic analysis, in: European Signal Processing Conference, EUSIPCO '00, Tampere, Finland, 5–8 September 2000.

[253] P. Ciblat, A. Chevreuil, P. Loubaton, Repetition/modulation and blind second order equalization, IEEE Transactions on Signal Processing 48 (11) (November 2000) 3153–3161.

[254] P. Ciblat, L. Vandendorpe, Non-data-aided carrier frequency offset estimation for OFDM and downlink DS-CDMA systems, IEEE Vehicular Technology Conference, VTC '01, Atlantic City, NJ, vol. 4, October 2001, pp. 2618–2626.

[255] P. Ciblat, P. Loubaton, E. Serpedin, G.B. Giannakis, Performance of blind carrier-offset estimation for noncircular transmissions through frequency-selective channels, IEEE Transactions on Signal Processing 50 (1) (January 2002) 130–140.

[256] P. Ciblat, P. Loubaton, E. Serpedin, G.B. Giannakis, Asymptotic analysis of blind cyclic correlation-based symbol-rate estimators, IEEE Transactions on Information Theory 48 (7) (July 2002) 1922–1934.

[257] P. Ciblat, E. Serpedin, Y. Wang, A fractionally-sampling based frequency offset enhanced blind estimator for

non-circular transmissions, 36th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 1, 3–6 November 2002, pp. 659–663.

[258] P. Ciblat, E. Serpedin, Y. Wang, On a blind fractionally sampling-based carrier frequency offset estimator for noncircular transmissions, IEEE Signal Processing Letters 10 (4) (April 2003) 89–92.

[259] P. Ciblat, L. Vandendorpe, Blind carrier frequency offset estimation for non-circular constellation based transmission, IEEE Transactions on Signal Processing 51 (5) (May 2003) 1378–1389.

[260] P. Ciblat, E. Serpedin, A fine blind frequency offset estimator for OFDM/OQAM systems, IEEE Transactions on Signal Processing 52 (1) (January 2004) 291–296.

[261] D. Cochran, Review of W.A. Gardner "Cyclostationarity in communications and signal processing", Proceedings of the IEEE 82 (10) (1994) 1584–1585.

[262] D. Cochran, Scale-based techniques in secure and jam-resistant communication systems, Tech. Rep. A870113. Available online at http://www.stormingmedia.us/87/8701/A870113.html (1 July 1996).

[263] P. Comon, P. Chevalier, Blind source separation: models, concepts, algorithms and performance, in: S.S. Haykin, S. Haykin (Eds.), Unsupervised Adaptive Filtering, vol. 1: Blind Source Separation, Wiley-Interscience, New York, 3 March 2000, pp. 191–237 (Chapter 5).

[264] P. Comon, Contrasts, independent component analysis, and blind deconvolution, International Journal of Adaptive Control and Signal Processing 18 (3) (April 2004) 225–243.

[265] E.L. da Costa, Detection and identification of cyclostationary signals, Master's Thesis, Naval Postgraduate School, Monterey, CA, 1996.

[266] J.-P. Costa, P. Rostaing, Nonlinear adaptive filtering for a jammer application, 13th International Conference on Digital Signal Processing, DSP '97, Santorini, Greece, vol. 1, 2–4 July 1997, pp. 41–44.

[267] A.J. Coulson, Maximum likelihood synchronization for OFDM using a pilot symbol: algorithms, IEEE Journal on Selected Areas in Communications 19 (12) (December 2001) 2483–2495.

[268] A.J. Coulson, Maximum likelihood synchronization for OFDM using a pilot symbol: analysis, IEEE Journal on Selected Areas in Communications 19 (12) (December 2001) 2495–2503.

[269] C. Couvreur, Y. Bresler, Doppler-based motion estimation for wide-band sources from single passive sensor measurements, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '97, Munich, Germany, vol. 5, 21–24 April 1997, pp. 3537–3540.

[270] G. Craver, D. Pietin, W. Akmouche, Detection and counting of time and spectrum overlapping signals in a NDA context, 35th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 1, 4–7 November 2001, pp. 903–907.

[272] J. Cui, D.D. Falconer, A.U.H. Sheikh, Blind adaptation of antenna arrays using a simple algorithm based on small frequency offsets, IEEE Transactions on Communications 46 (1) (January 1998) 61–70.

[273] B.J. Currivan, Satellite performance monitoring using digital measurement techniques, in: 15th American Institute of Aeronautics and Astronautics (AIAA) International Communications Satellite Systems Conference, San Diego, CA, 28 February–3 March 1994, pp. 1156–1161.

[274] R. Cusani, E. Baccarelli, S. Galli, Equalization of twisted-pair channels via optimum filtering and noise prediction, Signal Processing 66 (1) (27 April 1998) 79–93.

[275] X. Dai, Y.Q. Shi, Adaptive blind estimation and track of the carrier frequency offset of digital communication system, International Conference on Neural Networks and Signal Processing, Nanjing, China, vol. 2, 14–17 December 2003, pp. 1398–1401.

[276] X. Dai, T. Wu, P. Xu, Blind estimation of frequency offset and symbol timing in multi-path fading channels, Proceedings of the IEEE 6th Circuits and Systems Symposium on Emerging Technologies: Frontiers of Mobile and Wireless Communication, Shanghai, China, vol. 1, 31 May–2 June 2004, pp. 277–280.

[277] G. Dalpiaz, A. Rivola, R. Rubini, Gear fault monitoring: comparison of vibration analysis techniques, Third International Conference on Acoustical and Vibratory Surveillance Methods and Diagnostic Techniques, Senlis, France, vol. 2, 13–15 October 1998, pp. 623–637.

[278] G. Dalpiaz, A. Rivola, R. Rubini, Effectiveness and sensitivity of vibration processing techniques for local fault detection in gears, Mechanical Systems and Signal Processing 14 (3) (May 2000) 387–412.

[279] A.V. Dandawate, G.B. Giannakis, Polyspectral analysis of non-stationary signals: system identification, classification, and ambiguity functions, in: International Workshop on Higher-Order Statistics, Chamrousse, France, July 1991, pp. 147–150.

[280] A.V. Dandawate, G.B. Giannakis, Nonparametric polyspectral estimators for almost periodically dependent nonstationary processes, Tech. Rep. UVA/192444B/EE91/126, University of Virginia, Charlottesville, VA, October 1991.

[281] A.V. Dandawate, G.B. Giannakis, Cyclic-cumulant based identification of almost periodically time-varying systems: parametric methods, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '92, San Francisco, CA, vol. 5, 23–26 March 1992, pp. 229–232.

[282] A.V. Dandawate, G.B. Giannakis, Nonparametric polyspectral estimation of AM signals and processes with missing observations, in: 26th Conference on Information Sciences and Systems, CISS '92, Princeton, NJ, March 1992, pp. 603–605.

[283] A.V. Dandawate, G.B. Giannakis, Asymptotic properties of generalized sample averages and consistent cyclic

moment and cumulant estimators, Tech. Rep. UVA/192444B/EE92/128b, University of Virginia, Charlottesville, VA, May 1992.

[284] A.V. Dandawate, Detection and classification of cyclostationary signals using cyclic-HOS: a unified approach, in: Conference on Advanced Signal Processing Algorithms, Architectures, and Implementations, SPIE '92, San Diego, CA, July 1992, pp. 315–326.

[285] A.V. Dandawate, G.B. Giannakis, Consistent and asymptotically normal cyclic-moment and cumulant estimators and their application to missing observations, Workshop on Cyclostationary Signals, Yountville, CA, 16–18 August 1992.

[286] A.V. Dandawate, G.B. Giannakis, Nonparametric identification of linear (almost) periodically time-varying systems using cyclic-polyspectra, Sixth IEEE Signal Processing Workshop on Statistical Signal and Array Processing, SSAP '92, Victoria, BC, Canada, 7–9 October 1992, pp. 152–155.

[287] A.V. Dandawate, Exploiting cyclostationarity and higher-order statistics in signal processes, Ph.D. Thesis, University of Virginia, Charlottesville, VA, January 1993.

[288] A.V. Dandawate, On consistent and asymptotically normal sample estimators for cyclic-moments and cumulants, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '93, Minneapolis, MN, vol. 4, 27–30 April 1993, pp. 504–507.

[289] A.V. Dandawate, Testing for presence of Kth-order cyclostationarity, IEEE Signal Processing Workshop on Higher-Order Statistics, SPW-HOS '93, Lake Tahoe, CA, 7–9 June 1993, pp. 240–244.

[290] A.V. Dandawate, G.B. Giannakis, Extraction of acoustic signals using cyclostationarity, Underwater Signal Processing Workshop, Rhode Island, 6–8 October 1993.

[291] A.V. Dandawate, G.B. Giannakis, Computing the covariance of sample cumulants for stationary and cyclostationary processes, in: 27th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, 1–3 November 1993, pp. 1186–1190.

[292] A.V. Dandawate, G.B. Giannakis, Nonparametric cyclic-polyspectral analysis of AM signals and processes with missing observations, IEEE Transactions on Information Theory 39 (6) (November 1993) 1864–1876.

[293] A.V. Dandawate, G.B. Giannakis, Nonparametric polyspectral estimators for Kth-order (almost) cyclostationary processes, IEEE Transactions on Information Theory 40 (1) (January 1994) 67–84.

[294] A.V. Dandawate, G.B. Giannakis, Extraction of almost periodic signals using cyclostationarity, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '94, Adelaide, Australia, vol. 4, 19–22 April 1994, pp. 141–144.

[295] A.V. Dandawate, G.B. Giannakis, Statistical tests for presence of cyclostationarity, IEEE Transactions on Signal Processing 42 (9) (September 1994) 2355–2369.

[296] A.V. Dandawate, G.B. Giannakis, Asymptotic theory of mixed time averages and Kth-order cyclic-moment and cumulant statistics, IEEE Transactions on Information Theory 41 (1) (January 1995) 216–232.

[297] A.V. Dandawate, G.B. Giannakis, Modeling (almost) periodic moving average processes using cyclic statistics, IEEE Transactions on Signal Processing 44 (3) (March 1996) 673–684.

[298] A.V. Dandawate, G.B. Giannakis, Higher-order cyclostationarity in statistical signal processing, in: C.T. Leondes (Ed.), Digital Signal Processing Techniques and Applications, Academic Press, New York, NY, 1997.

[299] Y.Y. Dang, S. Subramanian, G.H. Gaonkar, Modeling turbulence seen by multibladed rotors for predicting rotorcraft response with three-dimensional wake, in: Institute of Aeronautics and Astronautics (AIAA) Dynamics Specialists Conference, Salt Lake City, UT, 18–19 April 1996, pp. 6–39.

[300] J. Daniere, F. Guillet, Comparaison entre les analyses angulaire et temporelle des signaux vibratoires de machines tournantes. Etude du concept de quasi-cyclostationnarite, Tech. Rep., L'Ecole Doctorale EEATS, France, 2001 (in French).

[301] A. Dapena, Blind separation of cyclostationary signals, in: European Signal Processing Conference, EUSIPCO '98, Rhodes, Greece, 1998.

[302] G.R. Dargahi-Noubary, Seismic waves and correlation autoregressive processes, Math. Geol. 25 (6) (1993) 671–688.

[303] R.J. Dargaville, S.C. Doney, I.Y. Fung, Inter-annual variability in the interhemispheric atmospheric CO_2 gradient: contributions from transport and the seasonal rectifier, Tellus B 55 (2) (April 2003) 711–722.

[304] S. Dasgupta, C. Schwarz, B.D.O. Anderson, Optimum subband coding of cyclostationary signals, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '99, Phoenix, AZ, vol. 3, 15–19 March 1999, pp. 1489–1492.

[305] A. Davis, Almost periodic extension of band-limited functions and its application to nonuniform sampling, IEEE Transactions on Circuits and Systems 33 (10) (October 1986) 933–938.

[306] S. Degerine, S. Lambert, Evolutive instantaneous spectrum associated with the partial autocorrelation function for nonstationary time series, in: IEEE Signal Processing International Symposium on Time-Frequency and Time-Scale Analysis, Paris, France, 18–21 June 1996, pp. 457–460.

[307] D. Dehay, Non linear analysis for almost periodically correlated strongly harmonizable processes, in: Second World Congress of the Bernoulli Society, Uppsala, Sweden, 13–18 August 1990.

[308] D. Dehay, Processus bivaries presque periodiquement correles: analyse spectrale et estimation des densites spectrales croisees, Journees de Statistiques, Strasbourg, France, vol. 33, May 1991, pp. 187–189 (in French).

[310] D. Dehay, Consistency of estimators of cyclic functional parameters for some nonstationary processes, Fascicule de probabilites, Publ. Inst. Rech. Math., vol. 19, University of Rennes, Rennes, France, 1993.
[311] D. Dehay, H.L. Hurd, Representation and estimation for periodically and almost periodically correlated random processes, in: W.A. Gardner (Ed.), Cyclostationarity in Communications and Signal Processing, IEEE Press, New York, NY, 1994, pp. 295–329 (Chapter 6).
[312] D. Dehay, Spectral analysis of the covariance of the almost periodically correlated processes, Stochastic Processes and their Applications 50 (2) (April 1994) 315–350.
[313] D. Dehay, Asymptotic behavior of estimators of cyclic functional parameters for some nonstationary processes, Statistics Decisions 13 (3) (1995) 273–286.
[314] D. Dehay, H.L. Hurd, Empirical determination of the frequencies of an almost periodic sequence, Eighth IEEE Signal Processing Workshop on Statistical Signal and Array Processing, Corfu, Greece, 24–26 June 1996, pp. 420–423.
[315] D. Dehay, Frequency determination for some almost periodically correlated sequences, Workshop on Cyclostationary Processes, Marnes-la-Vallee, France, 1996.
[316] D. Dehay, J.P. Leskow, Functional limit theory for the spectral covariance estimator, Journal of Applied Probability 33 (4) (1996) 1077–1092.
[317] D. Dehay, Random sampling estimation for almost periodically correlated processes, Journal of Time Series Analysis 17 (5) (1996) 425–446.
[318] D. Dehay, H.L. Hurd, Spectral estimation for strongly periodically correlated random fields defined on R^2, Mathematical Methods for Statistics 11 (2) (2002) 135–151.
[319] D. Dehay, V. Monsan, Asymptotic normality of random sampling estimators for almost periodically correlated processes, InterStat, vol. 3, September 2003. Available online at http://interstat.stat.vt.edu/InterStat/ARTICLES/2003/articles/0309003.pdf
[320] D. Dehay, V. Monsan, Discrete periodic sampling with jitter and almost periodically correlated processes, 2003, submitted for publication. Available online at http://name.math.univ-rennes1.fr/dominique.dehay/travaux-rec.html
[321] S.L. Delage, J. Obregon, Comments on "Noise source modeling for cyclostationary noise analysis in large-signal device operation", IEEE Transactions on Electron Devices 50 (10) (October 2003) 2183.
[322] A. Demir, Time domain non Monte Carlo noise simulation for nonlinear dynamic circuits with arbitrary excitations, Tech. Rep. UCB/ERL M94/39, University of California, Berkeley, CA, 1994.
[323] A. Demir, E.W.Y. Liu, A.L. Sangiovanni-Vincentelli, Time-domain non-Monte Carlo noise simulation for nonlinear dynamic circuits with arbitrary excitations, in: International Conference on Computer Aided Design, San Jose, CA, 6–10 November 1994, pp. 598–603.
[324] A. Demir, E. Liu, A. Sangiovanni-Vincentelli, Time-domain Monte-Carlo noise simulation for nonlinear dynamic circuits with arbitrary excitations, IEEE Transactions Computer-Aided Design 15 (May 1996) 493–505.
[325] A. Demir, A. Mehrotra, J. Roychowdhury, Phase noise in oscillators: a unifying theory and numerical methods for characterisation, in: 35th Conference on Design Automation, DAC '98, San Francisco, CA, 15–19 June 1998, pp. 26–31.
[326] A. Demir, D. Long, J. Roychowdhury, Computing phase noise eigenfunctions directly from steady-state Jacobian matrices, in: IEEE/ACM International Conference on Computer-Aided Design, ICCAD '00, San Jose, CA, November 2000, pp. 283–289.
[327] H. Ding, M.M. Fahmy, Inverse of linear periodically time-varying filtering, International Conference on Acoustics, Speech, and Signal Processing, ICASSP '90, Albuquerque, NM, vol. 3, 3–6 April 1990, pp. 1217–1220.
[328] H. Ding, M.M. Fahmy, Synchronised linear almost periodically time-varying adaptive filter, Communications, Speech and Vision, IEE Proceedings I 139 (4) (August 1992) 429–436.
[329] H. Ding, M.M. Fahmy, Performance of output-modulator-structured linear almost periodically time-varying adaptive filter, Communications, Speech and Vision, IEE Proceedings I 140 (2) (April 1993) 114–120.
[330] Z. Ding, On channel identifiability based on second order cyclic spectrum, IEEE Military Communications Conference, MILCOM '92, San Diego, CA, vol. 1, 11–14 October 1992, pp. 226–230.
[331] Z. Ding, Y. Li, Channel identification using second order cyclic statistics, in: 26th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, November 1992, pp. 334–338.
[332] Z. Ding, Blind channel identification and equalization using spectral correlation measurements, Part I: Frequency-domain analysis, in: W.A. Gardner (Ed.), Cyclostationarity in Communications and Signal Processing, IEEE Press, New York, NY, 1994, pp. 417–437 (Chapter 4, Part II).
[333] Z. Ding, Y. Li, On channel identification based on second-order cyclic spectra, IEEE Transactions on Signal Processing 42 (5) (May 1994) 1260–1264.
[334] Z. Ding, Characteristics of band-limited channels unidentifiable from second-order cyclostationary statistics, IEEE Signal Processing Letters 3 (5) (May 1996) 150–152.
[335] Z. Ding, Cyclostationary signal processing in digital communication systems, Tech. Rep. A582563. Available online at http://www.stormingmedia.us/58/5825/A582563.html (7 May 1999).
[336] O.A. Dobre, Y. Bar-Ness, W. Su, Higher-order cyclic cumulants for high order modulation classification, IEEE Military Communications Conference, MILCOM '03, Boston, MA, vol. 1, 13–16 October 2003, pp. 112–117.

[337] O.A. Dobre, Y. Bar-Ness, W. Su, Robust QAM modulation classification algorithm using cyclic cumulants, IEEE Wireless Communications and Networking Conference, WCNC'05, New Orleans, LA, vol. 2, 21–25 March 2004, pp. 745–748.

[338] A.V. Dobrovidov, A non-supervised algorithm for the asymptotically optimal filtering of random signals with an unknown a priori distribution, Problems of Control and Information 1 (2) (1972) 163–176 (in Russian).

[339] D.E. Dodds, J.S. Hanson, Power line data communication using timed transmission, Canadian Conference on Electrical and Computer Engineering, Calgary, AB, Canada, vol. 1, 25–28 September 1994, pp. 280–283.

[340] D.E. Dodds, K.W. Ackerman, J.S. Hanson, Power line communication using timed transmission, in: First IEEE Consumer Communications and Networking Conference, CCNC '04, Las Vegas, NV, 5–8 January 2004, pp. 639–641.

[341] F. Dominique, J.H. Reed, Estimating spectral correlations using the least mean square algorithm, Electronics Letters 33 (3) (30 January 1997) 182–184.

[342] K.D. Donohue, T. Varghese, Spectral cross correlation for tissue characterization, IEEE Ultrasonic Symposium, Tucson, AZ, vol. 2, October 1992, pp. 1049–1052.

[343] K.D. Donohue, J.M. Bressler, T. Varghese, N.M. Bilgutay, Spectral correlation in ultrasonic pulse-echo signal processing, IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control 40 (3) (July 1993) 330–337.

[344] K.D. Donohue, T. Varghese, N.M. Bilgutay, Spectral redundancy in characterizing scatterer structures from ultrasonic echoes, in: D.O. Thompson, D.E. Chimenti (Eds.), Review of Progress in Quantitative Nondestructive Evaluation, Plenum Publishing, New York, NY, 1994, p. 13.

[345] Y.P. Dragan, Periodically correlated random processes, and transformers with periodically varying parameters, Otbor i Peredavca Informacii 22 (1969) 27–33 (in Russian).

[346] Y.P. Dragan, The spectral properties of periodically correlated stochastic processes, Otbor i Peredavca Informacii 30 (1971) 16–24 (in Russian).

[347] Y.P. Dragan, Biperiodically correlated random processes, Otbor i Peredavca Informacii 34 (1972) 12–14 (in Russian).

[348] Y.P. Dragan, P. Ja, Properties of counts of periodically correlated random processes, Otbor i Perdavca Informacii 33 (1972) 9–12 (in Russian).

[349] Y.P. Dragan, The representation of a periodically correlated random process by stationary components, Otbor i Peredavca Informacii 45 (1975) 7–20 (in Russian).

[350] Y.P. Dragan, Harmonizability and spectral distribution of random processes with finite mean power, Dokl. Akad. Nauk. (Ukrain) SSR Ser. A (8) (1978) 679–684 (in Russian).

[351] Y.P. Dragan, Structure and Representation of Stochastic Signal Models, Naukova Dumka, Kiev, Ukraine, 1980 (in Russian).

[352] Y.P. Dragan, I.N. Yavorsky, Rythmics of Sea Waves and Underwater Acoustic Signals, Naukova Dumka, Kiev, Ukraine, 1982 (in Russian).

[353] Y.P. Dragan, V.P. Mezentsev, I.N. Yavorsky, Symmetry of the covariance matrix of measurements of a periodically correlated random process, Otbor i Peredacha Informatsii 66 (1982) 3–6 (in Russian).

[354] Y.P. Dragan, I.N. Yavorsky, The periodic correlation-random field as a model for bidimensional ocean waves, Peredacha Informatsii 51 (1982) 15–25.

[355] Y.P. Dragan, V.A. Rozhkov, I.N. Yavorsky, Applications of the theory of periodically correlated random processes to the probabilistic analysis of oceanological time series, in: V.A. Rozhkov (Ed.), Probabilistic Analysis and Modeling of Oceanological Processes, Leningrad, Gidrometeoizdat, 1984, pp. 4–23 (in Russian).

[356] Y.P. Dragan, I.N. Yavorsky, Statistical analysis of periodic random processes, Otbor i Peredacha Informatsii 71 (1985) 20–29 (in Russian).

[357] Y.P. Dragan, V.A. Rozhkov, I.N. Yavorsky, Methods of Probabilistic Analysis of Rhythms of Oceanological Processes, Gidrometeoizdat, Leningrad, 1987 (in Russian).

[358] Y.P. Dragan, L.S. Sikora, I.N. Yavorsky, Informativeness characteristics of periodically correlated and related random processes as stochastic models of periodicity, Problemy Upravlen. Inform. 151 (6) (1997) 96–109 (in Russian).

[359] J. Dreifuss, A. Madjar, A. Bar-Lev, An improved version of the almost periodic Fourier transform algorithm with applications in the large-signal domain, IEEE Transactions on Microwave Theory and Techniques 39 (3) (March 1991) 571–575.

[360] J. Du, Q. Peng, Y. Li, Adaptive blind equalization for MIMO-OFDM wireless communication systems, International Conference on Communication Technology, ICCT '03, Beijing, China, vol. 2, 9–11 April 2003, pp. 1086–1090.

[361] J. Du, Q. Peng, H. Zhang, Adaptive blind channel identification and equalization for OFDM-MIMO wireless communication systems, Fourteenth IEEE Conference on Personal, Indoor and Mobile Radio Communications, PIMRC '03, Beijing, China, vol. 3, 7–10 September 2003, pp. 2078–2082.

[362] K.-L. Du, A.K.Y. Lai, K.K.M. Cheng, M.N.S. Swamy, Neural methods for antenna array signal processing: a review, Signal Processing 82 (4) (April 2002) 547–561.

[363] K.-L. Du, M.N.S. Swamy, An iterative blind cyclostationary beamforming algorithm, IEEE International Conference on Communications, ICC '02, New York, NY, vol. 1, 28 April–2 May 2002, pp. 145–148.

[364] K.-L. Du, M.N.S. Swamy, Simple and practical cyclostationary beamforming algorithms, IEE Proceed-

ings—Vision, Image and Signal Processing 151 (3) (June 2004) 175–180.
[365] Q. Du, S. Zhu, P. Ren, An improved adaptive MMSE algorithm for multirate multiuser detection in WCDMA systems, Proceedings of the IEEE Sixth Circuits and Systems Symposium on Emerging Technologies: Frontiers of Mobile and Wireless Communication, Shanghai, China, vol. 1, 31 May–2 June 2004, pp. 317–320.
[366] A. Duel-Hallen, Detection of cyclostationary data in the presence of intersymbol interference, in: Conference on Information Sciences and Systems, CISS '89, Baltimore, MD, 1989, pp. 349–355.
[367] A. Duel-Hallen, C. Heegard, Spectra of cyclostationary run-length limited codes, in: Conference on Information Sciences and Systems, CISS '91, Baltimore, MD, 1991, pp. 390–394.
[368] A. Duel-Hallen, Equalizers for multiple input/multiple output channels and PAM systems with cyclostationary input sequences, IEEE Journal on Selected Areas in Communications 10 (3) (April 1992) 630–639.
[369] A. Dunlop, A. Demir, P. Feldmann, S. Kapur, D. Long, R. Melville, J. Roychowdhury, Tools and methodology for RF IC design, in: Conference on Design Automation, DAC '98, San Francisco, CA, 15–19 June 1998, pp. 414–421.
[370] W. Dunsmuir, Time series regression with periodically correlated errors and missing data, in: Symposium on Time Series Analysis of Irregularly Observed Data, College Station, TX, 1983, pp. 78–107.
[371] G.M. Durant, S. Ariyavisitakul, Implementation of a broadband equalizer for high-speed wireless data applications, IEEE International Conference on Universal Personal Communications, ICUPC '98, Florence, Italy, vol. 2, 5–9 October 1998, pp. 1015–1020.
[372] A. Duverdier, B. Lacaze, Scrambling and error correction by means of linear time-varying filters, in: European Signal Processing Conference, EUSIPCO '96, Trieste, Italy, 10–13 September 1996.
[373] A. Duverdier, B. Lacaze, Time-varying reconstruction of stationary processes subjected to analogue periodic scrambling, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '97, Munich, Germany, vol. 3, 21–24 April 1997, pp. 1839–1842.
[374] A. Duverdier, B. Lacaze, New realization method for linear periodic time-varying filters, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '99, Phoenix, AZ, vol. 3, 15–19 March 1999, pp. 1725–1728.
[375] A. Duverdier, B. Lacaze, D. Roviras, Introduction of linear cyclo-stationary filters to model time variant channels, IEEE Global Telecommunications Conference, GLOBECOM '99, Rio de Janeiro, Brazil, vol. 1A, 5–9 December 1999, pp. 325–329.
[376] A. Duverdier, B. Lacaze, J.-Y. Tourneret, On the use of cyclostationary filters to transmit information, in: Tenth IEEE Workshop on Statistical Signal and Array Processing, SSAP '00, Pocono Manor, PA, 14–16 August 2000, pp. 196–200.
[377] A. Duverdier, B. Lacaze, On the use of periodic clock changes to implement linear periodic time-varying filters, IEEE Transactions on Circuits and Systems II: Analog and Digital Signal Processing 47 (11) (November 2000) 1152–1159.
[378] N. Efstratios, S.V. Olafsson, Random vibrations of bladed-disk assemblies under cyclostationary excitation, Journal of Propulsion and Power 7 (6) (1991) 981–989.
[379] J.M.H. Elmirghani, R.A. Cryan, Jitter implications on PPM using optical preamplification, Electronics Letters 30 (1) (6 January 1994) 60–62.
[380] J.M.H. Elmirghani, R.A. Cryan, Jitter implications on optical fibre PPM performance, IEEE International Conference on Communications, ICC '94, New Orleans, LA, vol. 2, 1–5 May 1994, pp. 665–669.
[381] J.M.H. Elmirghani, R.A. Cryan, Self-synchronization and jitter in pulse position modulation (PPM) systems, SPIE '95, Broadband Networks: Strategies and Technologies, vol. 2450, February 1995, pp. 599–605.
[382] J.M.H. Elmirghani, R.A. Cryan, F.M. Clayton, On the spectral estimation and synchronization of the cyclostationary optical fibre PPM process, IEEE Transactions on Communications 43 (234) (February/March/April 1995) 1001–1012.
[383] J.M.H. Elmirghani, R.A. Cryan, F.M. Clayton, Spectral analysis of timing jitter effects on the cyclostationary PPM format, Signal Processing 43 (3) (1995) 269–277.
[384] S. Enserink, D. Cochran, A cyclostationary feature detector, 28th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 2, 31 October–2 November 1994, pp. 806–810.
[385] S. Enserink, D. Cochran, On detection of cyclostationary signals, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '95, Detroit, MI, vol. 3, 9–12 May 1995, pp. 2004–2007.
[386] T.H.E. Ericson, Modulation by means of linear periodic filtering, IEEE Transactions on Information Theory 27 (3) (May 1981) 322–327.
[387] W. van Etten, An optimum linear receiver for multiple channel digital transmission systems, IEEE Transactions on Communications 23 (8) (August 1975) 828–834.
[388] J.W.A. Fackrell, S. McLaughlin, Quadratic phase coupling detection using higher order statistics, IEE Colloquium on Higher Order Statistics in Signal Processing, vol. 9, 22 May 1995, pp. 1–8.
[389] T.T. Fang, I and Q decomposition of self-noise in square-law clock regenerators, IEEE Transactions on Communications 36 (9) (September 1988) 1044–1052.
[390] T.T. Fang, Analysis of self-noise in a fourth-power clock regenerator, IEEE Transactions on Communications 39 (1) (January 1991) 133–140.
[391] A. Farina, B. Wade, Clutter analysis with cyclostationary techniques, IEE Seminar—Multifunction Radar and Sonar Sensor Management, London, UK, vol. 1, 25 November 2001, pp. 1–10.

[392] J. Farshidi, H.L. Hurd, G. Kallianpur, Periodically correlated fields on Z^2, Tech. Rep. 428, Center for Stochastic Processes, University of North Carolina, Chapel Hill, NC, February 1995.
[393] J. Farshidi, H.L. Hurd, G. Kallianpur, Correlation and spectral theory for periodically correlated fields indexed on Z^2, Tech. Rep. 448, Center for Stochastic Processes, University of North Carolina, Chapel Hill, NC, 1997.
[394] L. Fellingham, F. Sommer, Ultrasonic characterization of tissue structure in the in vivo human liver and spleen, IEEE Transactions on Sonics and Ultrasonics 31 (July 1984) 418–428.
[395] D. Feng, J. Phillips, K. Nabors, K. Kundert, J. White, Efficient computation of quasi-periodic circuit operating conditions via a mixed frequency/time approach, in: 36th Design Automation Conference, New Orleans, LA, 21–25 June 1999, pp. 635–640.
[396] J.K. de Feriet, Correlation and spectra for nonstationary random functions, Mathematical Compendium 16 (1962) 1–21.
[397] J.K. de Feriet, Correlation and spectrum of asymptotically stationary random functions, Mathematical Studies 30 (1962) 55–67.
[398] E.R. Ferrara Jr., B. Widrow, The time-sequenced adaptive filter, IEEE Transactions on Acoustic, Speech, and Signal Processing 29 (3) (June 1981) 679–683.
[399] E.R. Ferrara Jr., Frequency-domain implementations of periodically time-varying filters, IEEE Transactions on Acoustics, Speech, and Signal Processing 33 (4) (August 1985) 883–892.
[400] P.J.S.G. Ferreira, Sampling and generalized almost periodic extension of functions, IEEE Transactions on Circuits and Systems II: Analog and Digital Signal Processing 46 (4) (April 1999) 475–478.
[401] A. Ferreol, P. Chevalier, Higher order blind source separation using the cyclostationarity property of the signals, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '97, Munich, Germany, vol. 5, 21–24 April 1997, pp. 4061–4064.
[402] A. Ferreol, P. Chevalier, Limites des estimateus classiques de cumulants d'ordre quatre pour la separation aveugle de sources cyclostationnaires, in: Seizieme Colloque GRETSI sur le Traitment du Signal et des Images, Grenoble, France, September 1997, pp. 19–22 (in French).
[403] A. Ferreol, P. Chevalier, On the fourth-order cumulants estimation for the HO blind separation of cyclostationary sources, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '98, Seattle, WA, vol. 4, 12–15 May 1998, pp. 2313–2316.
[404] A. Ferreol, P. Chevalier, On the behavior of current second and higher order blind source separation methods for cyclostationary sources, IEEE Transactions on Signal Processing 48 (6) (June 2000) 1712–1725.
[405] A. Ferreol, P. Chevalier, L. Albera, Procede de traiement d'antennes sur des signaux cyclostationnaires potentiellement non centres, Patent No. 02.05575, 62801. Available online at http://www.i3s.unice.fr/albera/alberasiteweb/publi.html, 3 May 2002 (in French).
[406] A. Ferreol, M. Chenu-Tournier, DOA estimation after blind identification of subspace channel vectors in multipath contexts, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '02, Orlando, FL, vol. 3, 13–17 May 2002, pp. 3061–3064.
[407] A. Ferreol, P. Chevalier, L. Albera, Higher order blind separation of non zero-mean cyclostationary sources, in: European Signal Processing Conference, EUSIPCO '02, Toulouse, France, September 2002, pp. 103–106.
[408] A. Ferreol, L. Albera, P. Chevalier, Fourth order blind identification of underdetermined mixtures of sources (FOBIUM), IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '03, Hong Kong, vol. 5, 6–10 April 2003, pp. 41–44.
[409] A. Ferreol, P. Chevalier, L. Albera, Second-order blind separation of first- and second-order cyclostationary sources-application to AM, FSK, CPFSK, and deterministic sources, IEEE Transactions on Signal Processing 52 (4) (April 2004) 845–861.
[410] G. Feyh, Higher order statistics of communication signals via tensor algebra, 26th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 2, 26–28 October 1992, pp. 731–735.
[411] G. Feyh, Using cyclostationarity for timing synchronization and blind equalization, 28th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 2, 31 October–2 November 1994, pp. 1448–1452.
[412] I. Fijalkow, F.L. de Victoria, C.R. Johnson Jr., Adaptive fractionally spaced blind equalization, Sixth IEEE DSP Workshop, Yosemite, CA, October 1994, pp. 261–264.
[413] C.J. Finelli, J.M. Jenkins, A cyclostationary least mean squares algorithm for discrimination of ventricular tachycardia from sinus rhythm, International Conference of the IEEE Engineering in Medicine and Biology Society, Baltimore, MD, vol. 13, 31 October–3 November 1991, pp. 740–741.
[414] R.F.H. Fischer, Precoding and Signal Shaping for Digital Transmission, Wiley–IEEE Press, New York, 26 July 2002.
[415] P.J. Fish, Nonstationarity broadening in pulsed Doppler spectrum measurements, Ultrasound in Medicine and Biology 17 (2) (1991) 147–155.
[416] M.P. Fitz, Nonlinear digital carrier synchronization for Rician fading channels, in: IEEE Global Telecommunications Conference, GLOBECOM '90, San Diego, CA, 2–5 December 1990, pp. 623–628.
[417] W. Fitzgerald, R. Smith, A. Walden, P. Young, Nonlinear and Nonstationary Signal Processing, Cambridge University Press, Cambridge, UK, 2000.
[418] F. Flagiello, L. Izzo, A. Napolitano, A computationally efficient and interference tolerant nonparametric algorithm for LTI system identification based on higher

order cyclostationarity, IEEE Transactions on Signal Processing 48 (4) (April 2000) 1040–1052.
[419] G. Fong, Evaluation of least squares algorithms for detection and estimation of cyclostationary signals, Master's Thesis, University of California, Davis, CA, September 1993.
[420] G. Fong, W.A. Gardner, S.V. Schell, An algorithm for improved signal-selective time-difference estimation for cyclostationary signals, IEEE Signal Processing Letters 1 (2) (February 1994) 38–40.
[421] J.R. Fonollosa, C.L. Nikias, Analysis of CPM signals using higher-order statistics, IEEE Military Communications Conference, MILCOM '93, Boston, MA, vol. 2, 11–14 October 1993, pp. 663–667.
[422] P. Forster, T. Aste, L. Fety, Multisensors receivers using a filtered reference: application to GSM, IEEE International Conference on Universal Personal Communications, ICUPC '98, Florence, Italy, vol. 1, 5–9 October 1998, pp. 517–521.
[423] B. Francis, S. Dasgupta, Signal compression by subband coding, Automatica 35 (12) (December 1999) 1895–1908.
[424] L.E. Franks, Signal Theory, Prentice-Hall, Englewood Cliffs, NJ, 1969.
[425] L. Franks, J. Bubrouski, Statistical properties of timing jitter in a PAM timing recovery scheme, IEEE Transactions on Communications 22 (7) (July 1974) 913–920.
[426] L.E. Franks, Carrier and bit synchronization in data communications—a tutorial review, IEEE Transactions on Communications 28 (8) (August 1980) 1107–1121.
[427] L.E. Franks, Polyperiodic linear filtering, Workshop on Cyclostationary Signals, Yountville, CA, 16–18 August 1992.
[428] L.E. Franks, Polyperiodic linear filtering, in: W.A. Gardner (Ed.), Cyclostationarity in Communications and Signal Processing, IEEE Press, New York, NY, 1994, pp. 240–267 (Chapter 4).
[429] P.H. Franses, Periodicity and Stochastic Trends in Economic Time Series, Oxford University Press, Oxford, 1996.
[430] P.H. Franses, R. Paap, Periodic Time Series Models, Oxford University Press, Oxford, 2004.
[431] T. Frederick, N. Erdol, Time-frequency estimation for cyclostationary signals, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '96, Atlanta, GA, vol. 5, 7–10 May 1996, pp. 2928–2931.
[432] C.A. French, Spread spectrum despreading without the code, Master's Thesis, University of California, Davis, CA, September 1984.
[433] C.A. French, W.A. Gardner, Spread-spectrum despreading without the code, IEEE Transactions on Communications 34 (4) (April 1986) 404–407.
[434] J. Freudenberger, M. Bossert, S. Shavgulidze, A repeat request strategy based on sliding window decoding of convolutional codes, in: Proceedings International Symposium on Information Theory, ISIT'04, Chicago, IL, 27 June–2 July 2004, p. 295.
[435] V. Friderikos, D. Koulakiotis, A.H. Aghvami, Performance evaluation of a parallel fractional adaptive single-user receiver in a dynamic environment, in: First International Conference on 3G Mobile Communication Technologies, London, UK, 27–29 March 2000, pp. 108–111.
[436] A. Fung, L.S. Lee, D.D. Falconer, A facility for near end cross-talk measurements on ISDN subscriber loops, IEEE Global Telecommunications Conference, GLOBECOM '89, Dallas, TX, vol. 3, 27–30 November 1989, pp. 1592–1596.
[437] I.G. Fuss, An interpretation of the spectral measurement of optical pulse train noise, IEEE Journal of Quantum Electronics 30 (11) (November 1994) 2707–2710.
[438] A. Gallopoulos, C. Heegard, P. Siegel, The power spectrum of run-length-limited codes, IEEE Transactions on Communications 37 (9) (September 1989) 906–917.
[439] A. Gameiro, Improved carrier recovery for signals affected by multipath fading, Fifth IEEE International Symposium on Personal, Indoor and Mobile Radio Communications, PIMRC '94, Ohe Hague, Netherlands, vol. 1, 18–23 September 1994, pp. 247–252.
[440] A. Gameiro, An extended phase-locked loop for clock synchronization applications, IEEE Global Telecommunications Conference, GLOBECOM '94, San Francisco, CA, vol. 2, 28 November–2 December 1994, pp. 956–961.
[441] A. Gameiro, Maximum likelihood symbol synchronization in channels with data dependent noise, in: IEEE International Symposium on Information Theory, ISIT '00, Sorrento, Italy, 25–30 June 2000, p. 134.
[442] A. Gameiro, Capacity enhancement of DS-CDMA synchronous channels by frequency-shift filtering, 11th IEEE International Symposium on Personal, Indoor and Mobile Radio Communications, PIMRC '00, London, UK, vol. 2, 18–21 September 2000, pp. 833–837.
[443] A. Gameiro, Simple receiver for systems with spectrally overlapping narrowband and broadband signals, Wireless Personal Communications 23 (3) (December 2002) 311–320.
[444] V.P. Gaposhkin, Criteria for the strong law of large numbers for some classes of second order stationary processes and homogenous random fields, Theory of Probability and its Applications 22 (2) (1977) 287–310.
[445] F.M. Gardner, Self-noise in synchronizers, IEEE Transactions on Communications 28 (8) (August 1980) 1159–1163.
[446] F.M. Gardner, A BPSK/QPSK timing-error detector for sampled receivers, IEEE Transactions on Communications 34 (5) (May 1986) 423–429.
[447] W.A. Gardner, Representation and estimation of cyclostationary processes, Ph.D. Thesis, University of Massachusetts, Amherst, MA, August 1972.

[448] W.A. Gardner, Representation and estimation of cyclostationary processes (Ph.D. Thesis Abstract), IEEE Transactions on Information Theory 19 (3) (May 1973) 376.
[449] W.A. Gardner, L. Franks, Characterization of cyclostationary random signal processes, IEEE Transactions on Information Theory 21 (1) (January 1975) 4–14.
[450] W.A. Gardner, Stationarizable random processes, IEEE Transactions on Information Theory 24 (1) (January 1978) 8–22.
[451] W.A. Gardner, Representation and estimation of cyclostationary processes, Tech. Rep. SILP-82-1, Signal and Image Processing Lab., University of California, Davis, CA, 1982.
[452] W.A. Gardner, Introduction to Random Processes with Applications to Signals and Systems, Macmillan, New York, 1985.
[453] W.A. Gardner, The spectral correlation theory of cyclostationary time series, Signal Processing 11 (1) (July 1986) 13–36.
[454] W.A. Gardner, Measurement of spectral correlation, IEEE Transactions on Acoustics, Speech, and Signal Processing 34 (5) (October 1986) 1111–1123.
[455] W.A. Gardner, The role of spectral correlation in design and performance analysis of synchronizers, IEEE Transactions on Communications 34 (11) (November 1986) 1089–1095.
[456] W.A. Gardner, The spectral correlation theory of cyclostationary time-series, Signal Processing 11 (1) (July 1986) 13–36 (Erratum, Signal Processing 11 (4) (December 1986) 405).
[457] W.A. Gardner, Rice's representation for cyclostationary processes, IEEE Transactions on Communications 35 (1) (January 1987) 74–78.
[458] W.A. Gardner, Common pitfalls in the application of stationary process theory to time-sampled and modulated signals, IEEE Transactions on Communications 35 (5) (May 1987) 529–534.
[459] W.A. Gardner, Spectral correlation of modulated signals: Part I—Analog modulation, IEEE Transactions on Communications 35 (6) (June 1987) 584–594.
[460] W.A. Gardner, W.A. Brown, C.-K. Chen, Spectral correlation of modulated signals: Part II—Digital Modulation, IEEE Transactions on Communications 35 (6) (June 1987) 595–601.
[461] W.A. Gardner, Statistical Spectral Analysis: A Nonprobabilistic Theory, Prentice-Hall, Englewood Cliffs, NJ, 1987.
[462] W.A. Gardner, Simplification of MUSIC and ESPRIT by exploitation of cyclostationarity, Proceedings of the IEEE 76 (7) (July 1988) 845–847.
[463] W.A. Gardner, Exploitation of spectral correlation in cyclostationary signals, Fourth ASSP Workshop on Spectrum Estimation and Modeling, Minneapolis, MN, 3–5 August 1988, pp. 1–6.
[464] W.A. Gardner, C.-K. Chen, Selective source location by exploitation of spectral coherence, Fourth ASSP Workshop on Spectrum Estimation and Modeling, Minneapolis, MN, 3–5 August 1988, pp. 271–276.
[465] W.A. Gardner, Signal interception: a unifying theoretical framework for feature detection, IEEE Transactions on Communications 36 (8) (August 1988) 897–906.
[466] W.A. Gardner, C.M. Spooner, Cyclic spectral analysis for signal detection and modulation recognition, IEEE Military Communications Conference, MILCOM '88, San Diego, CA, vol. 2, 23–26 October 1988, pp. 419–424.
[467] W.A. Gardner, Correlation estimation and time-series modeling for nonstationary processes, Signal Processing 15 (1) (1988) 31–41.
[468] W.A. Gardner, W.A. Brown, Frequency-shift filtering theory for adaptive co-channel interference removal, in: 23rd Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, 30 October–1 November 1989, pp. 562–567.
[469] W.A. Gardner, Identification of systems with cyclostationary input and correlated input/output measurement noise, IEEE Transactions on Automatic Control 35 (4) (April 1990) 449–452.
[470] W.A. Gardner, Spectral characterization of *N*th order cyclostationarity, Fifth ASSP Workshop on Spectrum Estimation and Modeling, Rochester, NY, 10–12 October 1990, pp. 251–255.
[471] W.A. Gardner, S. Venkataraman, Performance of optimum and adaptive frequency-shift filters for cochannel interference and fading, in: 24th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, 5–7 November 1990.
[472] W.A. Gardner, C.M. Spooner, Higher-order cyclostationarity, in: International Symposium on Information Theory and Applications, ISITA '90, Honolulu, HI, 27–30 November 1990, pp. 355–358.
[473] W.A. Gardner, Cyclostationary processes, in: W.A. Gardner (Ed.), Introduction to Random Processes with Applications in Signals and Systems, McGraw-Hill, New York, NY, 1990, pp. 323–415 (Chapter 12).
[474] W.A. Gardner, Introduction to Random Processes with Applications in Signals and Systems, McGraw-Hill, New York, NY, 1990.
[475] W.A. Gardner, On "The optimal linear receiving filter for digital transmission over nonlinear channels", IEEE Transactions on Information Theory 37 (1) (January 1991) 219.
[476] W.A. Gardner, Two alternative philosophies for estimation of the parameters of time-series, IEEE Transactions on Information Theory 37 (1) (January 1991) 216–218.
[477] W.A. Gardner, On the spectral coherence of nonstationary processes, IEEE Transactions on Signal Processing 39 (2) (February 1991) 424–430.
[478] W.A. Gardner, Exploitation of spectral redundancy in cyclostationary signals, IEEE Signal Processing Magazine 8 (2) (April 1991) 14–36.

[479] W.A. Gardner, A new method of channel identification, IEEE Transactions on Communications 39 (6) (June 1991) 813–817.
[480] W.A. Gardner, W.A. Brown, Fraction-of-time probability for time-series that exhibit cyclostationarity, Signal Processing 23 (3) (June 1991) 273–292.
[481] W.A. Gardner, C.M. Spooner, Signal interception: performance advantages of cyclic-feature detectors, IEEE Transactions on Communications 40 (1) (January 1992) 149–159.
[482] W.A. Gardner, C.-K. Chen, Signal-selective time-difference-of-arrival estimation for passive location of man-made signal sources in highly corruptive environments. I. Theory and method, IEEE Transactions on Signal Processing 40 (5) (May 1992) 1168–1184.
[483] W.A. Gardner, S.V. Schell, P.A. Murphy, Multiplication of cellular radio capacity by blind adaptive spatial filtering, in: IEEE ICSTWC '92, Vancouver, BC, Canada, June 1992, pp. 102–106.
[484] W.A. Gardner, C.M. Spooner, Comparison of autocorrelation and cross-correlation methods for signal-selective TDOA estimation, IEEE Transactions on Signal Processing 40 (10) (October 1992) 2606–2608.
[485] W.A. Gardner, Cyclic Wiener filtering: theory and method, IEEE Transactions on Communications 41 (1) (January 1993) 151–163.
[486] W.A. Gardner, T.L. Archer, Exploitation of cyclostationarity for identifying the Volterra kernels of nonlinear systems, IEEE Transactions on Information Theory 39 (2) (March 1993) 535–542.
[487] W.A. Gardner, C.M. Spooner, Detection and source location of weak cyclostationary signals: simplifications of the maximum-likelihood receiver, IEEE Transactions on Communications 41 (6) (June 1993) 905–916.
[488] W.A. Gardner, C.M. Spooner, Cyclic feature analysis, design and exploitation, Tech. Rep. A936092. Available online at http://www.stormingmedia.us/93/9360/A936092.html (26 September 1994).
[489] W.A. Gardner, C.M. Spooner, The cumulant theory of cyclostationary time-series. I. Foundation, IEEE Transactions on Signal Processing 42 (12) (December 1994) 3387–3408.
[490] W.A. Gardner, C.M. Spooner, The cumulant theory of cyclostationary time-series. II. Development and applications, IEEE Transactions on Signal Processing 42 (12) (December 1994) 3409–3429.
[491] W.A. Gardner, An introduction to cyclostationary signals, in: W.A. Gardner (Ed.), Cyclostationarity in Communications and Signal Processing, IEEE Press, New York, NY, 1994, pp. 1–91 (Chapter 1).
[492] W.A. Gardner, Cyclostationarity in Communications and Signal Processing, IEEE Press, New York, NY, 1994.
[493] W.A. Gardner, G.K. Yeung, W.A. Brown, Signal reconstruction after severe spectral excision, 29th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 1, 30 October–2 November 1995, pp. 516–520.
[494] W.A. Gardner, L. Paura, Identification of polyperiodic nonlinear systems, Signal Processing 46 (1) (September 1995) 75–83.
[495] W.A. Gardner, C.W. Reed, Making the most out of spectral redundancy in GSM: cheap CCI suppression, 35th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 1, 4–7 November 2001, pp. 883–889.
[496] A. Gatherer, E. Auslander, Exploiting cyclostationarity, first ed., in: The Application of Programmable DSPs in Mobile Communications, Wiley, Chichester, England, 18 January 2002, pp. 75–77 (Chapter 5.3.6).
[497] G. Gelli, A. Napolitano, L. Paura, Spectral-correlation based estimation of channel parameters by noncoherent data processing, International Conference on Circuits and Systems, Shenzhen, China, vol. 1, 16–17 June 1991, pp. 354–357.
[498] G. Gelli, L. Izzo, L. Paura, G. Poggi, A cyclic SVD-based algorithm for multiple source localization, in: Treizieme Colloque GRETSI sur le Traitment du Signal et des Images, Nice, France, 16–20 September 1991, pp. 669–672.
[499] G. Gelli, L. Izzo, A. Napolitano, L. Paura, Multipath-channel identification by an improved Prony algorithm based on spectral correlation measurements, Signal Processing 31 (1) (March 1993) 17–29.
[500] G. Gelli, Power and timing parameter estimation of multiple cyclostationary signals from sensor array data, Signal Processing 42 (1) (February 1995) 97–102.
[501] G. Gelli, L. Izzo, L. Paura, Cyclostationarity-based signal detection and source location in non-Gaussian noise, IEEE Transactions on Communications 44 (3) (March 1996) 368–376.
[502] G. Gelli, L. Izzo, A cyclic coherent method for wideband source location, in: European Signal Processing Conference, EUSIPCO '96, Trieste, Italy, 10–13 September 1996, pp. 911–914.
[503] G. Gelli, L. Paura, Blind signal extraction based on higher-order cyclostationarity properties, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '97, Munich, Germany, vol. 5, 21–24 April 1997, pp. 3473–3476.
[504] G. Gelli, L. Izzo, Minimum-redundancy linear arrays for cyclostationarity-based source location, IEEE Transactions on Signal Processing 45 (10) (October 1997) 2605–2608.
[505] G. Gelli, L. Paura, A.M. Tulino, Cyclostationarity-based filtering for narrowband interference suppression in direct-sequence spread-spectrum systems, IEEE Journal on Selected Areas in Communications 16 (9) (December 1998) 1747–1755.
[506] G. Gelli, F. Verde, Blind LPTV joint equalization and interference suppression, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '00, Istanbul, Turkey, vol. 5, 5–9 June 2000, pp. 2753–2756.

[507] G. Gelli, D. Mattera, L. Paura, Blind wideband spatial filtering based on higher-order cyclostationarity properties, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '01, Salt Lake City, UT, vol. 5, 7–11 May 2001, pp. 2933–2936.

[508] G. Gelli, L. Izzo, Cyclostationarity-based coherent methods for wideband-signal source location, IEEE Transactions on Signal Processing 51 (10) (October 2003) 2471–2482.

[509] G. Gelli, L. Paura, F. Verde, On the existence of FIR zero-forcing equalizers for nonredundantly precoded transmissions through FIR channels, IEEE Signal Processing Letters 12 (3) (March 2005) 202–205.

[510] G. Gelli, D. Mattera, L. Paura, Blind wideband spatio-temporal filtering based on higher-order cyclostationarity properties, IEEE Transactions on Signal Processing 53 (4) (April 2005) 1282–1290.

[511] M.J. Genossar, H. Lev-Ari, T. Kailath, Consistent estimation of the cyclic autocorrelation, IEEE Transactions on Signal Processing 42 (3) (March 1994) 595–603.

[512] V.V. George, G.H. Gaonkar, J.V.R. Prasad, D.P. Schrage, Adequacy of modeling turbulence and related effects on helicopter response, Institute of Aeronautics and Astronautics (AIAA) Journal 30 (6) (1992) 1468–1479.

[513] N.L. Gerr, J.C. Allen, The generalized spectrum and spectral coherence of a harmonizable time series, Digital Signal Processing 4 (1994) 222–238.

[514] I. Ghauri, D.T.M. Slock, Blind optimal MMSE receiver for asynchronous CDMA in the presence of multipath, 31st Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 1, 2–5 November 1997, pp. 500–504.

[515] I. Ghauri, D.T.M. Slock, Blind and semi-blind single user receiver techniques for asynchronous CDMA in multipath channels, IEEE Global Telecommunications Conference, GLOBECOM '98, Sydney, Australia, vol. 6, 8–12 November 1998, pp. 3572–3577.

[516] I. Ghauri, D.T.M. Slock, Blind channel and linear MMSE receiver determination in DS-CDMA systems, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '99, Phoenix, AZ, vol. 5, 15–19 March 1999, pp. 2699–2702.

[517] I. Ghauri, D.T.M. Slock, MMSE-ZF receiver and blind adaptation for multirate CDMA, 50th IEEE Vehicular Technology Conference, VTC '99—Fall, Amsterdam, Netherlands, vol. 1, 19–22 September 1999, pp. 628–632.

[518] I. Ghauri, D.T.M. Slock, Blind channel identification and projection receiver determination for multicode and multirate situations in DS-CDMA systems, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '01, Salt Lake City, UT, vol. 4, 7–11 May 2001, pp. 2197–2200.

[519] M. Ghogho, B. Garel, Optimal cyclic statistics for the estimation of harmonics in multiplicative and additive noise, in: IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '97, Munich, Germany, April 1997, pp. 3997–4000.

[520] M. Ghogho, A. Swami, T. Durrani, On blind carrier recovery in time-selective fading channels, 33rd Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 1, 24–27 October 1999, pp. 243–247.

[521] M. Ghogho, A. Swami, B. Garel, Performance analysis of cyclic estimators for harmonics in multiplicative and additive noise, IEEE Transactions on Signal Processing 47 (12) (December 1999) 3235–3249.

[522] S. Ghosh, P.K. Sen, U.K. De, Identification of significant parameters for the prediction of pre-monsoon thunderstorms at Calcutta, India, International Journal of Climatology 19 (6) (May 1999) 673–681.

[523] E. Ghysels, D.R. Osborn, The Econometric Analysis of Seasonal Time Series, Cambridge University Press, Cambridge, 2001.

[524] G. Giacinto, Power and timing parameter estimation of multiple cyclostationary signals from sensor array data, Signal Processing 42 (1) (February 1995) 97–102.

[525] G.B. Giannakis, A.V. Dandawate, Polyspectral analysis of non-stationary signals: bases, consistency and HOSWV, International Workshop on Higher-Order Statistics, Chamrousse, France, July 1991, pp. 167–170.

[526] G.B. Giannakis, A.V. Dandawate, Detection and classification of non-stationary underwater acoustic signals using cyclic cumulants, Underwater Signal Processing Workshop, Rhode Island, October 1991.

[527] G.B. Giannakis, A.V. Dandawate, Polyspectral analysis of (almost) cyclostationary signals: LPTV system identification and related applications, 25th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 1, 4–6 November 1991, pp. 377–382.

[528] G.B. Giannakis, M.K. Tsatsanis, A unifying maximum-likelihood view of cumulant and polyspectral measures for non-Gaussian signal classification and estimation, IEEE Transactions on Information Theory 38 (2) (March 1992) 386–406.

[529] G.B. Giannakis, G.T. Zhou, Parameter estimation of amplitude modulated signals and cyclostationary time-series with missing observations, in: Third International Symposium on Signal Processing and its Applications, ISSPA '92, Gold Coast, Australia, August 1992, p. 683.

[530] G.B. Giannakis, A.V. Dandawate, Consistent *K*th-order time-frequency representations for (almost) cyclostationary signals, in: IEEE-SP International Symposium on Time-Frequency and Time-Scale Analysis, Victoria, BC, Canada, 7–9 October 1992, pp. 123–126.

[531] G.B. Giannakis, S. Shamsunder, Non-Gaussian source localization via exploitation of higher-order cyclostationarity, Sixth IEEE Signal Processing Workshop on Statistical Signal and Array Processing, SSAP '92, Victoria, BC, Canada, 7–9 October 1992, pp. 193–196.

[532] G.B. Giannakis, G.T. Zhou, M.K. Tsatanis, On blind channel estimation with periodic misses and equalization of periodically varying channels, 26th Asilomar

Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 1, 26–28 October 1992, pp. 531–535.
[533] G.B. Giannakis, G.T. Zhou, Retrieval of random amplitude modulated harmonics using cyclic statistics, in: 27th Conference on Information Sciences and Systems, Baltimore, MD, March 1993, pp. 650–655.
[534] G.B. Giannakis, S.D. Halford, Performance analysis of blind equalizers based on cyclostationary statistics, in: 28th Conference on Information Sciences and Systems, CISS '94, Princeton, NJ, 16–18 March 1994, pp. 873–876.
[535] G.B. Giannakis, G.T. Zhou, On retrieving random amplitude modulated harmonics using higher-order statistics, SPIE '94, Conference on Advanced Signal Processing Algorithms, Architectures and Implementations, San Diego, CA, vol. 2296, July 1994, pp. 150–161.
[536] G.B. Giannakis, G.T. Zhou, Parameter estimation of cyclostationary AM time series with application to missing observations, IEEE Transactions on Signal Processing 42 (9) (September 1994) 2408–2419.
[537] G.B. Giannakis, Linear cyclic correlation approaches for blind identification of FIR channels, in: 28th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, 31 October–2 November 1994, pp. 420–424.
[538] G.B. Giannakis, Trends in spectral analysis: higher-order and cyclic statistics, in: P. Papamichalis, R. Kerwin (Eds.), Digital Signal Processing Technology, Critical Reviews, vol. 57, April 1995, pp. 74–97.
[539] G.B. Giannakis, Polyspectral and cyclo-stationary approaches for identification of closed loop systems, IEEE Transactions on Automatic Control 40 (5) (May 1995) 882–885.
[540] G.B. Giannakis, W. Chen, Blind blur identification and multichannel image restoration using cyclostationarity, IEEE Workshop on Nonlinear Signal and Image Processing, Halkidiki, Greece, vol. 2, 20–22 June 1995, pp. 543–546.
[541] G.B. Giannakis, G.T. Zhou, Harmonics in multiplicative and additive noise: parameter estimation using cyclic statistics, IEEE Transactions on Signal Processing 43 (9) (September 1995) 2217–2221.
[542] G.B. Giannakis, G.T. Zhou, On amplitude modulated time-series, higher-order statistics and cyclostationarity, in: E. Powers, B. Boashash, A. Zoubir (Eds.), Higher-order Statistical Signal Processing and Applications, Longman Chesire, Melbourne, Australia, Longman Chesire, New York, NY, 1995, pp. 179–209.
[543] G.B. Giannakis, E. Serpedin, Linear multichannel blind equalizers of nonlinear FIR Volterra channels, IEEE Transactions on Signal Processing 45 (1) (January 1997) 67–81.
[544] G.B. Giannakis, Filterbanks for blind channel identification and equalization, IEEE Signal Processing Letters 4 (6) (June 1997) 184–187.
[545] G.B. Giannakis, E. Serpedin, Blind channel identification with modulation induced cyclostationarity, 13th International Conference on Digital Signal Processing, DSP '97, Santorini, Greece, vol. 1, 2–4 July 1997, pp. 111–114.
[546] G.B. Giannakis, E. Serpedin, Blind identification of ARMA channels with periodically modulated inputs, IEEE Transactions on Signal Processing 46 (11) (November 1998) 3099–3104.
[547] G.B. Giannakis, Cyclostationary signal analysis, in: V.K. Madisetti, D. Williams (Eds.), Statistical Signal Processing Section of Digital Signal Processing Handbook, CRC Press, Boca Raton, FL, 1999 (Chapter 17).
[548] A.M. Gillman, Non co-operative detection of LPI/LPD signals via cyclic spectral analysis, Tech. Rep. A027163. Available online at http://www.stormingmedia.us/02/0271/A027163.html (March 1999).
[549] F. Gini, G.B. Giannakis, Frequency offset and timing estimation in slowly-varying fading channels: a cyclostationary approach, First IEEE Workshop on Signal Processing Advances in Wireless Communications, SPAWC '97, Paris, France, 16–18 April 1997, pp. 393–396.
[550] F. Gini, G.B. Giannakis, Frequency offset and symbol timing recovery in flat fading channels: a cyclostationary approach, IEEE Transactions on Communications 46 (3) (March 1998) 400–411.
[551] F. Gini, L. Verrazzani, Estimation and detection of chirp signals in compound-Gaussian clutter, International Conference on Signal Processing, ICSP '98, Beijing, China, vol. 2, 12–16 October 1998, pp. 1658–1661.
[552] F. Gini, M. Montanari, L. Verrazzani, Estimation of chirp radar signals in compound-Gaussian clutter: a cyclostationary approach, IEEE Transactions on Signal Processing 48 (4) (April 2000) 1029–1039.
[553] F. Gini, M. Greco, Texture modeling and validation using recorded high resolution sea clutter data, in: IEEE Radar Conference, Atlanta, GA, 1–3 May 2001, pp. 387–392.
[554] F. Gini, M. Greco, Texture modelling, estimation and validation using measured sea clutter data, Radar, Sonar and Navigation, IEE Proceedings 149 (3) (June 2002) 115–124.
[555] P.V.S. Giridhar, S.V. Narasimhan, Improved system-blind identification based on second-order cyclostationary statistics: a group delay approach, Sadhana: Academy Proceedings in Engineering Sciences 25 (2) (2000) 85–96.
[556] E.G. Gladyshev, Periodically correlated random sequences, Soviet Math. Dokl. 2 (1961) 385–388.
[557] E.G. Gladyshev, Periodically correlated random sequences, Dokl. Akad. Nauk SSSR 137 (1961) 1026–1029 (in Russian).
[558] E.G. Gladyshev, Periodically and semi-periodically correlated random processes with continuous time, Teor. Verojatnost. i Primenen. 8 (1963) 184–189 (in Russian).
[559] E.G. Gladyshev, Periodically and almost periodically correlated with continuous time parameter, Theory of Probability and Its Applications 8 (1963) 173–177.

[560] J. Goerlich, D. Bruckner, A. Richter, O. Strama, R.S. Thoma, U. Trautwein, Signal analysis using spectral correlation measurement, Instrumentation and Measurement Technology Conference, IMTC '98, Saint Paul, MN, vol. 2, 18–21 May 1998, pp. 1313–1318.

[562] G.D. Golden, J. Mazo, J. Salz, Transmitter design for data transmission in the presence of a data-like interferer, AT&T Bell Laboratories Released Paper No. BL92-00527, 7 May 1992.

[563] G.D. Golden, J. Mazo, J. Salz, Transmitter design for data transmission in the presence of a data-like interferer, IEEE Transactions on Communications 43 (2-3-4) (February–April 1995) 837–850.

[564] J. Gomes, V. Barroso, Source independent blind equalization with fractionally-spaced sampling, in: European Signal Processing Conference, EUSIPCO '96, Trieste, Italy, 10–13 September 1996.

[565] J. Gomes, V. Barroso, A super-exponential algorithm for blind fractionally spaced equalization, IEEE Signal Processing Letters 3 (10) (October 1996) 283–285.

[566] L.C.T. Gomes, M. Mboup, M. Bonnet, N. Moreau, Cyclostationary-based audio watermarking with private and public hidden data, in: 109th Convention of Audio Engineering Society, Los Angeles, CA, September 2000.

[567] L.C.T. Gomes, M. Mboup, M. Bonnet, N. Moreau, Cyclostationarity-based audio watermarking, Traitement du Signal 19 (1) (2002) 1–9.

[568] L. Goncalves, A. Silva, A. Gameiro, Frequency shift based multiple access interference canceller for DS-CDMA systems, 54th IEEE Vehicular Technology Conference, VTC '01—Fall, Atlantic City, NJ, vol. 4, 7–11 October 2001, pp. 2475–2478.

[569] L. Goncalves, A. Gameiro, Frequency shift based multiple access interference canceller for multirate UMTS-TDD systems, 13th IEEE International Symposium on Personal, Indoor and Mobile Radio Communications, PIMRC '02, Lisbon, Portugal, vol. 5, 15–18 September 2002, pp. 2112–2116.

[570] L. Goncalves, A. Gameiro, Frequency domain equalizer for multirate UMTS-TDD systems, IEEE International Conference on Communications, ICC '03, Anchorage, AK, vol. 5, 11–15 May 2003, pp. 3236–3240.

[571] L. Goncalves, A. Gameiro, Multi-sensor frequency domain multiple access interference canceller for DS-CDMA systems, in: IEEE Eighth International Symposium on Spread Spectrum Techniques and Applications, Sydney, Australia, 30 August–2 September 2004, pp. 27–31.

[572] T. Gonzalez, S. Perez, E. Starikov, P. Shiktorov, V. Gruzinskis, L. Reggiani, L. Varani, J.C. Vaissiere, Microscopic investigation of large-signal noise in semiconductor materials and devices, Noise in Devices and Circuits, SPIE '03, Santa Fe, NM, vol. 5113, 1–4 June 2003, pp. 252–266.

[573] N.R. Goodman, Statistical tests for stationarity within the framework of harmonizable processes, Tech. Rep. AD619270, Rocketdyne, Canoga Park, CA, 1965.

[574] M. Gouda, E.R. Adams, P.C.J. Hill, Estimation and identification techniques for DS/SS signals, 23rd International Conference on Industrial Electronics, Control and Instrumentation, IECON '97, New Orleans, LA, vol. 1, 9–14 November 1997, pp. 311–315.

[576] M.M. Gourary, S.G. Rusakov, S.L. Ulyanov, M.M. Zharov, K.K. Gullapalli, B.J. Mulvaney, A new approach for computation of timing jitter in phase locked loops, in: Conference on Design, Automation and Test in Europe, Paris, France, January 2000, pp. 345–349.

[577] P. Gournay, P. Nicolas, G. Vezzosi, Limite de Rayleigh et formule de Woodward de la formation de voies cyclique, Quatorzieme Colloque GRETSI sur le Traitement du Signal et des Images, 1993, pp. 249–252 (in French).

[578] P. Gournay, Detection, goniometrie et identification de signaux cyclo-stationnaires, Ph.D. Thesis, University of Rennes, Rennes, France, 16 December 1994.

[579] P. Gournay, P. Nicolas, Analyse spectrale cyclique et analyse temps-frequence pour l'identification automatique de transmissions, Quinzieme Colloque GRETSI sur le Traitement du Signal et des Images, 1995, pp. 53–56 (in French).

[580] P. Gournay, P. Viravau, Correlation spectrale theoretique des modulations CPM-Partie I: resultat analytique pour les modulations CPFSK a 2 etats (1REC), Annals of Telecommunications 53 (7–8) (1998) 267–278 (in French).

[581] P. Gournay, A. Ferreol, P. Nicolas, Goniometrie cyclique, in Sylvie Marcos, Les methodes a haute resolution - traitement d'antenne et analyse spectrale, Hermes, Paris, France, 1998, pp. 479–512 (Chapter 17) (in French).

[582] R.M. Gray, J.C. Kieffer, Asymptotically mean stationary measures, Annals of Probability 8 (5) (1980) 962–973.

[583] R.M. Gray, Probability, Random Processes and Ergodic Properties, Springer, New York, NY, 1988.

[584] C.D. Greene, J.H. Reed, T.C. Hsia, An optimal receiver using a time-dependent adaptive filter, IEEE Military Communications Conference, MILCOM '89, Boston, MA, vol. 3, 15–18 October 1989, pp. 650–656.

[585] L.I. Gudzenko, On periodically nonstationary processes, Radiotekhnika i Electronika 4 (6) (1959) 1062–1064.

[586] L.I. Gudzenko, On periodic nonstationary processes, Radio Eng. Electron. Phys. 4 (6) (1959) 220–224 (in Russian).

[587] R. Guidorzi, R. Diversi, Minimal representations of MIMO time-varying systems and realization of cyclostationary models, Automatica 39 (11) (November 2003) 1903–1914.

[588] M.I. Gurelli, C.L. Nikas, Blind identification of co-channel systems, IEEE Military Communications Conference, MILCOM '94, Fort Monmouth, NJ, vol. 1, 2–5 October 1994, pp. 296–300.

[589] M.I. Gurelli, C.L. Nikias, Blind identification of co-channel systems in the presence of input signals with different baud rates, IEEE Military Communications Conference, MILCOM '95, San Diego, CA, vol. 1, 5–8 November 1995, pp. 102–106.

[591] D. Habibi, D.J.H. Lewis, A Fourier approach to the study of cyclic behaviour of networks, International Conference on Computational Science, ICCS '94, Singapore, vol. 1, 14–18 November 1994, pp. 100–103.

[592] D. Habibi, D.J.H. Lewis, Fourier analysis for modelling some cyclic behaviour of networks, Computer Communications 19 (5) (May 1996) 426–434.

[593] W. Hachem, F. Desbouvries, P. Loubaton, Blind channel estimation for CDMA systems: an induced cyclostationarity approach, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '00, Istanbul, Turkey, vol. 5, 5–9 June 2000, pp. 2477–2480.

[594] W.M. Haddad, M. Wassim, V. Kapila, Reduced-order multirate estimation, Journal of Guidance, Control, and Dynamics 17 (4) (1994) 712–721.

[595] A. Hajimiri, T.H. Lee, A general theory of phase noise in electrical oscillators, IEEE Journal of Solid-State Circuits 33 (2) (February 1998) 179–194.

[596] A. Hajimiri, T.H. Lee, Design of Low Noise Oscillators, Kluwer Academic Publishers, Boston, MA, June 1999.

[597] K.W. Halford, M. Brandt-Pearce, New-user identification in a CDMA system, IEEE Transactions on Communications 46 (1) (January 1998) 144–155.

[598] S.D. Halford, G.B. Giannakis, Asymptotically optimal blind equalizers based on cyclostationary statistics, IEEE Military Communications Conference, MILCOM '94, Fort Monmouth, NJ, vol. 1, 2–5 October 1994, pp. 306–310.

[599] S.D. Halford, G.B. Giannakis, Channel order determination based on sample cyclic correlations, 28th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 1, 31 October–2 November 1994, pp. 425–429.

[600] S.D. Halford, G.B. Giannakis, Adaptive blind fractionally spaced equalizers using cyclic correlations, in: 29th Conference on Information Sciences and Systems, CISS'95, Baltimore, MD, March 1995, pp. 679–684.

[601] S.D. Halford, G.B. Giannakis, Optimal blind equalization and symbol error analysis of fractionally sampled channels, 29th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 2, 30 October–2 November 1995, pp. 1332–1336.

[602] S.D. Halford, G.B. Giannakis, Direct blind equalization for transmitter induced cyclostationarity, First IEEE Workshop on Signal Processing Advances in Wireless Communications, SPAWC '97, Paris, France, 16–18 April 1997, pp. 117–120.

[603] D. Ham, A. Hajimiri, Complete noise analysis for CMOS switching mixers via stochastic differential equations, in: IEEE Custom Integrated Circuits Conference, CICC '00, Orlando, FL, 21–24 May 2000, pp. 439–442.

[604] L. Hanzo, W. Webb, T. Keller, L. Hanzo, W.T. Webb, T. Keller, Overview of blind equalizers, in: Single- and Multi-carrier Quadrature Amplitude Modulation: Principles and Applications for Personal Communications, WLANs and Broadcasting, second ed., Wiley, Chichester, England, 7 June 2000, pp. 170–212 (Chapter 7.7).

[605] S. Hara, Maximum likelihood parameter estimation for cyclostationary signal, in: Multicarrier Techniques for 4G Mobile Communications, Artech House Publishers, Boston, MA, 1 June 2003, pp. 129–135 (Chapter 6.3).

[606] J.C. Hardin, A.G. Miamee, Correlation autoregressive process with application to helicopter noise, Journal of Sound and Vibration 142 (2) (1990) 191–202.

[607] K.R. Hardwicke, G.R. Wilson, K.W. Baugh, Characterization of spectral correlation detector statistics useful in transient detection, Circuits Systems Signal Processing 13 (4) (1994) 497–511.

[608] A. Hashad, Analysis of non-Gaussian processes using the Wiener model of discrete nonlinear systems, Ph.D. Thesis, Naval Postgraduate School, Monterey, CA, 1994.

[609] K. Hasselman, T.P. Barnett, Techniques of linear prediction for systems with periodic statistics, Journal of Atmospheric Science 38 (10) (1981) 2275–2283.

[610] D. Hatzinakos, Blind system identification based on the complex cepstrum of the cyclic autocorrelation, IEEE International Symposium on Circuits and Systems, ISCAS '93, Chicago, IL, vol. 1, 3–6 May 1993, pp. 726–729.

[611] D. Hatzinakos, Nonminimum phase channel deconvolution using the complex cepstrum of the cyclic autocorrelation, IEEE Transactions on Signal Processing 42 (11) (November 1994) 3026–3042.

[612] R. He, J.H. Reed, Spectral correlation of AMPS signals and its application to interference rejection, IEEE Military Communications Conference, MILCOM '94, Fort Monmouth, NJ, vol. 3, 2–5 October 1994, pp. 1007–1011.

[613] R. He, J.H. Reed, AMPS interference rejection by exploiting the SAT information, Sixth IEEE International Symposium on Personal, Indoor and Mobile Radio Communications, PIMRC '95, Toronto, ON, Canada, vol. 2, 27–29 September 1995, pp. 597–602.

[614] R. He, J. Reed, A robust co-channel interference rejection technique for current mobile phone system, 46th IEEE Vehicular Technology Conference, VTC '96, Atlanta, GA, vol. 2, 28 April–1 May 1996, pp. 1195–1199.

[615] S. He, B. Kedem, Higher order crossings spectral analysis of an almost periodic random sequence in noise, IEEE Transactions on Information Theory 35 (2) (March 1989) 360–370.

[616] S. He, T. Lo, J. Litva, A new spread spectrum system using spectral correlation technology, IEEE Military

Communications Conference, MILCOM '97, Monterey, CA, vol. 2, 2–5 November 1997, pp. 560–564.
[617] Z. He, Y. Chen, Robust blind beamforming using neural network, Radar, Sonar and Navigation, IEE Proceedings 147 (1) (February 2000) 41–46.
[618] R.W. Heath Jr., G.B. Giannakis, Blind channel identification for multirate precoding and OFDM systems, 13th International Conference on Digital Signal Processing, DSP '97, Santorini, Greece, vol. 1, 2–4 July 1997, pp. 383–386.
[619] R.W. Heath Jr., G.B. Giannakis, Exploiting input cyclostationarity for blind channel identification in OFDM systems, IEEE Transactions on Signal Processing 47 (3) (March 1999) 848–856.
[620] F. Hendessi, H.M. Hafez, A.U.H. Sheikh, The structure and performance of FRESH-decision feedback equalizer in the presence of adjacent channel interference, in: 43rd IEEE Vehicular Technology Conference, VTC '93, Secaucus, NJ, 18–20 May 1993, pp. 641–644.
[621] F. Hendessi, On the theory of FRESH-DFE for digital cellular radio system, Ph.D. Thesis, Carleton University, Ottawa, ON, Canada, September 1994.
[622] F. Hendessi, A.U.H. Sheikh, R.H.M. Hafez, Capacity improvement of microcellular systems using signal cyclic spectral properties, Sixth IEEE International Symposium on Personal, Indoor and Mobile Radio Communications, PIMRC '95, Toronto, Canada, vol. 3, 27–29 September 1995, pp. 1341–1345.
[623] P. Henttu, Cyclic SVD method for broadband interference cancellation in FH/DS communications, Sixth International Symposium on Spread Spectrum Techniques and Applications, Parsippany, NJ, vol. 1, 6–8 September 2000, pp. 68–72.
[624] L.J. Herbst, Almost periodic variances, Annals of Mathematical Statistics 34 (4) (1963) 1549–1557.
[625] L.J. Herbst, The statistical Fourier analysis of variances, Journal of the Royal Statistical Society. Series B (Methodological) 27 (1) (1965) 159–165.
[626] P. Heydari, Mixed-signal design and simulation: Characterizing the effects of clock jitter due to substrate noise in discrete-time D/S modulators, in: 14th Conference on Design Automation, Anaheim, CA, June 2003, pp. 532–537.
[627] P. Heydari, Analysis of the PLL jitter due to power/ground and substrate noise, IEEE Transactions on Circuits and Systems I: Regular Papers 51 (12) (December 2004) 2404–2416.
[628] Y. Higa, H. Ochi, S. Kinjo, H. Yamaguchi, A gradient type algorithm for blind system identification and equalizer based on second order statistics, IEICE Transactions 82 (8) (1999) 1544–1551.
[629] A.M. Hill, D.B. Payne, Linear crosstalk in wavelength-division-multiplexed optical fiber transmission systems, Journal of Lightwave Technology 3 (June 1985) 643–650.
[630] P.C.J. Hill, E.R. Adams, V.E. Comley, Techniques for detecting and characterising covert communication signals, in: European Conference on Security and Detection, ECOS '97, London, UK, 28–30 April 1997, pp. 57–60.
[631] P.C.J. Hill, V.E. Comley, E.R. Adams, Techniques for detecting and characterising covert communication signals, IEEE Military Communications Conference, MILCOM '97, Monterey, CA, vol. 3, 2–5 November 1997, pp. 1361–1365.
[632] M.J. Hinich, Detecting a hidden periodic signal when its period is unknown, IEEE Transactions on Acoustics, Speech, and Signal Processing 30 (5) (1982) 747–750.
[633] M.J. Hinich, Testing for Gaussianity and linearity of stationary time series, Journal of Time Series Analysis 3 (3) (1982) 169–176.
[634] M.J. Hinich, Book review of statistical spectral analysis: a nonprobabilistic theory, SIAM Review 33 (December 1991) 677–678.
[635] M.J. Hinich, A statistical theory of signal coherence, IEEE Journal of Oceanic Engineering 25 (2) (April 2000) 256–261.
[636] R. Hleiss, Egalisation aveugle des systemes OFDM. Utilisation de la cyclostationnarite, Ph.D. Thesis, Ecole Nationale Superieure des Telecommunications (ENST), France, 25 January 2000 (in French).
[637] R. Ho, Implementation of cyclic beamforming techniques on mobile communication systems, Master's Thesis, McMaster University, Hamilton, ON, Canada, June 1994.
[638] R. Ho, Q. Wu, K.M. Wong, Implementation of cyclic beamforming techniques on mobile communication systems, Second Workshop on Cyclostationary Signals, Monterey, CA, vol. 16, August 1994, pp. 1–9.
[639] R.D. Holley, J.H. Reed, Time dependent adaptive filters for interference cancellation in CDMA systems, Workshop on Cyclostationarity Signal Processing, Monterey, CA, August 1994.
[640] I. Honda, Sample periodicity of periodically correlated processes, Keio Mathematics Seminar Report 5 (1980) 13–18.
[641] I. Honda, Spectral representation of periodically correlated stochastic processes and approximate Fourier series, Keio Mathematics Seminar Report 6 (1981) 11–16.
[642] I. Honda, On the spectral representation and related properties of periodically correlated stochastic processes, IEICE Transactions 65 (12) (1982) 723–729.
[643] I. Honda, A note on periodgram analysis of periodically correlated stochastic processes, Keio Mathematics Seminar Report 8 (1983) 1–7.
[644] I. Honda, On the Fourier series and some sample properties of periodic stochastic processes, Reports of Statistical Application Research Union of Japanese Scientists and Engineers 30 (1) (1983) 1–17.
[645] I. Honda, On the ergodicity of Gaussian periodically correlated stochastic processes, IEICE Transactions 73 (10) (1990) 1729–1737.

[646] L. Hongwei, Z. Chouhong, W. Jun, Blind equalization algorithm based on cyclostationary property of IF signal, Fourth International Conference on Signal Processing, ICSP '98, Beijing, China, vol. 1, 12–16 October 1998, pp. 498–501.

[647] Y. Hongyi, B. Zheng, Performance analysis of a class of cyclic weighted subspace fitting method of direction estimation for cyclostationary signals, IEEE International Symposium on Circuits and Systems, ISCAS '98, Monterey, CA, vol. 5, 31 May–3 June 1998, pp. 29–32.

[648] Y. Hongyi, B. Zheng, Fully blind estimation of time delays and spatial signatures for cyclostationary signals, Electronics Letters 34 (25) (10 December 1998) 2378–2380.

[649] M.L. Honig, P. Crespo, K. Steiglitz, Suppression of near- and far-end crosstalk by linear pre- and post-filtering, IEEE Journal on Selected Areas in Communications 10 (3) (April 1992) 614–629.

[650] F. Horlin, L. Van der Perre, Optimal training sequences for low complexity ML multi-channel estimation in multi-user MIMO OFDM-based communications, IEEE International Conference on Communications, Paris, France, vol. 4, 20–24 June 2004, pp. 2427–2431.

[651] S. Houcke, A. Chevreuil, P. Loubaton, Joint blind equalization and estimation of the symbol period: a contrast function approach, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '01, Salt Lake City, UT, vol. 4, 7–11 May 2001, pp. 2545–2548.

[652] S. Houcke, A. Chevreuil, P. Loubaton, Separation autodidacte d'un melange de sources a debits multiples, Dix-Huitieme Colloque GRETSI sur le Traitment du Signal et des Images, Toulouse, France, September 2001 (in French).

[653] S. Houcke, A. Chevreuil, Blind source separation of a mixture of communication sources emitting at various baud-rates, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '02, Orlando, FL, vol. 3, 13–17 May 2002, pp. 3053–3056.

[654] S. Houcke, A. Chevreuil, P. Loubaton, Blind equalization - case of an unknown symbol period, IEEE Transactions on Signal Processing 51 (3) (March 2003) 781–793.

[655] S. Houcke, A. Chevreuil, P. Loubaton, Blind source separation of a mixture of communication sources with various symbol periods, IEICE Transactions 86 (3) (2003) 564–572.

[656] L. Huang, K.D. Donohue, Frequency correlation analysis for periodic echoes, in: IEEE Southeastcon '00, Nashville, TN, 7–9 April 2000, pp. 131–138.

[657] Y. Huang, L. Qiu, J. Zhu, A doppler offset estimator by using the signal's cyclostationarity in cdma system, IEEE 59th Vehicular Technology Conference, VTC'04—Spring, Milan, Italy, vol. 2, 17–19 May 2004, pp. 1091–1094.

[658] Z. Huang, W. Jiang, Y. Zhou, A direction-of-arrival estimation for source signals exploiting 1st-order cyclostationarity property, in: CIE International Conference on Radar, Beijing, China, 15–18 October 2001, pp. 819–823.

[659] Z. Huang, Y. Zhou, W. Jiang, Angle-of-arrival estimation based on weighted cyclic spectrum, CIE International Conference on Radar, Beijing, China, 15–18 October 2001, pp. 1108–1111.

[660] Z. Huang, Y. Zhou, W. Jiang, Q. Lu, Joint estimation of Doppler and time-difference-of-arrival exploiting cyclostationary property, Radar, Sonar and Navigation, IEE Proceedings 149 (4) (August 2002) 161–165.

[661] C. Hui, W. Yongliang, W. BuHong, The pre-processing method based on signal conjugate cyclostationary, IEEE Antennas and Propagation Society International Symposium, Columbus, OH, vol. 3, 22–27 June 2003, pp. 280–283.

[662] C. Hull, R.G. Meyer, A systematic approach to the analysis of noise in mixers, IEEE Transactions on Circuits and Systems-I 40 (12) (December 1993) 909–919.

[663] H.L. Hurd, An investigation of periodically correlated stochastic processes, Ph.D. Thesis, Duke University, Durham, NC, 1969.

[664] H.L. Hurd, Stationarizing properties of random shifts, SIAM Journal of Applied Mathematics 26 (1) (January 1974) 203–211.

[665] H.L. Hurd, Periodically correlated processes with discontinuous correlation functions, Theory of Probability and its Applications 19 (4) (1974) 834–838.

[666] H.L. Hurd, Spectral coherence of nonstationary and transient stochastic processes, Fourth ASSP Workshop on Spectrum Estimation and Modeling, Minneapolis, MN, 3–5 August 1988, pp. 387–390.

[667] H.L. Hurd, Nonparametric time series analysis for periodically correlated processes, IEEE Transactions on Information Theory 35 (2) (March 1989) 350–359.

[668] H.L. Hurd, Representation of strongly harmonizable periodically correlated processes and their covariances, Journal of Multivariate Analysis 29 (1) (1989) 53–67.

[669] H.L. Hurd, V. Mandrekar, Spectral theory of periodically and quasi-periodically stationary SαS sequences, Tech. Rep. 349, Center for Stochastic Processes, University of North Carolina, Chapel Hill, NC, September 1991.

[670] H.L. Hurd, Correlation theory of almost periodically correlated processes, Journal of Multivariate Analysis 37 (1) (1991) 24–45.

[671] H.L. Hurd, N.L. Gerr, Graphical methods for determining the presence of periodic correlation in time series, Journal of Time Series Analysis 12 (4) (1991) 337–350.

[672] H.L. Hurd, J.P. Leskow, Estimation of the Fourier coefficient functions and their spectral densities for ϕ-mixing almost periodically correlated processes, Statistics and Probability Letters 14 (4) (17 July 1992) 299–306.

[673] H.L. Hurd, G.K. Kallianpur, Periodically correlated and periodically unitary processes and their relationship

to $L_2[0, T]$-valued stationary sequences, in: J.C. Hardin, A.G. Miamee, Nonstationary Stochastic Processes and Their Applications, World Scientific Publishing, Singapore, 1–2 August 1992, pp. 256–284.
[674] H.L. Hurd, C.H. Jones, Multiple-scan spectral coherence processing of periodically correlated signals, Workshop on cyclostationary signals, Yountville, CA, 16–18 August 1992.
[675] H.L. Hurd, Almost periodically unitary stochastic processes, Stochastic Processes and their Applications 43 (1) (November 1992) 99–113.
[676] H.L. Hurd, P. Bloomfield, R.B. Lund, Periodic correlation in meteorological time series, Fifth International Meeting on Statistical Meteorology, 1992, pp. 1–6.
[677] H.L. Hurd, D. Dehay, Spectral theory for periodically and almost periodically correlated random processes: a survey, Tech. Rep. 412, Center for Stochastic Processes, University of North Carolina, Chapel Hill, NC, 1992.
[678] H.L. Hurd, J.P. Leskow, Strongly consistent and asymptotically normal estimation of the covariance for almost periodically correlated processes, Statistics and Decisions 10 (1992) 201–225.
[679] H.L. Hurd, C.H. Jones, Dynamical systems with cyclostationary orbits, Second ONR/NUWC Conference on Nonlinear Dynamics, 1993.
[680] H.L. Hurd, C. Houdre, Periodically and almost periodically UBLS processes, IEEE International Symposium on Information Theory, ISIT '94, Trondheim, Norway, 27 June–1 July 1994, p. 299.
[681] H.L. Hurd, C.H. Jones, Dynamical systems with cyclostationary orbits, in: R. Katz (Ed.), The Chaos Paradigm: Developments and Applications in Engineering and Science, AIP Press, New York, 1994.
[682] H.L. Hurd, Spectral correlation of randomly jittered periodic functions of two variables, 29th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 1, 30 October–2 November 1995, pp. 500–505.
[683] H.L. Hurd, Empirical determination of the frequencies of an almost periodic sequence, Eighth IEEE Signal Processing Workshop on Statistical Signal and Array Processing, Corfu, Greece, 24–26 June 1996, pp. 420–423.
[684] H.L. Hurd, Spectral coherence measurements of accelerometer signals taken from a faulty gear system, Workshop on Cyclostationary Processes, July 1996.
[685] H.L. Hurd, D. Dehay, Spectral estimation for a strongly periodically correlated random field defined on Z^2, Workshop on Cyclostationary Processes, July 1996.
[686] H.L. Hurd, A. Russek, Almost periodically correlated and almost periodically unitary processes in the sense of Stepanov, Theory of Probability and its Application 41 (3) (1996).
[687] H.L. Hurd, T. Koski, The Wold isomorphism for cyclostationary sequences, Tech. Rep. 484, Center for Stochastic Processes, University of North Carolina, Chapel Hill, NC, 17 June 1997.
[688] H.L. Hurd, G. Kallianpur, J. Farshidi, Correlation and spectral theory for periodically correlated random fields indexed on Z^2, Tech. Rep. 448, Center for Stochastic Processes, University of North Carolina, Chapel Hill, NC, 24 October 1997.
[689] H.L. Hurd, A. Russek, Stepanov almost periodically correlated and almost periodically unitary processes, Theory of Probability and its Applications 41 (3) (1997) 449–467.
[690] H.L. Hurd, Cyclostationary signals in battlefield acoustics, Tech. Rep. A229114. Available online at http://www.stormingmedia.us/22/2291/A229114.html (4 September 1999).
[691] H.L. Hurd, Theory and inference for cyclo-stationary random and non random functions, Tech. Rep. A932973. Available online at http://www.stormingmedia.us/93/9329/A932973.html (17 March 2000).
[692] H.L. Hurd, Statistical methods for processing of harmonic and cyclo-stationary signals, Tech. Rep. A369414. Available online at http://www.stormingmedia.us/36/3694/A369414.html (02 February 2002).
[693] H.L. Hurd, A. Makagon, A.G. Miamee, On AR(1) models with periodic and almost periodic coefficients, Stochastic Processes and their Applications 100 (1–2) (July–August 2002) 167–185.
[694] H.L. Hurd, T. Koski, The Wold isomorphism for cyclostationary sequences, Signal Processing 84 (5) (May 2004) 813–824.
[695] H.L. Hurd, A brief introduction to periodically correlated (cyclostationary) random sequences, class notes available online at http://www.stat.unc.edu/faculty/hurd.html.
[696] H.-C. Hwang, C.-H. Wei, Adaptive variable step-size Griffiths' algorithm for blind demodulation of DS/CDMA signals, IEICE Transactions 82 (10) (1999) 1643–1650.
[697] J.-K. Hwang, J.-H. Chiou, A new method for blind identification of multipath channel by exploiting signal cyclostationarity, First IEEE Signal Processing Workshop on Signal Processing Advances in Wireless Communications, SPAWC '97, Paris, France, 16–18 April 1997, pp. 25–28.
[698] W.-J. Hwang, Source coding theorem for cyclostationary Gaussian sources, Journal of the Chinese Institute of Engineers 20 (1) (1997) 27.
[699] Y.-S. Hwu, M.D. Srinath, A neural network approach to design of smart antennas for wireless communication systems, 31st Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 1, 2–5 November 1997, pp. 145–148.
[700] A. Hyvarinen, J. Karhunen, Convolutive Mixtures and Blind Deconvolution, in Independent Component Analysis, Wiley, New York, NY, 2001, pp. 355–369 (Chapter 19).
[701] D. Iglesia, A. Dapena, L. Castedo, Using fractional cyclic moments of CPFSK signals in blind adaptive beamforming, IEEE International Conference on

Acoustics, Speech, and Signal Processing, ICASSP '97, Munich, Germany, vol. 5, 21–24 April 1997, pp. 3441–3444.

[702] K. Ikeda, R. Sakamoto, Convergence analyses of stereo acoustic echo cancelers with preprocessing, IEEE Transactions on Signal Processing 51 (5) (May 2003) 1324–1334.

[703] J. Ilow, D. Hatzinakos, Recursive least squares algorithm for blind deconvolution of channels with cyclostationary inputs, IEEE Military Communications Conference, MILCOM '93, Bedford, MA, vol. 1, 11–14 October 1993, pp. 123–127.

[704] G.-H. Im, C.K. Un, A reduced structure of the passband fractionally spaced equalizer, Proceedings of IEEE 75 (June 1987) 847–849.

[705] G.-H. Im, J.J. Werner, Bandwidth efficient digital transmission over unshielded twisted pair wiring, IEEE Journal on Selected Areas in Communications 13 (9) (December 1995) 1643–1655.

[706] G.-H. Im, N.R. Shanbhag, VLSI systems design of 51.84 Mb/s transceivers for ATM-LAN and broadband access, IEEE Transactions on Signal Processing 46 (5) (May 1998) 1403–1416.

[707] G.-H. Im, H.-C. Won, C.-J. Park, Convergence behavior of a PS-FSE in the presence of a cyclostationary crosstalk interference, IEEE Communications Letters 4 (8) (August 2000) 261–263.

[708] T. Inaba, J. Takada, K. Araki, T. Sakamoto, H. Yanagisawa, A study on direction-of-arrival estimation methods using $\cos\theta$ amplitude response antenna, Electronics and Communications in Japan (Part I: Communications) 85 (10) (October 2002) 8–22.

[709] K. Inoue, Crosstalk and its power penalty in multichannel transmission due to gain saturation in a semiconductor laser amplifier, Journal of Lightwave Technology 7 (July 1989) 1118–1124.

[710] Y. Inouye, T. Ohta, Blind equalization of digital communication channels using fractionally spaced samples, IEEE International Symposium on Circuits and Systems, ISCAS '96, Atlanta, GA, vol. 2, 12–15 May 1996, pp. 165–168.

[711] M.K. Islam, H.M. Hafez, D.C. Coll, Detection of multiple users of direct sequence spread spectrum signals by cyclic spectral analysis, 43rd IEEE Vehicular Technology Conference, VTC '93, Secaucus, NJ, 18–20 May 1993, pp. 811–814.

[712] Y. Isokawa, An identification problem in almost and asymptotically almost periodically correlated processes, Journal of Applied Probability 19 (1) (1982) 456–462.

[713] L. Izzo, L. Paura, M. Tanda, Interception of cyclostationary signals by cycle detectors in non-Gaussian noise, Fourth European Signal Processing Conference, EUSIPCO '88, Grenoble, France, 1988.

[714] L. Izzo, L. Paura, G. Poggi, Multiple source localization: a new method exploiting the cyclostationarity property, Douzieme Colloque sur le Traitement du Signal et des Images, Juan-les-Pins, France, 1989, pp. 481–484.

[715] L. Izzo, L. Paura, M. Tanda, Signal detection in partially known cyclostationary non-Gaussian noise, IEEE National Aerospace and Electronics Conference, NAECON '90, Dayton, OH, vol. 1, 21–25 May 1990, pp. 116–119.

[716] L. Izzo, L. Paura, M. Tanda, Signal interception in non-Gaussian noise, IEEE Transactions on Communications 40 (6) (June 1992) 1030–1037.

[717] L. Izzo, L. Paura, G. Poggi, An interference-tolerant algorithm for localization of cyclostationary-signal sources, IEEE Transactions on Signal Processing 40 (7) (July 1992) 1682–1686.

[718] L. Izzo, A. Napolitano, L. Paura, Spectral-correlation based methods for multipath channel identification, European Transactions on Telecommunications and Related Technologies, vol. 3, July–August 1992, pp. 341–348.

[719] L. Izzo, A. Napolitano, L. Paura, MIMO linear system input/output relations for cyclic higher-order statistics, Quatorzieme Colloque GRETSI sur le Traitment du Signal et des Images, Juan-les-Pins, France, September 1993.

[720] L. Izzo, A. Napolitano, L. Paura, Modified cyclic methods for signal selective TDOA estimation, IEEE Transactions on Signal Processing 42 (11) (November 1994) 3294–3298.

[721] L. Izzo, A. Napolitano, L. Paura, Cyclostationarity-exploiting methods for multipath-channel identification, in: W.A. Gardner (Ed.), Cyclostationarity in Communications and Signal Processing, IEEE Press, New York, NY, 1994, pp. 391–417 (Chapter 3, Part II).

[722] L. Izzo, A. Napolitano, Cyclic higher-order statistics of decimated and interpolated digital signals, IEEE Signal Processing ATHOS Workshop on Higher-Order Statistics, Begur, Girona, Spain, June 1995, pp. 157–161.

[723] L. Izzo, A. Napolitano, Effects of random linear transformations on higher-order cyclostationary time-series, 29th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 1, 30 October–2 November 1995, pp. 521–525.

[724] L. Izzo, A. Napolitano, Higher-order cyclostationarity properties of sampled time-series, Signal Processing 54 (3) (November 1996) 303–307.

[725] L. Izzo, A. Napolitano, Higher-order statistics for Rice's representation of cyclostationary signals, Signal Processing 56 (3) (February 1997) 279–292.

[726] L. Izzo, A. Napolitano, Time-frequency representation of generalized almost-cyclostationary signals, Seizieme Colloque GRETSI sur le Traitment du Signal et des Images, Grenoble, France, 15–19 September 1997.

[727] L. Izzo, A. Napolitano, Multirate processing of time series exhibiting higher order cyclostationarity, IEEE Transactions on Signal Processing 46 (2) (February 1998) 429–439.

[728] L. Izzo, A. Napolitano, The higher order theory of generalized almost-cyclostationary time series, IEEE Transactions on Signal Processing 46 (11) (November 1998) 2975–2989.

[729] L. Izzo, A. Napolitano, Higher-order characterization of linear time-variant systems operating on generalized almost-cyclostationary signals, IEEE Signal Processing Workshop on Higher-Order Statistics, SPW-HOS '99, Caesarea, Israel, 14–16 June 1999, pp. 375–379.

[730] L. Izzo, A. Napolitano, Linear almost-periodically time-variant filtering of generalized almost-cyclostationary signals, IEEE International Symposium on Information Theory, ISIT '00, Sorrento, Italy, 25–30 June 2000, p. 361.

[731] L. Izzo, A. Napolitano, On the sampling of generalized almost-cyclostationary signals, 36th Asilomar Conference on Signals, Systems and Computers 2, Pacific Grove, CA, 3–6 November 2002, pp. 1581–1585.

[732] L. Izzo, A. Napolitano, Linear time-variant transformations of generalized almost-cyclostationary signals. I. Theory and method, IEEE Transactions on Signal Processing 50 (12) (December 2002) 2947–2961.

[733] L. Izzo, A. Napolitano, Linear time-variant transformations of generalized almost-cyclostationary signals. II. Development and applications, IEEE Transactions on Signal Processing 50 (12) (December 2002) 2962–2975.

[734] L. Izzo, A. Napolitano, Sampling of generalized almost-cyclostationary signals, IEEE Transactions on Signal Processing 51 (6) (June 2003) 1546–1556.

[735] K. Jacobs, Fastperiodische Markoffsche Prozesse, Mathematische Annalen 134 (1958) 408–427 (in German).

[736] M.G. Jafari, J.A. Chambers, D.P. Mandic, Natural gradient algorithm for cyclostationary sources, Electronics Letters 38 (14) (4 July 2002) 758–759.

[737] M.G. Jafari, J.A. Chambers, Sequential blind source separation of cyclostationary sources, IEE Workshop on Nonlinear and Non-Gaussian Signal Processing (N2SP), Peebles, UK, 8–9 July 2002.

[738] M.G. Jafari, J.A. Chambers, Normalised natural gradient algorithm for the separation of cyclostationary sources, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '03, Hong Kong, vol. 5, 6–10 April 2003, pp. 301–304.

[739] M.G. Jafari, D.P. Mandic, J.A. Chambers, A Fast Converging Sequential Blind Source Separation Algorithm for Cyclostationary Sources, Lecture Notes in Computer Science, vol. 2773, Springer, Berlin, 2003, pp. 1343–1349.

[740] M.G. Jafari, S.R. Alty, J.A. Chambers, New natural gradient algorithm for cyclostationary sources, Vision, Image and Signal Processing, IEE Proceedings 151 (1) (5 February 2004) 62–68.

[741] G. Jeong, J.W. Goodman, Analysis of linear crosstalk in photonic crossbar switches based on on/off gates, Journal of Lightwave Technology 14 (3) (March 1996) 359–364.

[742] Y.K. Jeong, J.H. Cho, J.S. Lehnert, Performance bounds on chip-matched-filter receivers for bandlimited DS/SSMA communications, IEEE Transactions on Communications 53 (1) (January 2005) 131–141.

[743] A. Jha, E. Nikolaidis, S. Gangadharan, Structural mechanics and materials—vibration of dynamic systems under cyclostationary excitations, American Institute of Aeronautics and Astronautics (AIAA) Journal 38 (12) (2000) 2284–2291.

[744] A. Jha, E. Nikolaidis, S. Gangadharan, Cyclostationary random vibration of a ship propeller, Journal of Ship Research 47 (4) (1 December 2003) 299–312.

[745] H. Jiang, S. Wang, Direction-finding of cyclostationary sources with minimum-redundancy linear arrays by fourth-order cyclic cumulants, International Conference on Communication Technology, ICCT '03, Beijing, China, vol. 2, 9–11 April 2003, pp. 1835–1838.

[746] H. Jiang, S. Wang, 2-D direction finding of cyclostationary signals in the presence of both multiplicative noise and additive noise, 14th IEEE Conference on Personal, Indoor and Mobile Radio Communications, PIMRC '03, Beijing, China, vol. 3, 7–10 September 2003, pp. 2393–2396.

[747] H. Jiang, S. Wang, Azimuth/elevation estimation for cyclostationary coherent sources using higher order cyclic cumulant, 14th IEEE Conference on Personal, Indoor and Mobile Radio Communications, PIMRC '03, Beijing, China, vol. 3, 7–10 September 2003, pp. 2480–2484.

[748] H. Jiang, S. Wang, Fourth-order cyclic cumulant TLS-ESPRIT algorithm to estimate direction of cyclostationary coherent sources, International Conference on Neural Networks and Signal Processing, Nanjing, China, vol. 2, 14–17 December 2003, pp. 1330–1333.

[749] H. Jiang, S. Wang, H. Lu, Forward-backward linear prediction to direction finding of coherent sources using higher-order cyclic statistics, Proceedings of the IEEE sixth Circuits and Systems Symposium on Emerging Technologies: Frontiers of Mobile and Wireless Communication, Shanghai, China, vol. 2, 31 May–2 June 2004, pp. 737–740.

[750] H. Jiang, S. Wang, H. Lu, Multipath direction finding in both multiplicative noise and additive noise environments via exploitation of cyclostationarity, Proceedings of the IEEE sixth Circuits and Systems Symposium on Emerging Technologies: Frontiers of Mobile and Wireless Communication, Shanghai, China, vol. 2, 31 May–2 June 2004, pp. 765–768.

[751] L. Jin, M. Yao, Q.-Y. Yin, 2-D DOA estimating of multipath signals by exploitation of cyclostationarity, Midwest Symposium on Circuits and Systems, MWSCAS '98, South Bend, IN, 9–12 August 1998, pp. 608–611.

[752] L. Jin, M. Yao, Q.-Y. Yin, A novel method for 2-D spatial spectrum estimation of wideband signals, Fourth International Conference on Signal Processing, ICSP

'98, Beijing, China, vol. 1, 12–16 October 1998, pp. 397–400.
[753] L. Jin, Q.-Y. Yin, B. Jiang, Direction finding of wideband signals via spatial-temporal processing in wireless communications, IEEE International Symposium on Circuits and Systems, ISCAS '00, Geneva, Switzerland, vol. 2, 28–31 May 2000, pp. 81–84.
[754] L. Jin, Q.-Y. Yin, M. Yao, Estimating spatial spectrum with generalized spectral-correlation signal subspace fitting, IEEE International Symposium on Circuits and Systems, ISCAS '00, Geneva, Switzerland, vol. 4, 28–31 May 2000, pp. 577–580.
[755] W.K. Johnson, The dynamic pneumocardiogram: an application of coherent signal processing to cardiovascular measurement, IEEE Transactions on Biomedical Engineering 28 (6) (1981) 471–475.
[756] R. Jones, A. Kotousov, I.H. Marshall, Adhesively bonded joints under cyclic load spectra, Fatigue and Fracture of Engineering Materials and Structures 25 (2) (2002) 173–186.
[757] K.S. Joo, T. Bose, Image scrambling using 2-D periodically shift variant filters, 38th Midwest Symposium on Circuits and Systems, MWSCAS '95, Rio de Janeiro, Brazil, 13–16 August 1995, pp. 478–481.
[758] K.S. Joo, S. Rajan, T. Bose, On 2-D periodically shift variant digital filters, 38th Midwest Symposium on Circuits and Systems, MWSCAS '95, Rio de Janeiro, Brazil, vol. 1, 13–16 August 1995, pp. 592–595.
[759] K.S. Joo, T. Bose, Two-dimensional periodic digital filters, International Conference on Image Processing, Washington DC, MD, vol. 2, 23–26 October 1995, pp. 117–120.
[760] K.S. Joo, T. Bose, Two-dimensional periodically shift variant digital filters, IEEE Transactions on Circuits and Systems for Video Technology 6 (1) (February 1996) 97–107.
[761] V. Joshi, D.D. Falconer, Reduced state sequence estimation techniques for digital subscriber loop application, IEEE Global Telecommunications Conference, GLOBECOM '88, Hollywood, FL, vol. 2, 28 November–1 December 1988, pp. 799–803.
[762] V. Joshi, D.D. Falconer, Sequence estimation techniques for digital subscriber loop transmission with crosstalk interference, IEEE Transactions on Communications 38 (9) (September 1990) 1367–1374.
[763] A.R. Kacimov, Y.V. Obnosov, N.D. Yakimov, Groundwater flow in a medium with a parquet-type conductivity distribution, Journal of Hydrology 226 (3–4) (31 December 1999) 242–249.
[764] A.R. Kacimov, Y.V. Obnosov, J. Perret, Phreatic surface flow from a near-reservoir saturated tongue, Journal of Hydrology 296 (1–4) (20 August 2004) 271–281.
[765] K. Kadiman, D. Williamson, Discrete minimax linear quadratic regulation of continuous-time systems, Automatica 23 (6) (November 1987) 741–747.
[766] M.F. Kahn, T.E. Biedka, N.B. Whitley, Progress in cyclostationary-signal processing, First Workshop on Cyclostationary Signal Processing, Yountville, CA, August 1992.
[769] A. Kajiwara, Mobile satellite CDMA system robust to Doppler shift, IEEE Transactions on Vehicular Technology 44 (August 1995) 480–486.
[770] R. Kakarala, G.J. Iverson, Uniqueness of results for the multiple correlations of periodic functions, Journal of the Optical Society of America 10 (7) (1993) 1517–1528.
[771] Y. Kakihara, Multidimensional Second-Order Stochastic Processes, Series on Multivariate Analysis, World Scientific Publishing Company, River Edge, NJ, 1997.
[772] N. Kalouptsidis, Signal Processing Systems: Theory and Design, Wiley-Interscience, New York, 4 April 1997.
[773] A. Kanazawa, Spatial and temporal of cyclostationary signals in array antennas based on linear prediction model, European Signal Processing Conference, EUSIPCO '98, Rhodes, Greece, 1998.
[774] K.-M. Kang, G.-H. Im, Convergence and steady-state behavior of a hybrid decision feedback equalizer, IEICE Transactions 85 (12) (2002) 2764–2775.
[775] M. Kaplan, Single-server queue with cyclostationary arrivals and arithmetic service, Operations Research 31 (1) (1983) 184–205.
[776] M. Katayama, Introduction to robust, reliable, and high-speed power-line communication systems, IEICE Transactions 84 (12) (2001) 2958–2965.
[777] M. Kavehrad, J. Salz, Cross-polarization cancelation and equalization in digital transmission over dually polarized multipath fading channels, AT&T Technical Journal 64 (10) (December 1985) 2211–2245.
[778] T. Kawata, Almost periodic weakly stationary processes, in: G. Kallianpur, P.R. Krishnaiah, J.K. Ghosh (Eds.), Statistics and Probability: Essays in Honour of C.R. Rao, North-Holland, Amsterdam, 1982, pp. 383–396.
[779] L.G. Kazovsky, Optical Fiber Communication Systems, Artech House Publishers, Boston, MA, 1 November 1996.
[780] J. Keeler, Piecewise-periodic analysis of almost-periodic sounds and musical transients, IEEE Transactions on Audio and Electroacoustics 20 (5) (December 1972) 338–344.
[781] M. Khalafi, M.A. Mohseni, A simulation procedure for periodically correlated processes, Pakistan Journal of Statistics 18 (3) (2002) 423–434.
[782] B.H. Khalaj, B. Hassibi, A. Paulraj, T. Kailath, Blind identification of FIR channels via antenna arrays, 27th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 1, 1–3 November 1993, pp. 721–725.
[783] K. Kihira, N. Nobuyoshi, N. Inagaki, Correlation constrained CMA adaptive array using cyclostationary signal properties, Electronics and Communications in Japan, Part 1, Communications 84 (4) (2001) 48–56.
[784] N. Kikuma, K. Kihira, N. Inagaki, Correlation-constrained CMA adaptive array using cyclostationary signal properties, IEEE Antennas and Propagation

Society International Symposium, Atlanta, GA, vol. 1, 21–26 June 1998, pp. 376–379.
[785] N. Kikuma, W. Mizumukai, N. Inagaki, K. Sakakibara, On improving the CR-SCORE adaptive array by using multiple cyclic correlation properties, IEEE Antennas and Propagation Society International Symposium, Columbus, OH, vol. 1, 22–27 June 2003, pp. 61–64.
[786] D.-H. Kim, G.-H. Im, Performance analysis of a symbol timing recovery system for VDSL transmission, IEICE Transactions 84 (4) (2001) 1079–1086.
[787] K. Kim, T.K. Sarkar, H. Wang, M. Salazar-Palma, Direction of arrival estimation based on temporal and spatial processing using a direct data domain (D^3) approach, IEEE Transactions on Antennas and Propagation 52 (2) (February 2004) 533–541.
[788] K.-Y. Kim, G.R. North, J. Huang, EOFs of one-dimensional cyclostationary time series: computations, examples, and stochastic modeling, Journal of the Atmospheric Sciences 53 (7) (1996) 1007–1017.
[789] K.-Y. Kim, G.R. North, EOFs of harmonizable cyclostationary processes, Journal of the Atmospheric Sciences 54 (19) (1997) 2416.
[790] K.-Y. Kim, Statistical interpolation using cyclostationary EOFs, Journal of Climate 10 (11) (1997) 2931.
[791] K.-Y. Kim, Q. Wu, A comparison study of EOF techniques: analysis of nonstationary data with periodic statistics, Journal of Climate 12 (1) (1999) 185–199.
[792] K.-Y. Kim, Q. Wu, Optimal detection using cyclostationary EOFs, Journal of Climate 13 (5) (2000) 938.
[793] K.-Y. Kim, Statistical prediction of cyclostationary processes, Journal of Climate 13 (6) (2000) 1098.
[795] M. Kim, K. Ichige, H. Arai, Design of Jacobi EVD processor based on CORDIC for DOA estimation with MUSIC algorithm, IEICE Transactions 85 (12) (2002) 2648–2655.
[796] S.J. Kim, I.-J. Ha, A state-space approach to analysis of almost periodic nonlinear systems with sector nonlinearities, IEEE Transactions on Automatic Control 44 (1) (January 1999) 66–70.
[797] P.T. Kim, Consistent estimation of the fourth-order cumulant spectra density, Journal of Time Series Analysis 12 (1) (1991) 63–71.
[798] Y.K. Kim, C.L. Weber, Generalized single cycle classifier with applications to SQPSK vs. 2^kPSK, IEEE Military Communications Conference, MILCOM '89, Boston, MA, vol. 3, 15–18 October 1989, pp. 754–758.
[799] Y. Kitaoka, T. Furukawa, K. Urahama, Blind identification of second-order statistics using periodic Toeplitz system, IEEE International Symposium on Circuits and Systems, ISCAS '99, Orlando, FL, vol. 3, 30 May–2 June 1999, pp. 235–238.
[800] E.A.M. Klumperink, S.L.J. Gierkink, A.P. van der Wel, B. Nauta, Reducing MOS-FET $1/f$ noise and power consumption by switched biasing, IEEE Journal of Solid-State Circuits 35 (7) (July 2000) 994–1001.
[801] M. Knaflitz, P. Bonato, Time-frequency methods applied to muscle fatigue assessment during dynamic contractions, Journal of Electromyography and Kinesiology 9 (5) (October 1999) 337–350.
[802] D. Konig, J.F. Bohme, Application of cyclostationary and time-frequency signal analysis to car engine diagnosis, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '94, Adelaide, Australia, vol. 4, 19–22 April 1994, pp. 149–152.
[803] D. Konig, C. Tork, J.F. Bohme, Design of optimum periodic time varying filters for applications in combustion diagnosis of car engines, International Conference on Acoustics, Speech, and Signal Processing, ICASSP '95, Detroit, MI, vol. 3, 9–12 May 1995, pp. 1924–1927.
[804] D.G. Konstantinides, V. Piterbarg, Extreme values of the cyclostationary Gaussian random process, Journal of Applied Probability 30 (1) (1993) 82–97.
[805] D.G. Konstantinides, V. Piterbarg, S. Stamatovic, Gnedenko-type limit theorems for cyclostationary χ^2-processes, Lithuanian Mathematical Journal 44 (2) (April 2004) 157–167.
[806] A. Koukab, K. Banerjee, M. Declercq, Analysis and optimization of substrate noise coupling in single-chip RF transceiver design, IEEE/ACM International Conference on Computer-Aided Design, ICCAD '02, San Jose, CA, November 2002, pp. 309–316.
[807] V. Koivunen, J. Laurila, E. Bonek, Blind methods for wireless communication receivers, in: W.R. Stone (Ed.), Review of Radio Science: 1999–2002, Wiley–IEEE Press, New York, NY, 26 July 2002, pp. 247–275.
[808] G. Kubin, Poincare section techniques for speech, IEEE Workshop on Speech Coding for Telecommunications, Pocono Manor, PA, 7–10 September 1997, pp. 7–8.
[809] D.V. Kuksenkov, H. Temkin, S. Swirhun, Polarization instability and performance of free-space optical links based on vertical-cavity surface-emitting lasers, IEEE Photonics Technology Letters 8 (5) (May 1996) 703–705.
[810] P.S. Kumar, S. Roy, Optimization for crosstalk suppression with noncoordinating users, IEEE Transactions on Communications 44 (7) (July 1996) 894–905.
[811] K.S. Kundert, G.B. Sorkin, A. Sangiovanni-Vincentelli, Applying harmonic balance to almost-periodic circuits, IEEE Transactions on Microwave Theory and Techniques 36 (2) (February 1988) 366–378.
[812] K.S. Kundert, Simulation methods for RF integrated circuits, IEEE/ACM International Conference on Computer-Aided Design, ICCAD '97, San Jose, CA, 9–13 November 1997, pp. 752–765.
[813] K.S. Kundert, Predicting the phase noise and jitter of PLL-based frequency synthesizers, in: B. Razavi (Ed.), Phase-Locking in High-Performance Systems: From Devices to Architectures, IEEE Press, Piscataway, NJ, 21 February 2003, pp. 46–73.
[814] B. Lacaze, Processus harmonisables et processus cyclostationnaires, in Processus Aleatoires pour les Communications Numeriques, Hermes, Paris, France, 2002 (Chapter 9) (in French).
[815] D.E. Lake, Detection of affine time-delay multipath striations using a generalized cyclostationary model,

Eight IEEE Signal Processing Workshop on Statistical Signal and Array Processing, SSAP '96, Corfu, Greece, 24–26 June 1996, pp. 424–427.

[816] D.E. Lake, Tracking fundamental frequency for synchronous mechanical diagnostic signal processing, Ninth IEEE Signal Processing Workshop on Statistical Signal and Array Processing, SSAP '98, Portland, OR, 14–16 September 1998, pp. 200–203.

[817] I. Lakkis, A novel blind channel identification and equalisation algorithm based on maximum likelihood, Wireless Personal Communications 8 (2) (September 1998) 73–92.

[818] B. Lall, S.D. Joshi, R.K.P. Bhatt, Second-order statistical characterization of the filter bank and its elements, IEEE Transactions on Signal Processing 47 (6) (June 1999) 1745–1749.

[819] S. Lambert-Lacroix, Fonction d'autocorrelation partielle des processus a temps discret non stationnaires et applications, Ph.D. Thesis, Joseph Fourier University, Grenoble, France, 1998 (in French).

[820] S. Lambert-Lacroix, On periodic autoregressive processes estimation, IEEE Transactions on Signal Processing 48 (6) (June 2000) 1800–1803.

[821] U. Lambrette, H. Meyr, Two timing recovery algorithms for MSK, IEEE International Conference on Communications, ICC '94, New Orleans, LA, May 1994, pp. 1155–1159.

[822] J. Lamperti, Semi-stable stochastic processes, American Mathematical Society 104 (1) (1962) 62–78.

[823] L. Landini, L. Verrazzani, Spectral characterization of tissues microstructure by ultrasound: a stochastic approach, IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control 37 (5) (September 1990) 448–456.

[824] A. Langousis, Development of cyclostationary stochastic hydrological models preserving short-term memory and long-term persistence, Ph.D. Thesis, National Technical University of Athens, Athens, Greece, July 2003.

[825] M.M. Lara, A.G. Orozco-Lugo, D.C. McLernon, H.J. Muro-Lemus, Blind recovery of multiple packets in ad hoc mobile networks using polynomial phase modulating sequences, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '03, Hong-Kong, China, vol. 4, 6–10 April 2003, pp. 628–631.

[826] Y. Larsen, A. Hanssen, Wavelet-polyspectra: analysis of non-stationary and non-Gaussian/non-linear signals, 10th IEEE Workshop on Statistical Signal and Array Processing, SSAP '00, Pocono Manor, PA, 14–16 August 2000, pp. 539–543.

[827] Y. Larsen, A. Hanssen, H.L. Pecseli, Analysis of non-stationary mode coupling by means of wavelet-bicoherence, IEEE International Conference on Acoustics, Speech, and Signal Processing, vol. 6, ICASSP '01, Salt Lake City, UT, vol. 6, 7–11 May 2001, pp. 3581–3584.

[828] E.G. Larsson, G. Liu, J. Li, G.B. Giannakis, Joint symbol timing and channel estimation for OFDM based WLANs, IEEE Communications Letters 5 (8) (August 2001) 325–327.

[829] G. Latouche, D. Pirez, P. Vila, MMSE cyclic equalization, IEEE Military Communications Conference, MILCOM '98, Boston, MA, vol. 1, 18–21 October 1998, pp. 150–154.

[830] J.-H. Lee, Y.-T. Lee, Adaptive beamforming using cyclic signals in the presence of cycle frequency error, Antennas and Propagation Society International Symposium, AP-S '96, Baltimore, MD, vol. 2, 21–26 July 1996, pp. 1180–1183.

[831] J.-H. Lee, Y.-T. Lee, Robust adaptive array beamforming for cyclostationary signals under cycle frequency error, IEEE Transactions on Antennas and Propagation 47 (2) (February 1999) 233–241.

[832] J.-H. Lee, Y.-T. Lee, W.-H. Shih, Efficient robust adaptive beamforming for cyclostationary signals, IEEE Transactions on Signal Processing 48 (7) (July 2000) 1893–1901.

[833] J.-H. Lee, Y.-T. Lee, A novel direction-finding method for cyclostationary signals, Signal Processing 81 (6) (2001) 1317–1324.

[834] J.-H. Lee, C.-H. Tung, Estimating the bearings of near-field cyclostationary signals, IEEE Transactions on Signal Processing 50 (1) (January 2002) 110–118.

[835] J.-H. Lee, Y.-T. Lee, Robust technique for estimating the bearings of cyclostationary signals, Signal Processing 83 (5) (May 2003) 1035–1046.

[836] T.H. Lee, Oscillator phase noise: a tutorial, IEEE Custom Integrated Circuits Conference, San Diego, CA, 16–19 May 1999, pp. 373–380.

[837] T.H. Lee, A. Hajimiri, Oscillator phase noise: a tutorial, IEEE Journal of Solid-State Circuits 35 (3) (March 2000) 326–336.

[838] T.H. Lee, The Design of CMOS Radio-Frequency Integrated Circuits, Cambridge University Press, New York, NY, 22 December 2003.

[839] Y.-T. Lee, J.-H. Lee, Robust adaptive array beamforming with random error in cycle frequency, Radar, Sonar and Navigation, IEE Proceedings 148 (4) (August 2001) 193–199.

[840] Y.-T. Lee, J.-H. Lee, Direction-finding methods for cyclostationary signals in the presence of coherent sources, IEEE Transactions on Antennas and Propagation 49 (12) (December 2001) 1821–1826.

[841] D. Leenaerts, G. Gielen, R.A. Rutenbar, Embedded tutorial: CAD solutions and outstanding challenges for mixed-signal and RF IC design, IEEE/ACM International Conference on Computer-Aided Design, ICCAD '01, San Jose, CA, 4–8 November 2001, pp. 270–277.

[842] B. Lehman, J.R. Graef, D. Sahay, K. Shujaee, Stability of fast almost periodic systems with special classes of time varying delay, 32nd IEEE Conference on Decision and Control, IDC '93, San Antonio, TX, vol. 4, 15–17 December 1993, pp. 3220–3222.

[843] G. Lejeune, et al., Cyclostationnarite d'ordre 1 et 2: application a des signaux d'engrenages, Seizieme Colloque GRETSI sur le Traitment du Signal et des Images, Grenoble, France, 1997, pp. 323–326 (in French).

[844] A. Leon-Garcia, Cyclostationary random processes, in: Probability and Random Processes for Electrical Engineering, second ed., Addison-Wesley Publishing Company, Reading, MA, 1 July 1993, pp. 363–366 (Chapter 6.5).

[845] J.P. Leskow, Maximum likelihood estimator for almost periodic stochastic process models, Tech. Rep. 251, Center for Stochastic Processes, University of North Carolina, Chapel Hill, NC, 1988.

[846] J.P. Leskow, Least square estimation in almost periodic point process models, Tech. Rep. 254, Center for Stochastic Processes, University of North Carolina, Chapel Hill, NC, 1989.

[847] J.P. Leskow, Asymptotic normality of the spectral density estimators for almost periodically correlated stochastic processes, Tech. Rep. 170, University of California, Santa Barbara, CA, April 1991.

[848] J.P. Leskow, A. Weron, Ergodic behavior and estimation for periodically correlated processes, Statistics and Probability Letters 15 (4) (1992) 299–304.

[849] J.P. Leskow, Asymptotic normality of the spectral density estimators for almost periodically correlated stochastic processes, Stochastic Processes and their Applications 52 (2) (August 1994) 351–360.

[850] J.P. Leskow, The impact of stationarity assessment on studies of volatility and value-at-risk. Stable non-Gaussian models in finance and econometrics, Mathematical and Computer Modelling 34 (9–11) (2001) 1213–1222.

[851] H. Lev-Ari, Adaptive RLS filtering under the cyclostationary regime, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '98, Seattle, WA, vol. 4, 12–15 May 1998, pp. 2185–2188.

[852] P.A.W. Lewis, B.K. Ray, Nonlinear modelling of periodic threshold autoregressions using tsmars, Journal of Time Series Analysis 23 (4) (July 2002) 459–471.

[853] H. Li, Q. Cheng, Some estimation problems for harmonics in multiplicative and additive noise, Third International Conference on Signal Processing, ICSP '96, Beijing, China, vol. 1, 14–18 October 1996, pp. 181–184.

[854] H. Li, Q. Cheng, Almost sure convergence analysis of mixed time averages and Kth-order cyclic statistics, IEEE Transactions on Information Theory 43 (4) (July 1997) 1265–1268.

[855] J. Li, Z. Bao, Maximum likelihood DOA estimation in cyclic cumulant domains, IEEE Signal Processing Workshop on Higher-Order Statistics, SPW-HOS '99, Madison, WI, 14–16 June 1999, pp. 336–339.

[856] L. Li, L. Qu, Cyclic statistics in rolling bearing diagnosis, Journal of Sound and Vibration 267 (2) (16 October 2003) 253–265.

[857] M. Li, J. Tan, W. Zhang, A channel estimation method based on frequency-domain pilots and time-domain processing for OFDM systems, IEEE Transactions on Consumer Electronics 50 (4) (November 2004) 1049–1057.

[858] P. Li, L.T. Pileggi, Compact reduced-order modeling of weakly nonlinear analog and RF circuits, IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems 24 (2) (February 2005) 184–203.

[859] T. Li, J.K. Tugnait, Z. Ding, Channel estimation of long-code CDMA systems utilizing transmission induced cyclostationarity, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '03, Hong Kong, vol. 4, 6–10 April 2003, pp. 105–108.

[860] T. Li, Z. Ding, J.K. Tugnait, W. Liang, Channel identification and signal separation for long-code CDMA systems using multistep linear prediction method, IEEE International Conference on Communications, Paris, France, vol. 4, 20–24 June 2004, pp. 2437–2441.

[861] T.-H. Li, M.J. Hinich, A filter bank approach for modeling and forecasting seasonal patterns, Technometrics 44 (1) (1 February 2002) 1–14.

[862] X. Li, Y. Xu, P. Li, P. Gopalakrishnan, L.T. Pileggi, A frequency relaxation approach for analog/RF system-level simulation, 41st Conference on Design Automation, CDA '04, San Diego, CA, 2004, pp. 842–847.

[863] Y. Li, Z. Ding, Linear system phase recovery based on second order cyclostationary statistics, 27th Conference on Information Sciences and Systems, Baltimore, MD, March 1993, pp. 897–902.

[864] Y. Li, Z. Ding, Blind channel identification based on second order cyclostationary statistics, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '93, Minneapolis, MN, vol. 4, 27–30 April 1993, pp. 81–84.

[865] Y. Li, Z. Ding, A non-parametric cepstral method for blind channel identification from cyclostationary statistics, IEEE Military Communications Conference, MILCOM '93, Boston, MA, vol. 2, 11–14 October 1993, pp. 648–652.

[866] Y. Li, Z. Ding, Global convergence of fractionally spaced Godard equalizers, 28th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 1, 31 October–2 November 1994, pp. 617–621.

[867] Y. Li, Z. Ding, ARMA system identification based on second-order cyclostationarity, IEEE Transactions on Signal Processing 42 (12) (December 1994) 3483–3494.

[868] Y.-X. Li, M. Yi, Q. Yang, X.-C. Xiao, H.-M. Tai, Low SNR BPSK signal chip rate estimation using a wavelet based spectral correlation algorithm, 45th Midwest Symposium on Circuits and Systems, MWSCAS '02, Tulsa, OK, vol. 3, 4–7 August 2002, pp. 247–249.

[869] Y.-C. Liang, A.R. Leyman, B.-H. Soong, (Almost) periodic FIR system identification using third-order cyclic-statistics, Electronics Letters 33 (5) (27 February 1997) 356–357.

[870] Y.-C. Liang, A.R. Leyman, B.-H. Soong, Blind source separation using second-order cyclic-statistics, First IEEE Signal Processing Workshop on Signal Processing Advances in Wireless Communications, SPAWC '97, Paris, France, 16–18 April 1997, pp. 57–60.

[871] Y.-C. Liang, A.R. Leyman, B.-H. Song, A network structure approach to blind source separation using second order cyclic statistics, IEEE International Symposium on Circuits and Systems, ISCAS '97, Hong Kong, vol. 4, 9–12 June 1997, pp. 2549–2551.

[872] Y.-C. Liang, A.R. Leyman, X.-D. Zhang, Linear algebraic approaches for (almost) periodic moving average system identification, IEEE Signal Processing Workshop on Higher-Order Statistics, Banff, Canada, 21–23 July 1997, pp. 112–116.

[873] Y.-C. Liang, A.R. Leyman, (Almost) periodic moving average system identification using higher order cyclic-statistics, IEEE Transactions on Signal Processing 46 (3) (March 1998) 779–783.

[874] Y.-C. Liang, A.R. Leyman, F. Chin, New criteria for blind source separation using second-order cyclic statistics, Circuits, Systems, Signal Processing 19 (1) (2000) 43–58.

[875] K.-S. Lii, M. Rosenblatt, Spectral analysis for harmonizable processes, Annals of Statistics 30 (1) (2002) 258–297.

[876] A.F. Lime Jr., Analysis of low probability of intercept (LPI) radar signals using cyclostationary processing, Master's Thesis, Naval Postgraduate School, Monterey, CA, September 2002.

[877] C.A. Lin, J.Y. Wu, Blind identification with periodic modulation: a time-domain approach, IEEE Transactions on Signal Processing 50 (11) (November 2002) 2875–2888.

[878] S.-C. Lin, V.K. Prabhu, Optimum diversity receiver for cochannel interference with non-zero symbol timing offset in digital mobile radio, IEEE International Conference on Communications, ICC '98, Atlanta, GA, vol. 3, 7–11 June 1998, pp. 1350–1354.

[879] Z. Lin, Detection of helicopter signals using cyclostationarity, International Conference on Acoustics, Speech, and Signal Processing, ICASSP '95, Detroit, MI, vol. 3, 9–12 May 1995, pp. 1952–1955.

[880] F. Ling, S.U.H. Qureshi, Convergence and steady-state behavior of a phase-splitting fractionally spaced equalizer, IEEE Transactions on Communications 38 (April 1990) 418–425.

[881] J. Litva, T.K.-Y. Lo, Cyclostationary algorithms, in: Digital Beamforming in Wireless Communications, Artech House Publishers, Boston, MA, 1 September 1996, pp. 108–113 (Chapter 5.3.3).

[882] J. Litva, T.K.-Y. Lo, Adaptive beamforming for downlink, in: Digital Beamforming in Wireless Communications, Artech House Publishers, Boston, MA, 1 September 1996, pp. 180–184 (Chapter 8.5).

[883] H. Liu, G. Xu, L. Tong, T. Kailath, Recent developments in blind channel equalization: from cyclostationarity to subspaces, Signal Processing 50 (1–2) (April 1996) 83–99.

[884] H.-Y. Liu, R.Y. Yen, Effect of changing symbol rate on equalizer performance for band-limited systems, International Journal of Communication Systems 17 (3) (April 2004) 253–267.

[885] R. Liu, V. Raman, Stabilization of chaos-an algebraic theory, IEEE International Symposium on Circuits and Systems, Espoo, Finland, vol. 3, 7–9 June 1988, p. 1981.

[886] C.-Y. Lo, H. Lev-Ari, Robust linear estimation of moments for (almost) cyclostationary signals, Seventh IEEE Signal Processing Workshop on Statistical Signal and Array Processing, Quebec City, Canada, 26–29 June 1994, pp. 27–30.

[887] N.W.K. Lo, D.D. Falconer, A.U.H. Sheikh, Adaptive equalization techniques for multipath fading and co-channel interference, 43rd IEEE Vehicular Technology Conference, VTC '93, Secaucus, NJ, 18–20 May 1993, pp. 653–656.

[888] N.W.K. Lo, D.D. Falconer, A.U.H. Sheikh, Adaptive equalization for co-channel interference in a multipath fading environment, IEEE Transactions on Communications 43 (234) (February/March/April 1995) 1441–1453.

[889] H.H. Loomis Jr., R.F. Bernstein Jr., High speed pipeline processor and memory architectures for cyclostationary processing, Workshop on Cyclostationary Analysis, Monterey, CA, vol. 4, August 1994, pp. 1–5.

[890] J.A. Lopez-Salcedo, G. Vazquez, Second-order cyclostationary approach to NDA ML square timing estimation with frequency uncertainty, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '03, Hong Kong, vol. 4, 6–10 April 2003, pp. 572–575.

[891] J.A. Lopez-Salcedo, G. Vazquez, Stochastic approach to square timing estimation with frequency uncertainty, IEEE International Conference on Communications, ICC '03, Anchorage, AK, vol. 5, 11–15 May 2003, pp. 3555–3559.

[892] J.A. Lopez-Salcedo, G. Vazquez, Cyclostationary joint phase and timing estimation for staggered modulations, Proceedings IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '04, Montreal, Quebec, Canada, vol. 4, 17–21 May 2004, pp. 833–836.

[893] E.F. LoPresti, R.A. Jesinger, V.L. Stonick, Identifying significant frequencies in surface EMG signals for localization of neuromuscular activity, 17th Conference on Engineering in Medicine and Biology Society, Montreal, Canada, vol. 2, 20–23 September 1995, pp. 967–968.

[894] R. Lugannani, Sample stability of periodically correlated pulse trains, Journal of the Franklin Institute 296 (3) (September 1973) 179–190.

[895] T. Luginbuhl, P. Willett, Estimating the parameters of general frequency modulated signals, IEEE

Transactions on Signal Processing 52 (1) (January 2004) 117–131.

[896] G.L. Lui, H.H. Tan, On joint symbol and frame synchronization for direct-detection optical communication systems, IEEE Transactions on Communications 35 (24) (February 1987) 250–255.

[897] R.B. Lund, H.L. Hurd, P. Bloomfield, R.L. Smith, Climatological time series with periodic correlation, Journal of Climate 8 (11) (November 1995) 2787–2809.

[898] R.B. Lund, H.L. Hurd, P. Bloomfield, R. Smith, Climatological time series with periodic correlation, Tech. Rep. STA 95-8, University of Georgia, Athens, GA, 1995.

[899] R.B. Lund, I.V. Basawa, Modeling and inference for periodically correlated time series. Asymptotics, nonparametrics, and time series, in: S. Ghosh (Ed.), Asymptotics, Nonparametrics and Time Series, Marcel Dekker, New York, NY, 1999, pp. 37–62.

[900] W. Luo, J.K. Tugnait, Blind identification of time-varying channels using multistep linear predictors, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '02, Orlando, FL, vol. 3, 13–17 May 2002, pp. 2277–2280.

[901] T. Lv, Q. Wan, Blind estimation of symbol timing and carrier frequency offset in time-varying multipath channels for OFDM systems, IEICE Transactions 86 (9) (2003) 2665–2671.

[902] D.V. Lyridis, A.N. Perakis, M.G. Parsons, Level crossing probabilities for cyclostationary processes with two frequencies in marine diesel engine shafting systems, SAE Transactions 104 (3) (1996) 1291.

[903] S. Ma, C. Ji, Modeling heterogeneous network traffic in wavelet domain, IEEE/ACM Transactions on Networking 9 (5) (October 2001) 634–649.

[904] Y. Ma, Y. Huang, X. Zhu, N. Yi, Blind channel estimation for OFDM based multitransmitter systems using guard interval diversity, IEEE 59th Vehicular Technology Conference, VTC'04—Spring, Milan, Italy, vol. 1, 17–19 May 2004, pp. 440–444.

[905] U. Madhow, M.L. Honig, MMSE interference suppression for direct-sequence spread-spectrum CDMA, IEEE Transactions on Communications 42 (12) (December 1994) 3178–3188.

[906] M. Majmundar, N. Sandhu, J.H. Reed, Adaptive single-user receivers for direct-sequence spread-spectrum CDMA systems, IEEE Transactions on Vehicular Technology 49 (2) (March 2000) 379–389.

[907] A. Makagon, A.G. Miamee, H. Salehi, Periodically correlated processes and their spectrum, Workshop on Nonstationary Stochastic Processes and Their Applications, Hampton, VA, 1–2 August 1992, pp. 147–164.

[908] A. Makagon, A.G. Miamee, H. Salehi, Continuous time periodically correlated processes: spectrum and prediction, Stochastic Processes and their Applications 49 (2) (February 1994) 277–295.

[909] A. Makagon, A.G. Miamee, Weak law of large numbers for almost periodically correlated processes, American Mathematical Society 124 (6) (June 1996) 1899–1902.

[910] A. Makagon, A.G. Miamee, On the spectrum of correlation autoregressive sequences, Stochastic Processes and their Applications 69 (2) (1 September 1997) 179–193.

[911] A. Makagon, Induced stationary process and structure of locally square integrable periodically correlated processes, Studia Mathematica 136 (1) (1999) 71–86.

[912] A. Makagon, Theoretical prediction of periodically correlated sequences, Probability and Mathematical Statistics 19 (2) (1999) 287–322.

[913] A. Makagon, Characterization of the spectra of periodically correlated processes, Journal of Multivariate Analysis 78 (1) (July 2001) 1–10.

[914] A. Makagon, On a stationary process induced by an almost periodically correlated process, Demonstratio Mathematica 34 (2) (2001) 321–326.

[915] G.D. Mandyam, Digital-to-analog conversion of pulse amplitude modulated systems using adaptive quantization, Wireless Personal Communications 23 (2) (November 2002) 253–281.

[916] V.B. Manimohan, W.J. Fitzgerald, Blind frequency offset and delay estimation of linearly modulated signals using second order cyclic statistics, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '98, Seattle, WA, vol. 4, 12–15 May 1998, pp. 2337–2340.

[917] V.B. Manimohan, W.J. Fitzgerald, Signal extraction and delay estimation by exploiting cyclostationarity, Second IEEE Workshop on Signal Processing Advances in Wireless Communications, SPAWC '99, Annapolis, MD, 9–12 May 1999, pp. 121–124.

[918] V.B. Manimohan, W.J. Fitzgerald, Blind frequency synchronisation for OFDM systems with pulse shaping, IEEE International Conference on Communications, ICC '99, Vancouver, BC, Canada, vol. 1, 6–10 June 1999, pp. 178–181.

[919] V.B. Manimohan, W.J. Fitzgerald, Direction estimation using conjugate cyclic cross-correlation: more signals than sensors, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '99, Phoenix, AZ, vol. 5, 15–19 March 1999, pp. 2877–2880.

[920] J. Mannerkoski, V. Koivunen, D. Taylor, Prediction-based adaptive blind equalization: a performance study, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '99, Phoenix, AZ, vol. 5, 15–19 March 1999, pp. 2491–2494.

[921] J. Mannerkoski, V. Koivunen, Analytical performance bound on a correlation matrix based blind equalizer, Second IEEE Workshop on Signal Processing Advances in Wireless Communications, SPAWC '99, Annapolis, MD, 9–12 May 1999, pp. 86–89.

[922] J.H. Manton, Y. Hua, A frequency domain deterministic approach to channel identification, IEEE Signal Processing Letters 6 (12) (December 1999) 323–326.

[923] P. Marchand, Detection et reconnaissance de modulations numeriques a l'aide des statistiques cycliques d'ordre superieur, Ph.D. Thesis, Institut National

Polytechnique, Grenoble, France, 30 March 1992 (in French).
[924] P. Marchand, Statistiques d'ordre superieur a deux pour des signaux cyclostationnaires a valeurs complexes, Quinzieme Colloque GRETSI sur le Traitment du Signal et des Images, Juan-les-Pins, France, September 1995 (in French).
[925] P. Marchand, D. Boiteau, Higher-order statistics for QAM signals: a comparison between cyclic and stationary representations, European Signal Processing Conference, EUSIPCO '96, Trieste, Italy, 10–13 September 1996.
[926] P. Marchand, C. Le Martret, J.-L. Lacoume, Classification of linear modulations by a combination of different orders cyclic cumulants, IEEE Signal Processing Workshop on Higher-Order Statistics, SPW-HOS '97, Banff, AB, Canada, 21–23 July 1997, pp. 47–51.
[927] P. Marchand, J.-L. Lacoume, C. Le Martret, Multiple hypothesis modulation classification based on cyclic cumulants of different orders, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '98, Seattle, WA, vol. 4, 12–15 May 1998, pp. 2157–2160.
[928] P. Marchand, J.-L. Lacoume, C. Le Martret, Multiple hypothesis modulation classification based on cyclic cumulants of different orders, European Signal Processing Conference, EUSIPCO '98, Rhodes, Greece, 1998.
[929] G.I. Marchuk, J. Schroter, V.B. Zalesny, Numerical study of the global ocean equilibrium circulation, Russian Journal of Mathematical Modelling 18 (4) (August 2003) 307–335.
[930] V.A. Markelov, Axis crossing and relative time of existence of a periodically nonstationary random process, Soviet Radiophysics 9 (4) (1966) 440–443.
[931] M. Marseguerra, S. Minoggio, A. Rossi, E. Zio, Neural networks prediction and fault diagnosis applied to stationary and non stationary ARMA modeled time series, Progress in Nuclear Energy 27 (1) (1992) 25–36.
[932] D.E.K. Martin, Estimation of the minimal period of periodically correlated sequences, Ph.D. Thesis, University of Maryland, College Park, MD, 1991.
[933] D.E.K. Martin, B. Kedem, Estimation of the period of periodically correlated sequences, Journal of Time Series Analysis 14 (2) (1993) 193–205.
[934] D.E.K. Martin, Detection of periodic autocorrelation in time series data via zero-crossing, Journal of Time Series Analysis 20 (4) (1999) 435–452.
[935] G. Martini, $1/f$ noise in passive components under time-varying bias, SPIE '03, Noise in Devices and Circuits, Santa Fe, NM, vol. 5113, 1–4 June 2003, pp. 406–414.
[936] M. Martone, CHOS-based channel tracking in cellular TDMA communication, Ninth IEEE International Symposium on Personal, Indoor and Mobile Radio Communications, PIMRC '98, Boston, MA, vol. 3, 8–11 September 1998, pp. 1231–1234.
[937] M. Martone, Adaptive multistage beamforming of cellular signals using cyclic higher-order statistics, Ninth IEEE International Symposium on Personal, Indoor and Mobile Radio Communications, PIMRC '98, Boston, MA, vol. 3, 8–11 September 1998, pp. 1391–1395.
[938] M. Martone, Fractionally-spaced array processing for fast fading cellular TDMA signals using cyclic higher-order cumulants, Second IEEE Workshop on Signal Processing Advances in Wireless Communications, SPAWC '99, Annapolis, MD, 9–12 May 1999, pp. 288–291.
[939] M. Martone, Adaptive multistage beamforming using cyclic higher order statistics (CHOS), IEEE Transactions on Signal Processing 47 (10) (October 1999) 2867–2873.
[940] K. Maryan, I.N. Yavorsky, The estimate of period of Gaussian periodically correlated stochastic processes, TCSET '02, Lviv-Slavsko, Ukraine, 18–23 February 2002, pp. 101–102.
[941] D. Mattera, L. Paura, Exploitation of cyclostationarity for identifying nonlinear Volterra systems by input–output noisy measurements, 30th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 1, 3–6 November 1996, pp. 166–170.
[942] D. Mattera, L. Paura, Higher-order cyclostationarity-based methods for identifying Volterra systems by input–output noisy measurements, Signal Processing 67 (1) (29 May 1998) 77–98.
[943] D. Mattera, Identification of polyperiodic Volterra systems by means of input-output noisy measurements, Signal Processing 75 (1) (5 January 1999) 41–50.
[944] K.D. Mauck, Wideband cyclic MUSIC, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '93, Minneapolis, MN, vol. 4, 27–30 April 1993, pp. 288–291.
[945] L. Mazet, P. Loubaton, Estimation de la periode symbole d'un signal module lineairement basee sur des cyclo-correlations, Dix-Septieme Colloque GRETSI sur le Traitment du Signal et des Images, Vannes, France, September 1999 (in French).
[946] L. Mazet, P. Loubaton, Cyclic correlation based symbol rate estimation, 33rd Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 2, 24–27 October 1999, pp. 1008–1012.
[947] J.E. Mazo, Jitter comparison of tones generated by squaring and by fourth-power circuits, Bell System Technical Journal 57 (5) (May–June 1978) 1489–1498.
[948] F. Mazzenga, F. Vatalaro, Parameter estimation in CDMA multiuser detection using cyclostationary statistics, Electronics Letters 32 (3) (1 February 1996) 179–181.
[949] F. Mazzenga, Blind multipath channel identification for wideband communications systems based on cyclostationary statistics, European Transactions on Telecommunications and Related Technologies 9 (1) (1998) 27–32.
[950] A.C. McCormick, A.K. Nandi, Cyclostationarity in rotating machine vibrations, Mechanical Systems and Signal Processing 12 (2) (March 1998) 225–242.

[951] D.C. McLernon, Periodically time-varying two dimensional systems, Electronics Letters 26 (6) (1990) 412–413.
[952] D.C. McLernon, Analysis of LMS algorithm with inputs from cyclostationary random processes, Electronics Letters 27 (2) (17 January 1991) 136–138.
[953] D.C. McLernon, On periodically time-varying two-dimensional state-space filters, International Symposium on Circuits and Systems, Glasgow, UK, May 1994, pp. 221–224.
[954] R. Mehlan, Y. Chen, H. Meyr, A fully digital feedforward MSK demodulator with joint frequency offset and symbol timing estimation for burst mode mobile radio, IEEE Transactions on Vehicular Technology 42 (4) (November 1993) 434–443.
[955] A. Mehrotra, A.L. Sangiovanni-Vincentelli, Noise analysis of non-autonomous radio frequency circuits, IEEE/ACM International Conference on Computer-Aided Design, San Jose, CA, 7–11 November 1999, pp. 55–60.
[956] A. Mehrotra, Simulation and modelling techniques for noise in radio frequency integrated circuits, Ph.D. Thesis, University of California, Berkeley, CA, 1999.
[957] R. Mendoza, J.H. Reed, T.C. Hsia, B.G. Agee, Interference rejection using the time-dependent constant modulus algorithm (CMA) and the hybrid CMA/spectral correlation discriminator, IEEE Transactions on Signal Processing 39 (9) (September 1991) 2108–2111.
[958] M.F. Mesiya, P.J. McLane, L.L. Campbell, Optimal receiver filters for BPSK transmission over a bandlimited nonlinear channel, IEEE Transactions on Communications 26 (1) (January 1978) 12–22.
[959] D.G. Messerschmitt, L.C. Barbosa, T.D. Howell, A study of sampling detectors for magnetic recording, Tech. Rep. DJ 4081 (45459), IBM Almaden Research Center, San Jose, CA, 16 July 1984.
[960] H. Meyr, Nonsinusoidal phase detector characteristics, in: H. Meyr (Ed.), Digital Communication Receivers, Phase-, Frequency-Locked Loops, and Amplitude Control, Wiley-Interscience, New York, NY, March 1990, pp. 112–115 (Chapter 3.2.2).
[961] H. Meyr, M. Moeneclaey, S.A. Fechtel, Digital Communication Receivers: Synchronization, Channel Estimation, and Signal Processing, Wiley, New York, NY, 1998.
[962] A.G. Miamee, H. Salehi, On the prediction of periodically correlated stochastic processes, in: V.P.R. Krishnaiah (Ed.), Multivariate Analysis, North-Holland, Amsterdam, 1980, pp. 167–179.
[963] A.G. Miamee, Periodically correlated processes and their stationary dilations, SIAM Journal of Applied Mathematics 50 (4) (August 1990) 1194–1199.
[964] A.G. Miamee, J.C. Hardin, On a class of nonstationary stochastic processes, Sankhya Series A 52 (2) (1990) 145–156.
[965] A.G. Miamee, Explicit formula for the best linear predictor of periodically correlated sequences, SIAM Journal on Mathematical Analysis 24 (3) (1993) 703–711.
[966] A.G. Miamee, On recent developments in prediction theory for cyclo-stationary processes, in: W.A. Gardner (Ed.), Cyclostationarity in Communications and Signal Processing, IEEE Press, New York, NY, 1994, pp. 480–493 (Chapter 7, Part II).
[967] A.G. Miamee, A study of non-stationary processes and their applications, Tech. Rep. A527192. Available online at http://www.stormingmedia.us/52/5271/A527192.html (31 January 1995).
[968] A.G. Miamee, B.S.W. Schroder, On completeness of the spectral domain of harmonizable processes, Probab. Theory Related Fields 101 (3) (1995) 303–309.
[969] A.G. Miamee, A study of non-stationary processes with their applications, Tech. Rep. A597583. Available online at http://www.stormingmedia.us/59/5975/A597583.html (30 November 2000).
[970] A.G. Miamee, G.H. Shahkar, Shift operator for periodically correlated processes, Indian Journal of Pure Applied Mathematics 33 (5) (2002) 705–712.
[971] A. Mickelson, D. Jaggard, Electromagnetic wave propagation in almost periodic media, IEEE Transactions on Antennas and Propagation 27 (1) (January 1979) 34–40.
[972] R.F. Mills, Implementation of the single cycle detector using the signal processing workstation, Tactical Communications Conference, Fort Wayne, IN, vol. 1, 10–12 May 1994, pp. 393–400.
[973] L. Mingquan, X. Xianci, L. LeMing, Cyclic spectral features based modulation recognition, International Conference on Communication Technology, ICCT '96, vol. 3, 5–7 May 1996, pp. 792–795.
[974] A. Mirbagheri, Y.C. Yoon, A linear MMSE receiver for multipath asynchronous random-CDMA with chip pulse shaping, IEEE Transactions on Vehicular Technology 51 (5) (September 2002) 1072–1086.
[975] A. Mirbagheri, K.N. Plataniotis, S. Pasupathy, An improved widely linear receiver for cyclostationary CDMA systems with OQPSK modulation, Canadian Conference on Electrical and Computer Engineering, Montreal, Quebec, Canada, vol. 3, 2–5 May 2004, pp. 1801–1804.
[976] J. Mitola, The radio spectrum and RF environment, in: Software Radio Architecture: Object-Oriented Approaches to Wireless Systems Engineering, Wiley, New York, NY, 15 January 2000, pp. 73–101 (Chapter 3).
[977] T. Miyajima, Blind adaptive detection using differential CMA for CDMA systems, Electronics and Communications in Japan (Part III: Fundamental Electronic Science) 85 (1) (January 2002) 1–13.
[978] T. Miyajima, Blind adaptive beamformer for cyclostationary sources with application to CDMA systems, IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences 87 (5) (2004) 1258–1269.
[979] K. Mocek, K. Vokurka, Cepstral analysis of cyclostationary diagnostic signals, TD 2000—DIAGON '97,

Academia Centrum Fakulty Technologicke ve Zline, Zlin, Czech Republic, 1997, pp. 152–155 (in Czech).
[980] M. Moeneclaey, Comment on "Tracking performance of the filter and square bit synchronizer", IEEE Transactions on Communications 30 (2) (February 1982) 407–410.
[981] M. Moeneclaey, Linear phase-locked loop theory for cyclostationary input disturbances, IEEE Transactions on Communications 30 (10) (October 1982) 2253–2259.
[982] P. Mohanraj, D.D. Falconer, T.A. Kwasniewski, Baseband trellis coded modulation with combined equalization/decoding for high bit rate digital subscriber loops, IEEE Global Telecommunications Conference, GLOBECOM '90, San Diego, CA, vol. 3, 2–5 December 1990, pp. 1669–1672.
[983] A.O. Molajo, Some basic problems in the estimation and hypothesis testing of almost periodically correlated processes, Ph.D. Thesis, George Washington University, Washington, DC, 1987.
[984] A.S. Monin, Stationary and periodic time series in the general circulation of the atmosphere, in: M. Rosenblatt (Ed.), Symposium on Time Series Analysis, Wiley, New York, NY, 1962, pp. 144–151.
[985] V. Monsan, Poisson sampling for spectral estimation in periodically correlated processes, Journal of Applied Mathematics 22 (2) (1994) 227–266.
[986] V. Monsan, Estimation of spectral densities of periodically correlated processes by random sampling, Comptes Rendues des Searces de l'Academie des Sciences, Serie I, Mathematique 323 (9) (1996) 1065–1068.
[987] C. Monti, G. Pierobon, Block codes for linear timing recovery in data transmission systems, IEEE Transactions on Communications 33 (6) (June 1985) 527–534.
[988] P.H. Moose, A technique for orthogonal frequency division multiplexing frequency offset correction, IEEE Transactions on Communications 42 (10) (October 1994) 2908–2914.
[989] M.R. Morelande, Optimal phase parameter estimation of random amplitude linear FM signals using cyclic moments, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '99, Phoenix, AZ, vol. 3, 15–19 March 1999, pp. 1557–1560.
[990] M.R. Morelande, Statistical analysis of phase parameter estimates of random amplitude linear FM signals, IEEE Signal Processing Workshop on Higher-Order Statistics, Madison, WI, 14–16 June 1999, pp. 34–38.
[991] M.R. Morelande, A.M. Zoubir, Detection of a random amplitude modulation in polynomial phase signals, 33rd Asilomar Conference on Signals, Systems, and Computers, Pacific Grove, CA, vol. 1, 24–27 October 1999, pp. 700–704.
[992] M.R. Morelande, B. Barkat, A.M. Zoubir, Statistical performance comparison of a parametric and a nonparametric method for IF estimation of random amplitude linear FM signals in additive noise, 10th IEEE Workshop on Statistical Signal and Array Processing, SSAP '00, Pocono Manor, PA, 14–16 August 2000, pp. 262–266.
[993] M.R. Morelande, A.M. Zoubir, Comparison of cyclic moments-based estimators of the parameters of random amplitude polynomial phase signals, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '00, Istanbul, Turkey, 2000, pp. 293–296.
[994] M.R. Morelande, A.M. Zoubir, On the performance of cyclic moments-based parameter estimators of amplitude modulated polynomial phase signals, IEEE Transactions on Signal Processing 50 (3) (March 2002) 590–606.
[995] P.S. Naidu, Modern Spectrum Analysis of Time Series Fast Algorithms and Error Control Techniques, CRC Press, Boca Raton, FL, 25 October 1995.
[996] A. Napolitano, Cyclic higher-order statistics: Input/output relations for discrete- and continuous-time MIMO linear almost-periodically time-variant systems, Signal Processing 42 (2) (March 1995) 147–166.
[997] A. Napolitano, M. Tanda, Cyclostationarity-based parameter estimation in multiuser communications systems, IEEE 50th Vehicular Technology Conference, VTC '99—Fall, Amsterdam, Netherlands, vol. 1, 19–22 September 1999, pp. 598–602.
[998] A. Napolitano, M. Tanda, Blind estimation of amplitudes, phases, time delays, and frequency shifts in multiuser communication systems, 51st IEEE Vehicular Technology Conference, VTC '00—Spring, Tokyo, Japan, vol. 2, 15–18 May 2000, pp. 844–848.
[999] A. Napolitano, C.M. Spooner, Median-based cyclic polyspectrum estimation, IEEE Transactions on Signal Processing 48 (5) (May 2000) 1462–1466.
[1000] A. Napolitano, C.M. Spooner, Cyclic spectral analysis of continuous-phase modulated signals, IEEE Transactions on Signal Processing 49 (1) (January 2001) 30–44.
[1001] A. Napolitano, M. Tanda, Blind parameter estimation in multiple-access systems, IEEE Transactions on Communications 49 (4) (April 2001) 688–698.
[1002] A. Napolitano, On the spectral correlation measurement of nonstationary stochastic processes, 35th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 1, 4–7 November 2001, pp. 898–902.
[1003] A. Napolitano, Uncertainty in measurements on spectrally correlated stochastic processes, IEEE Transactions on Information Theory 49 (9) (September 2003) 2172–2191.
[1004] A. Napolitano, M. Tanda, Doppler-channel blind identification for noncircular transmissions in multiple-access systems, IEEE Transactions on Communications 52 (12) (December 2004) 2073–2078.
[1005] J. Nedoma, Uber die ergodizitat and r-ergozitat stationarer wahrscheinlichkeitsmasse, Zeitschrift fur Wahrscheinlichkeitstheorie 2 (1963) 90–97.
[1006] D.J. Nelson, W.G. Wysocki, G. Wayne, Cross-spectral methods with an application to speech processing, SPIE '99, Advanced Signal Processing Algorithms,

Architectures, and Implementations IX, Denver, CO, vol. 3807, November 1999, pp. 552–563.
[1007] A.R. Nematollahi, A.R. Soltani, Discrete time periodically correlated Markov processes, Probability and Mathematical Statistics 20 (1) (2000) 127–140.
[1008] H.J. Newton, Using periodic autoregressions for multiple spectral estimation, Technometrics 24 (2) (May 1982) 109–116.
[1009] D.L. Nicholson, M.C. Sullivan, Noninterfering communications using chip-rate keying and a cyclostationary demodulator, IEEE Military Communications Conference, MILCOM '91, McLean, VA, vol. 2, 4–7 November 1991, pp. 606–609.
[1010] G. de Nicolao, G. Ferrari-Trecate, The structure of predictable discrete-time cyclostationary processes, Symposium on Mathematical Theory of Networks and Systems, MTNS '98, Padova, Italy, 6–10 July 1998, pp. 751–753.
[1011] G. de Nicolao, G. Ferrari-Trecate, On the Wold decomposition of discrete-time cyclostationary processes, IEEE Transactions on Signal Processing 47 (7) (July 1999) 2041–2043.
[1012] J.J. Nicolas, J.S. Lim, Equalization and interference rejection for the terrestrial broadcast of digital HDTV, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '93, Minneapolis, MN, vol. 4, 27–30 April 1993, pp. 176–179.
[1013] E. Nikolaidis, H. Wang, A. Jha, D. Ghiocel, Fatigue reliability of cars under road-induced cyclostationary excitation, International Journal of Materials and Product Technology 16 (4) (2001) 404–416.
[1014] H. Niwa, M. Katayama, T. Yamazato, A. Ogawa, N. Isaka, A spread-spectrum system with dual processing gains designed for cyclic noise in power line communications, Fourth IEEE International Symposium on Spread Spectrum Techniques and Applications, Mainz, Germany, vol. 2, 22–25 September 1996, pp. 816–820.
[1015] H. Niwa, O. Oono, M. Katayama, T. Yamazato, A. Ogawa, N. Isaka, A spread-spectrum system with dual processing gains designed for cyclic noise in power line communications, IEICE Transactions 80 (12) (1997) 2526–2533.
[1016] H. Nogami, S. Tsuruga, N. Morinaga, A transmission mode detector for OFDM systems, Electronics and Communications in Japan (Part I: Communications) 86 (8) (August 2003) 79–94.
[1017] A. Nosratinia, Embedded post-processing for enhancement of compressed images, Data Compression Conference, DCC '99, Snowbird, UT 29–31 March 1999, pp. 62–71.
[1018] M.K. Ochi, I. Dyer, R.E. Taylor, J.N. Newman, W.G. Price, Hurricane-associated seas, in: Ocean Waves: The Stochastic Approach, Cambridge University Press, Cambridge, UK, 28 March 1998, pp. 137–141 (Chapter 5.2).
[1019] M. Odyniec, RF and Microwave Oscillator Design, first ed., Artech House Publishers, Boston, MA, 15 October 2002.
[1020] M. Oerder, H. Meyr, Digital filter and square timing recovery, IEEE Transactions on Communications 36 (5) (May 1988) 605–612.
[1021] H. Ogura, Spectral representation of a periodic nonstationary random process, IEEE Transactions on Information Theory 17 (2) (March 1971) 143–149.
[1022] S. Ohno, H. Sakai, Optimization of filter banks using cyclostationary spectral analysis, International Conference on Acoustics, Speech, and Signal Processing, ICASSP '95, Detroit, MI, vol. 2, 9–12 May 1995, pp. 1292–1295.
[1023] S. Ohno, H. Sakai, Optimization of filter banks using cyclostationary spectral analysis, IEEE Transactions on Signal Processing 44 (11) (November 1996) 2718–2725.
[1024] S. Ohno, H. Sakai, Blind identification of multichannel systems by exploiting prior knowledge of the channel, IEICE Transactions 82 (8) (1999) 1552–1557.
[1025] S. Ohno, Studies on the convergence speed of oversampled subband adaptive digital filters, IEICE Transactions 83 (8) (2000) 1531–1538.
[1026] S. Ohno, H. Sakai, Blind identification of multichannel systems by scalar-valued linear prediction, IEICE Transactions 84 (8) (2001) 1856–1862.
[1027] M. Okada, S. Hara, S. Komaki, N. Morinaga, Optimum synchronization of orthogonal multi-carrier modulated signals, Seventh IEEE Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC '96), Taipei, Taiwan, vol. 3, 15–18 October 1996, pp. 863–867.
[1028] M. Okumura, H. Tanimoto, T. Itakura, T. Sugawara, Numerical noise analysis for nonlinear circuits with a periodic large signal excitation including cyclostationary noise sources, IEEE Transactions on Circuits and Systems I: Fundamental Theory and Applications 40 (9) (September 1993) 581–590.
[1029] M. Okumura, H. Tanimoto, Decomposition of periodic time-varying transfer function into phase and amplitude modulation components, Electronics and Communications in Japan (Part III: Fundamental Electronic Science) 85 (7) (July 2002) 29–37.
[1030] O. Oliaei, Numerical algorithm for noise analysis of switched-capacitor networks, IEEE Transactions on Circuits and Systems I: Fundamental Theory and Applications 50 (7) (July 2003) 865–876.
[1031] J.D. Olsen, Nonlinear binary sequences with asymptotically optimum periodic cross-correlation, Ph.D. Thesis, University of Southern California, Los Angeles, CA, December 1977.
[1034] M. Oner, F. Jondral, Air interface recognition for a software radio system exploiting cyclostationarity, 15th IEEE International Symposium on Personal, Indoor and Mobile Radio Communications, PIMRC'04, Barcelona, Spain, vol. 3, 5–8 September 2004, pp. 1947–1951.
[1035] M. Oner, F. Jondral, Cyclostationarity based air interface recognition for software radio systems, IEEE Radio

and Wireless Conference, Atlanta, GA, 19–22 September 2004, pp. 263–266.

[1036] A.G. Orozco-Lugo, D.C. McLernon, An application of linear periodically time-varying digital filters to blind equalisation, IEE Colloquium on Digital Filters, London, UK, 20 April 1998, pp. 1–6.

[1037] A.G. Orozco-Lugo, D.C. McLernon, G.D. Halikias, D.A. Wilson, A new blind identification algorithm based on cyclostationarity and the bandlimited property of the communication channel, IEE Colloquium on Novel DSP Algorithms and Architectures for Radio Systems, London, UK, 28 September 1999, pp. 1–6.

[1038] A.G. Orozco-Lugo, D.C. McLernon, Blind channel equalization using chirp modulating signals, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '00, Istanbul, Turkey, vol. 5, 5–9 June 2000, pp. 2721–2724.

[1039] A.G. Orozco-Lugo, M.M. Lara, D.C. McLernon, H.J. Muro-Lemus, Multiple packet reception in wireless ad hoc networks using polynomial phase-modulating sequences, IEEE Transactions on Signal Processing 51 (8) (August 2003) 2093–2110.

[1040] A.G. Orozco-Lugo, D.C. McLernon, Blind channel equalization using chirp modulating signals, IEEE Transactions on Signal Processing 52 (5) (May 2004) 1364–1375.

[1041] R. Orr, C. Pike, M. Bates, M. Tzannes, S. Sandberg, Covert communications employing wavelet technology, 27th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 1, 1–3 November 1993, pp. 523–527.

[1042] M.J. Ortiz-Bevia, Estimation of the cyclostationary dependence in geophysical data fields, Journal of Geophysical Research 102 (D/12) (1997) 13.

[1043] P.E. Pace, Detecting and Classifying Low Probability of Intercept Radar, Artech House Publishers, Boston, MA, 1 November 2003.

[1044] R.A. Pacheco, D. Hatzinakos, Semi-blind spatio-temporal equalization and multiuser detection for DS-CDMA systems, Third IEEE Workshop on Signal Processing Advances in Wireless Communications, SPAWC '01, Taoyuan, Taiwan, 20–23 March 2001, pp. 126–129.

[1045] R.A. Pacheco, D. Hatzinakos, Spatio-temporal equalization and multiuser detection for DS-CDMA systems: a semi-blind approach, Canadian Conference on Electrical and Computer Engineering, Toronto, Ont., vol. 2, 13–16 May 2001, pp. 1345–1350.

[1046] M. Pagano, On periodic and multiple autoregressions, The Annals of Statistics 6 (6) (1978) 1310–1317.

[1047] M. Pagano, E. Parzen, An approach to modeling seasonally stationary time-series, Journal of Econometrics 9 (1–2) (January 1979) 137–153.

[1048] D. Pal, Fractionally spaced semi-blind equalization of wireless channels, 26th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 2, 26–28 October 1992, pp. 642–645.

[1049] D. Pal, Fractionally spaced equalization of multipath channels: a semi-blind approach, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '93, Minneapolis, MN, vol. 3, 27–30 April 1993, pp. 9–12.

[1050] E. Panayirci, E.Y. Bar-Ness, A new approach for evaluating the performance of a symbol timing recovery system employing a general type of nonlinearity, IEEE Transactions on Communications 44 (1) (1996) 29–33.

[1051] G. Panci, G. Scarano, G. Jacovitti, Blind identification and order estimation of FIR communications channels using cyclic statistics, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '98, Seattle, WA, vol. 4, 12–15 May 1998, pp. 2389–2392.

[1052] A. Pandharipande, S. Dasgupta, Subband coding of cyclostationary signals with static bit allocation, Fifth International Symposium on Signal Processing and its Applications, ISSPA '99, Brisbane, Australia, vol. 2, 22–25 August 1999, pp. 615–618.

[1053] A. Pandharipande, S. Dasgupta, Subband coding of cyclostationary signals with static bit allocation, IEEE Signal Processing Letters 6 (11) (November 1999) 284–286.

[1054] A. Pandharipande, S. Dasgupta, D. Kula, Filter banks for optimum subband coding of cyclostationary signals with dynamic bit allocation, 35th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 1, 4–7 November 2001, pp. 513–517.

[1055] A. Pandharipande, S. Dasgupta, Subband coding of cyclostationary signals, IEEE Transactions on Circuits and Systems I: Fundamental Theory and Applications 49 (12) (December 2002) 1884–1886.

[1056] A. Pandharipande, S. Dasgupta, Optimum compaction filters for cyclostationary signals, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '02, Orlando, FL, vol. 2, 2002, pp. 1201–1204.

[1058] A. Papoulis, Cyclostationary Processes, in Probability, Random Variables, and Stochastic Processes, McGraw-Hill, New York, NY, 1984, pp. 226–231.

[1059] J. M Pardo, M. Burgos, J.L. Jimenez, Practical cyclic-correlation interceiver with rotating antenna, Electronics Letters 39 (11) (29 May 2003) 868–870.

[1060] B. Park, E. Ko, H. Cheon, C. Kang, D. Hong, A blind OFDM synchronization algorithm based on cyclic correlation, IEEE Global Telecommunications Conference, GLOBECOM '01, San Antonio, TX, vol. 5, 25–29 November 2001, pp. 3116–3119.

[1061] B. Park, H. Cheon, E. Ko, C. Kang, D. Hong, A blind OFDM synchronization algorithm based on cyclic correlation, IEEE Signal Processing Letters 11 (2) (February 2004) 83–85.

[1062] M.T. Park, K.G. Jeon, D.Y. Kim, Derivation of timing wave expression on a PAM signal limited to the Nyquist frequency, IEICE Transactions 85 (9) (2002) 1838–1841.

[1063] S.-Y. Park, K.-M. Kim, An adaptive array beamforming technique using cyclostationarity, IEEE Region 10

Conference, TENCON '99, Cheju Island, South Korea, vol. 2, 15–17 September 1999, pp. 1319–1322.
[1064] G. Parker, Frequency domain frequency shift for optimal filtering of cyclostationary signals, Digital Signal Processing 12 (4) (October 2002) 561–589.
[1065] E. Parzen, Spectral analysis of asymptotically stationary time series, Bulletin of the International Statistical Institute 39 (2) (1962) 87–103.
[1066] E. Parzen, Stochastic Processes, Holden-Day, San Francisco, CA, 1962.
[1067] E. Parzen, On spectral analysis with missing observations, Sankhya A 25 (1963) 383–392.
[1068] S.-C. Pei, M.-F. Shih, Fractionally spaced blind equalization using polyperiodic linear filtering, IEEE Transactions on Communications 46 (1) (January 1998) 16–19.
[1069] D.J. Percival, M. Kraetzl, M.S. Britton, A Markov model for HF spectral occupancy in central Australia, Seventh International Conference on HF Radio Systems and Techniques, Nottingham, UK, 7–10 July 1997, pp. 14–18.
[1070] T. Petermann, K.D. Kammeyer, Blind channel estimation in GSM receivers: a comparison of HOS and SOCS based approaches, IEEE Signal Processing Workshop on Higher-Order Statistics, Madison, WI, 14–16 June 1999, pp. 80–84.
[1071] B.R. Petersen, D.D. Falconer, Equalization in cyclostationary interference, Tech. Rep. SCE 90-01, Carleton University, Ottawa, ON, Canada, January 1990.
[1072] B.R. Petersen, D.D. Falconer, Equalization bounds in cyclostationary subscriber-loop interference, IEEE High-Speed Digital Subscriber Lines Workshop, Parsippany, NJ, 28–29 March 1990.
[1073] B.R. Petersen, D.D. Falconer, Exploiting cyclostationary subscriber-loop interference by equalization, IEEE Global Telecommunications Conference GLOBECOM '90, San Diego, CA, vol. 2, 2–5 December 1990, pp. 1156–1160.
[1074] B.R. Petersen, D.D. Falconer, Minimum mean square equalization in cyclostationary and stationary interference-analysis and subscriber line calculations, IEEE Journal on Selected Areas in Communications 9 (6) (August 1991) 931–940.
[1075] B.R. Petersen, D.D. Falconer, Suppression of adjacent-channel interference in digital radio by equalization, IEEE International Conference on Communications, ICC '92, Chicago, IL, vol. 2, 14–18 June 1992, pp. 657–661.
[1076] B.R. Petersen, Equalization in cyclostationary interference, Ph.D. Thesis, Carleton University, Ottawa, ON, Canada, 1992.
[1077] P. Petrus, J.H. Reed, Cochannel interference rejection for AMPS signals using spectral correlation properties and an adaptive array, 45th IEEE Vehicular Technology Conference, VTC '95, Chicago, IL, vol. 1, 25–28 July 1995, pp. 30–34.
[1078] D.-T. Pham, C. Serviere, Separation aveugle de melanges convolutifs de sources, Tech. Rep., L'Ecole Doctorale EEATS, France, 2001 (in French).
[1079] J. Phillips, Model reduction of time-varying linear systems using approximate multipoint Krylov subspace projectors, International Conference on Computer Aided Design, ICCAD '98, San Jose, CA, 1998, pp. 96–102.
[1080] J. Phillips, K. Kundert, Noise in mixers, oscillators, samplers, and logic an introduction to cyclostationary noise, IEEE Custom Integrated Circuits Conference, CICC '00, Orlando, FL, 21–24 May 2000, pp. 431–438.
[1081] B. Picinbono, Polyspectra of ordered signals, IEEE Transactions on Information Theory 45 (7) (1999) 2239–2252.
[1082] B. Picinbono, Moments and polyspectra of the discrete-time random telegraph signal, IEEE Transactions on Information Theory 46 (7) (2000) 2735–2739.
[1083] R. Poisel, Cyclostationary Signal Processing, in Introduction to Communication Electronic Warfare Systems, Artech House Publishers, Boston, MA, 1 March 2002, pp. 286–289 (Chapter 10.4).
[1084] A. Polydoros, K. Kim, On the detection and classification of quadrature digital modulations in broad-band noise, IEEE Transactions on Communications 38 (8) (August 1990) 1199–1211.
[1085] T.D. Popescu, Dams displacements monitoring using second order blind identification algorithm, IEEE International Symposium on Intelligent Control, Vancouver, BC, Canada, 27–30 October 2002, pp. 345–349.
[1086] M. Pourahmadi, H. Salehi, On subordination and linear transformation of harmonizable and periodically correlated processes, in: Probability Theory on Vector Spaces III, Springer, New York, NY, 1984, pp. 195–213.
[1087] M. Pourahmadi, Toward statistical implementation of prediction theory: the role of convergence of finite predictors, Proceeding of the Workshop on Nonstationary Stochastic Processes and their Applications, Hampton, VA, 1991, pp. 243–255.
[1088] S. Prakriya, D. Hatzinakos, Efficient nonlinear channel identification using cyclostationary signal analysis, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '93, Minneapolis, MN, vol. 4, 27–30 April 1993, pp. 264–267.
[1089] S. Prakriya, D. Hatzinakos, Identification of symmetric/asymmetric quadratic nonlinear channels with cyclostationary inputs, IEEE Military Communications Conference, MILCOM '93, Boston, MA, vol. 2, 11–14 October 1993, pp. 653–657.
[1090] S. Prakriya, D. Hatzinakos, Identification of parametric linear models with cyclostationary inputs, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '94, Adelaide, Australia, vol. 4, 19–22 April 1994, pp. 417–419.
[1091] S. Prakriya, D. Hatzinakos, Blind identification of LTI-ZMNL-LTI nonlinear channel models, IEEE Transactions on Signal Processing 43 (12) (December 1995) 3007–3013.
[1092] S. Prakriya, D. Hatzinakos, Blind identification of nonlinear channels with higher order cyclic spectral

analysis, IEEE Signal Processing ATHOS Workshop on Higher-Order Statistics, Begur, Girona, Spain, 12–14 June 1995, pp. 366–370.

[1093] S. Prakriya, D. Hatzinakos, Blind identification of linear subsystems of LTI-ZMNL-LTI models with cyclostationary inputs, IEEE Transactions on Signal Processing 45 (8) (August 1997) 2023–2036.

[1094] S. Prasad, A.S. Varikat, Semi-blind equalization at the symbol rate with application to OFDM, Signal Processing 83 (2003) 1105–1115.

[1095] R. Priebe, G. Wilson, Application of matched wavelets to identification of metallic transients, IEEE-SP International Symposium on Time-Frequency and Time-Scale Analysis, Wrightsville Beach, NC, 4–6 October 1992, pp. 349–352.

[1096] M.B. Priestley, Non-Linear and Non-Stationary Time Series Analysis, Academic Press, London, UK, 1988.

[1097] S. Pupolin, C. Tomasi, Spectral analysis of line regenerator time jitter, IEEE Transactions on Communications 32 (5) (May 1984) 561–566.

[1098] A. Raad, J. Antoni, M. Sidahmed, Third-order cyclic characterization of vibration signals in rotating machinery, European Signal Processing Conference, EUSIPCO '02, Toulouse, France, vol. 2, 3–6 September 2002, pp. 95–98.

[1099] A. Raad, M. Sidahmed, Gear fault diagnosis using cyclic bispectrum, 15th International Federation of Automatic Control (IFAC) World Congress, Barcelona, Spain, 2002.

[1100] A. Raad, J. Antoni, M. Sidahmed, Indicators of cyclostationarity: proposal, statistical evaluation and application to diagnostics, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '03, Hong Kong, vol. 6, 6–10 April 2003, pp. 757–760.

[1101] A. Raad, Contributions aux statistiques cycliques d'ordre superieur: applications au diagnostic des defauts d'engrenage, Ph.D. Thesis, Universite de Technologie de Compiegne, Compiegne, France, 10 November 2003 (in French).

[1102] S. Raghavan, H.K. Thapar, Feedforward timing recovery for digital magnetic recording, IEEE International Conference on Communications, ICC '91, Denver, CO, 1991, pp. 794–798.

[1103] R. Raich, G.T. Zhou, Spectral analysis for bandpass nonlinearity with cyclostationary input, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '04, Montreal, QC, Canada, May 2004, pp. 465–468.

[1104] R. Ramaswami, P.A. Humblet, Amplifier induced crosstalk in multichannel optical networks, Journal of Lightwave Technology 8 (December 1990) 1882–1896.

[1105] J. Ramos, M.D. Zoltowski, H. Liu, A low-complexity space-time RAKE receiver for DS-CDMA communications, IEEE Signal Processing Letters 4 (9) (September 1997) 262–265.

[1106] R.B. Randall, J. Antoni, S. Chobsaard, A comparison of cyclostationary and envelope analysis in the diagnostics of rolling element bearings, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '00, Istanbul, Turkey, vol. 6, 5–9 June 2000, pp. 3882–3885.

[1107] R.B. Randall, J. Antoni, Optimization of SANC for separation of bearing and gear signals, 14th Condition Monitoring and Diagnostic Engineering Management Congress, COMADEM '01, Manchester, UK, 4–6 September 2001, pp. 89–96.

[1108] R.B. Randall, J. Antoni, Differential diagnostics of gear and bearing faults using spectral correlation, ACAM '01, Camberra, Australia, September 2001, pp. 255–260.

[1109] R.B. Randall, J. Antoni, S. Chobsaard, The relationship between spectral correlation and envelope analysis in the diagnostics of bearing faults and other cyclostationary machine signals, Mechanical Systems and Signal Processing 15 (5) (September 2001) 945–962.

[1110] R.B. Randall, J. Antoni, Separation of gear and bearing fault signals in helicopter gearboxes, Quatrieme Conference Internationale sur les Methodes de Surveillance et Techniques de Diagnostic Acoustique et Vibratoires, Compiegne, France, 16–18 October 2001, pp. 161–183.

[1111] T.S. Randhawa, R.H.S. Hardy, Proactive management of MPEG traffic in ATM networks using time sequenced RLS filters, Second International Conference on ATM, ICATM '99, Colmar, France, 21–23 June 1999, pp. 507–511.

[1112] P. Ravier, R. Weber, Detecteur robuste de signaux cyclostationnaires: application a la suppression d'interferences en radioastronomie, Dix-Huitieme Colloque GRETSI sur le Traitment du Signal et des Images, Toulouse, France, vol. 2, September 2001, pp. 403–406 (in French).

[1113] B. Razavi, A study of phase noise in CMOS oscillators, IEEE Journal of Solid-State Circuits 31 (3) (March 1996) 331–343.

[1114] V.U. Reddy, C.B. Papadias, A.J. Paulraj, Second-order blind identifiability of certain classes of multipath channels using antenna arrays, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '97, Munich, Germany, vol. 5, 21–24 April 1997, pp. 3465–3468.

[1115] V.U. Reddy, C.B. Papadias, A.J. Paulraj, Blind identifiability of certain classes of multipath channels from second-order statistics using antenna arrays, IEEE Signal Processing Letters 4 (5) (May 1997) 138–141.

[1116] J.H. Reed, A.A. Quilici, T.C. Hsia, A frequency domain time-dependent adaptive filter for interference rejection, IEEE Military Communications Conference, MILCOM '88, San Diego, CA, vol. 2, 23–26 October 1988, pp. 391–397.

[1117] J.H. Reed, T.C. Hsia, The performance of time-dependent adaptive filters for interference rejection, IEEE Transactions on Acoustics, Speech, and Signal Processing 38 (8) (August 1990) 1373–1385.

[1118] J.H. Reed, T.C. Hsia, The theoretical performance of optimal time-dependent filters for co-channel interference rejection, IEEE Military Communications Conference, MILCOM '90, Monterey, CA, vol. 3, 30 September–3 October 1990, pp. 961–965.

[1119] J.H. Reed, B.G. Agee, A technique for instantaneous tracking of frequency agile signals in the presence of spectrally correlated interference, 26th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 2, 26–28 October 1992, pp. 1065–1071.

[1120] J.H. Reed, N.M. Yuen, T.C. Hsia, An optimal receiver using a time-dependent adaptive filter, IEEE Transactions on Communications 43 (234) (February/March/April 1995) 187–190.

[1121] J.J. O'Reilly, Timing extraction for baseband digital transmission, in: K.W. Cattermole, J.J. O'Reilly (Eds.), Problems of Randomness in Communication Engineering, Plymouth, London, UK, 1984.

[1122] R.L. Reng, H.W. Schussler, Measurement of aliasing distortions and quantization noise in multirate systems, IEEE International Symposium on Circuits and Systems, ISCAS '92, San Diego, CA, vol. 5, 10–13 May 1992, pp. 2328–2331.

[1123] M. Reuter, Spectral correlation properties of time series due to an acoustic source moving through an oceanic waveguide, Tech. Rep. A410603. Available online at http://www.stormingmedia.us/41/4106/A410603.html (February 1996).

[1124] Z. Reznic, C.R. Johnson Jr., F.L. de Victoria, Frequency domain interpretation of LMS convergence of a fractionally spaced equalizer, IEEE Signal Processing Letters 3 (7) (July 1996) 206–208.

[1125] J. Riba, G. Vazquez, Recursive Bayes risk parameter estimation from the cyclic autocorrelation matrix, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '94, Adelaide, Australia, vol. 4, 19–22 April 1994, pp. 409–412.

[1126] J. Riba, G. Vazquez, Bayesian recursive estimation of frequency and timing exploiting the cyclostationarity property, Signal Processing 40 (1) (1994) 21–37.

[1127] J. Riba, J. Goldberg, G. Vazquez, M.A. Lagunas, Signal selective DOA tracking for multiple moving targets, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '96, Atlanta, GA, vol. 5, 7–10 May 1996, pp. 2559–2562.

[1128] B.F. Rice, S.R. Smith, R.A. Threlkeld, A neural network classifier for cyclostationary signals, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '94, Adelaide, Australia, vol. 4, 19–22 April 1994, pp. 165–168.

[1129] R. Rifkin, Comparison of performance measures for intercept detectors, Tactical Communications Conference, Fort Wayne, IN, vol. 1, 10–12 May 1994, pp. 509–518.

[1130] V. Rizzoli, F. Mastri, D. Masotti, General noise analysis of nonlinear microwave circuits by the piecewise harmonic-balance technique, IEEE Transactions on Microwave Theory and Techniques 42 (5) (May 1994) 807–819.

[1131] R.S. Roberts, Architectures for digital cyclic spectral analysis, Ph.D. Thesis, University of California, Davis, CA, September 1989.

[1132] R.S. Roberts, W.A. Brown, H.H. Loomis Jr., Computationally efficient algorithms for cyclic spectral analysis, IEEE Signal Processing Magazine 8 (2) (April 1991) 38–49.

[1133] R.S. Roberts, H.H. Loomis Jr., Computational balance in real-time cyclic spectral analysis, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '94, Adelaide, Australia, vol. 4, 19–22 April 1994, pp. 161–164.

[1134] R.S. Roberts, W.A. Brown, H.H. Loomis Jr., A review of the spectral correlation analysis: theory and implementation, in: W.A. Gardner (Ed.), Cyclostationarity in Communications and Signal Processing, IEEE Press, New York, NY, 1994, pp. 455–480 (Chapter 6, Part II).

[1135] R.S. Roberts, H.H. Herschel Jr., Parallel computation structures for a class of cyclic spectral analysis algorithms, Journal of VLSI Signal Processing 10 (1995) 25–40.

[1136] J.W.C. Robinson, J. Rung, A.R. Bulsara, M.E. Inchiosa, General measures for signal-noise separation in nonlinear dynamical systems, Physical Review E 63 (011107) (2000) 1–11.

[1137] L. Rodman, I.M. Spitkovsky, H.J. Woerdeman, Toeplitz and Wiener algebras of operator matrices—application to cyclostationary processes, in: Abstract Band Method via Factorization, Positive and Band Extensions of Multivariable Almost Periodic Matrix Functions, and Spectral Estimation, Memoirs of the American Mathematical Society, American Mathematical Society, Providence, RI, 2002 (Chapter 3.3).

[1138] M.R.D. Rodrigues, J.J. O'Reilly, Statistical characterisation of the response of a Volterra non-linearity to a cyclo-stationary zero-mean Gaussian stochastic process, IEEE International Symposium on Information Theory, ISIT '02, Lausanne Switzerland, 2002, p. 8.

[1139] M.R.D. Rodrigues, I. Darwazeh, J.J. O'Reilly, Volterra-series-based analytic technique to assess the power density spectrum of nonlinearly distorted OFDM signals, IEE Proceedings Communications 151 (4) (21 August 2004) 401–407.

[1140] P.J.C. Rodrigues, An orthogonal almost-periodic Fourier transform for use in nonlinear circuit simulation, IEEE Microwave and Guided Wave Letters 4 (3) (March 1994) 74–76.

[1141] P.A. Rosher, A.R. Hunwicks, The analysis of crosstalk in multichannel wavelength division multiplexed optical transmission systems and its impact on multiplexor design, IEEE Journal of Selected Areas in Communications 8 (August 1990) 1108–1114.

[1142] P. Rostaing, E. Thierry, T. Pitarque, M. Le Dard, Cyclic detection in a nonwhite gaussian noise, International Conference on Acoustics, Speech, and Signal Processing,

ICASSP '95, Detroit, MI, vol. 3, 9–12 May 1995, pp. 2008–2011.

[1143] P. Rostaing, T. Pitarque, E. Thierry, Detecteurs cycliques dans un bruit non blanc et non Gaussien, Colloque GRETSI sur le Traitment du Signal et des Images, Juan-les-Pins, France, 1995, pp. 121–124 (in French).

[1144] P. Rostaing, T. Pitarque, E. Thierry, Performance analysis of a statistical test for presence of cyclostationarity in a noisy observation, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '96, Atlanta, GA, vol. 5, 7–10 May 1996, pp. 2932–2935.

[1145] P. Rostaing, T. Pitarque, E. Thierry, Single-cycle detector with application to real sonar signals, First National Workshop on Cyclostationarity, Marne la Vallee, France, July 1996.

[1146] P. Rostaing, E. Thierry, T. Pitarque, Asymptotic performance analysis of a single-cycle detector, in: European Signal Processing Conference, EUSIPCO '96, Trieste, Italy, 1996, pp. 671–674.

[1147] P. Rostaing, Detection de signaux modules en exploitant leur proprietes cyclostationnaires: Application aux signaux sonars, Ph.D. Thesis, Universite de Nice, Sophia Antipolis, France, January 1997 (in French).

[1148] P. Rostaing, E. Thierry, T. Pitarque, Asymptotic performance analysis of cyclic detectors, IEEE Transactions on Communications 47 (1) (January 1999) 10–13.

[1149] H. Roufarshbaf, H. Amindavar, High-speed voiceband QAM constellation classification in multipath environment, 12th IEEE Workshop on Neural Networks for Signal Processing, Martigny, Switzerland, 4–6 September 2002, pp. 455–464.

[1150] S. Roy, Y. Jian, P.S. Kumar, Joint transmitter/receiver optimization for multiuser communications, in: W.A. Gardner (Ed.), Cyclostationarity in Communications and Signal Processing, IEEE Press, New York, NY, 1994, pp. 329–362 (Chapter 1, Part II).

[1151] J. Roychowdhury, P. Feldmann, A new linear-time harmonic balance algorithm for cyclostationary noise analysis in RF circuits, in: Asia and South Pacific Design Automation Conference, ASP-DAC '97, Makuhari, Japan, 28–31 January 1997, pp. 483–492.

[1152] J. Roychowdhury, D. Long, P. Feldmann, Cyclostationary noise analysis of large RF circuits with multitone excitations, in: IEEE Custom Integrated Circuits Conference, Santa Clara, CA, 5–8 May 1997, pp. 383–386.

[1153] J. Roychowdhury, D. Long, P. Feldmann, Cyclostationary noise analysis of large RF circuits with multitone excitations, IEEE Journal of Solid-State Circuits 33 (3) (March 1998) 324–336.

[1154] J. Roychowdhury, A. Demir, Estimating noise in RF systems, in: IEEE/ACM International Conference on Computer-Aided Design, ICCAD '98, San Jose, CA, 8–12 November 1998, pp. 199–202.

[1155] J. Roychowdhury, Reduced-order modeling of time-varying systems, IEEE Transactions on Circuits and Systems II: Analog and Digital Signal Processing 46 (10) (October 1999) 1273–1288.

[1156] A. Sabharwal, U. Mitra, R. Moses, Cyclic Wiener filtering based multirate DS-CDMA receivers, IEEE Wireless Communications and Networking Conference, WCNC '99, New Orleans, LA, vol. 3, 21–24 September 1999, pp. 1129–1133.

[1157] A. Sabharwal, U. Mitra, R. Moses, MMSE receivers for multirate DS-CDMA systems, IEEE Transactions on Communications 49 (12) (December 2001) 2184–2197.

[1158] M. Sabry-Rizk, W. Zgallai, A. McLean, E.R. Carson, K.T.V. Grattan, Virtues and vices of source separation using linear independent component analysis for blind source separation of non-linearly coupled and synchronised fetal and mother ECGs, 23rd International Conference of the IEEE Engineering in Medicine and Biology Society, San Francisco, CA, vol. 2, 25–28 October 2001, pp. 1985–1989.

[1159] B.M. Sadler, Second- and higher-order cyclostationary processing using acousto-optics, SPIE '94, Advanced Signal Processing: Algorithms, Architectures, and Implementations V, San Diego, CA, vol. 2296, July 1994, pp. 82–92.

[1160] B.M. Sadler, Nonparametric estimation of the cyclic cross-spectrum, Tech. Rep. A657582. Available online at http://www.stormingmedia.us/65/6575/A657582.html (October 1994).

[1161] B.M. Sadler, Acousto-optic cyclostationary signal processing, Applied Optics 34 (23) (1995) 5091–5099.

[1162] B.M. Sadler, A.V. Dandawate, Nonparametric estimation of the cyclic cross spectrum, IEEE Transactions on Information Theory 44 (1) (January 1998) 351–358.

[1163] S. Saha, A.G. Ramakrishnan, Transmission of chosen transform coefficients of normalized cardiac beats for compression, International Conference on Acoustics, Speech, and Signal Processing, ICASSP '97, Munich, Germany, vol. 3, 21–24 April 1997, pp. 1901–1904.

[1164] H. Sakai, N. Hirayama, Cyclostationary spectral analysis of subband adaptive filters, in: European Signal Processing Conference, EUSIPCO '96, Trieste, Italy, 10–13 September 1996.

[1165] H. Sakai, S. Ohno, Theory of cyclostationary processes and its applications, in: Statistical Methods in Control and Signal Processing, Marcel Dekker, New York, NY, 1997, pp. 327–354.

[1166] J. Sala-Alvarez, G. Vazquez-Grau, Separation of digital communication signals through joint space-time decorrelation, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '94, Adelaide, Australia, vol. 4, 19–22 April 1994, pp. 145–148

[1167] J.D. Salas, Range analysis for storage problems of periodic stochastic processes, Ph.D. Thesis, Colorado State University, Fort Collins, CO, 1972.

[1168] H. Saleur, D. Sornette, Complex exponents and log-periodic corrections in constrained systems, Journal of Physics 6 (March 1996) 327–355 (in French).

[1169] J. Salz, Digital transmission over cross-coupled linear channels, AT&T Technical Journal 64 (6) (August 1985) 1147–1159.

[1170] J.E. Sanchez, G. Bosman, M.E. Law, Two-dimensional semiconductor device simulation of trap-assisted generation-recombination noise under periodic large-signal conditions and its use for developing cyclostationary circuit simulation models, IEEE Transactions on Electron Devices 50 (5) (May 2003) 1353–1362.

[1171] I.W. Sandberg, Existence and evaluation of almost periodic steady-state responses of mildly nonlinear systems, IEEE Transactions on Circuits and Systems 31 (8) (August 1984) 689–701.

[1172] I.W. Sandberg, The circle criterion and almost periodic inputs, IEEE Transactions on Circuits and Systems I: Fundamental Theory and Applications 47 (6) (June 2000) 825–829.

[1173] I.W. Sandberg, G.J.J. van Zyl, The spectral coefficients of the response of nonlinear systems to asymptotically almost periodic inputs, IEEE Transactions on Circuits and Systems I: Fundamental Theory and Applications 48 (2) (February 2001) 170–176.

[1174] I.W. Sandberg, G.J.J. Van Zyl, Evaluation of the response of nonlinear systems to asymptotically almost periodic inputs, IEEE International Symposium on Circuits and Systems, ISCAS '01, Sydney, Australia, vol. 3, 6–9 May 2001, pp. 77–80.

[1175] I.W. Sandberg, The recovery of distorted bandlimited almost-periodic signals, IEEE International Symposium on Circuits and Systems, ISCAS '01, Sydney, Australia, vol. 3, 6–9 May 2001, pp. 413–416.

[1176] I.W. Sandberg, G.J.J. van Zyl, Harmonic balance and almost periodic inputs, IEEE Transactions on Circuits and Systems I: Fundamental Theory and Applications 49 (4) (April 2002) 459–464.

[1177] I.W. Sandberg, G.J.J. van Zyl, Harmonic balance and almost periodic inputs, IEEE International Symposium on Circuits and Systems, ISCAS '02, Scottsdale, AZ, vol. 1, 26–29 May 2002, pp. 637–640.

[1178] V.P. Sathe, P.P. Vaidyanathan, Analysis of the effects of multirate filters on stationary random inputs, with application in adaptive filtering, International Conference on Acoustics, Speech, and Signal Processing, ICASSP '91, Toronto, ON, Canada, vol. 3, 14–17 April 1991, pp. 1681–1684.

[1179] V.P. Sathe, P.P. Vaidyanathan, Effects of multirate systems on the statistical properties of random signals, IEEE Transactions on Signal Processing 41 (1) (January 1993) 131–146.

[1180] S.M. Savaresi, R.R. Bitmead, W.J. Dunstan, Non-linear system identification using closed-loop data with no external excitation: the case of a lean combustion chamber, International Journal of Control 74 (18) (2001) 1796–1806.

[1181] G. Scarano, G. Panci, On cyclic correlation approaches for blind identification of FIR communication channels, First IEEE Signal Processing Workshop on Signal Processing Advances in Wireless Communications, SPAWC '97, Paris, France, 16–18 April 1997, pp. 81–84.

[1182] S.V. Schell, R.A. Calabretta, W.A. Gardner, B.G. Agee, Cyclic MUSIC algorithms for signal-selective DOA estimation, in: IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '89, Glasgow, Scotland, May 1989, pp. 2278–2281.

[1183] S.V. Schell, W.A. Gardner, Signal-selective high-resolution direction finding in multipath, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '90, Albuquerque, NM, vol. 5, 3–6 April 1990, pp. 2667–2670.

[1184] S.V. Schell, W.A. Gardner, Detection of the number of cyclostationary signals in unknown interference and noise, 24th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 1, 5–7 November 1990, pp. 473–477.

[1185] S.V. Schell, W.A. Gardner, Cramer-Rao lower bound for parameters of Gaussian cyclostationary signals, in: International Symposium on Information Theory and its Applications, ISITA '90, Waikiki, HI, November 1990, pp. 255–258.

[1186] S.V. Schell, Exploitation of spectral correlation for signal-selective direction finding, Ph.D. Thesis, University of California, Davis, CA, 1990.

[1187] S.V. Schell, W.A. Gardner, Estimating the directions of arrival of cyclostationary signals-Part I: Theory and methods, Tech. Rep., University of California, Davis, CA, November 1991.

[1188] S.V. Schell, W.A. Gardner, The Cramer-Rao lower bound for directions of arrival of Gaussian cyclostationary signals, IEEE Transactions on Information Theory 38 (4) (July 1992) 1418–1422.

[1189] S.V. Schell, Generalization of Whittle's theorem to cyclostationary signals, Sixth IEEE Signal Processing Workshop on Statistical Signal and Array Processing, Victoria, BC, Canada, 7–9 October 1992, pp. 110–113.

[1190] S.V. Schell, W.A. Gardner, Robustness of direction-finding methods for cyclostationary signals in the presence of array calibration error, Sixth IEEE Signal Processing Workshop on Statistical Signal and Array Processing, SSAP '92, Victoria, BC, Canada, 7–9 October 1992, pp. 346–349.

[1191] S.V. Schell, W.A. Gardner, Maximum likelihood and common factor analysis-based blind adaptive spatial filtering for cyclostationary signals, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '93, Minneapolis, MN, vol. 4, 27–30 April 1993, pp. 292–295.

[1192] S.V. Schell, W.A. Gardner, Blind adaptive spatiotemporal filtering for wide-band cyclostationary signals, IEEE Transactions on Signal Processing 41 (5) (May 1993) 1961–1964.

[1193] S.V. Schell, D.L. Smith, Blind identification and equalization of MA channels for QAM communication signals, 27th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 1, 1–3 November 1993, pp. 736–740.

[1194] S.V. Schell, Performance analysis of the cyclic MUSIC method of direction estimation for cyclostationary signals, IEEE Transactions on Signal Processing 42 (11) (November 1994) 3043–3050.

[1195] S.V. Schell, An overview of sensor array processing for cyclostationary signals, in: W.A. Gardner (Ed.), Cyclostationarity in Communications and Signal Processing, IEEE Press, New York, NY, 1994, pp. 168–240 (Chapter 3).

[1196] S.V. Schell, Asymptotic moments of estimated cyclic correlation matrices, IEEE Transactions on Signal Processing 43 (1) (January 1995) 173–180.

[1197] S.V. Schell, Higher-order cyclo stationarity properties of coded communication signals, Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 1, 30 October–2 November 1995, pp. 526–530.

[1198] S.V. Schell, T.E. Shrimpton, Super-exponentially convergent blind fractionally-spaced equalization and co-channel interference rejection, IEEE Military Communications Conference, MILCOM '96, McLean, VA, vol. 2, 21–24 October 1996, pp. 607–611.

[1199] U. Schlink, M. Volta, Grey box and component models to forecast ozone episodes: a comparison study, Environmental Monitoring and Assessment 65 (1) (November 2000) 313–321.

[1200] T.M. Schmidl, D.C. Cox, Robust frequency and timing synchronization for OFDM systems in multipath channels, IEEE Transactions on Communications 45 (12) (December 1997) 1613–1621.

[1201] K.E. Scott, E.B. Olasz, Simultaneous clock phase and frequency offset estimation, IEEE Transactions on Communications 43 (7) (July 1995) 2263–2270.

[1202] B. Seaman, R.M. Braun, Using cyclostationarity in the modulation classification of analogue signals, in: South African Symposium on Communications and Signal Processing, COMSIG '98, Rondebosch, South Africa, 7–8 September 1998, pp. 261–266.

[1203] N. Seidl, V. Howitt, J. Richie, Blind adaptive linear multiuser detection for multirate CDMA systems, 52nd IEEE Vehicular Technology Conference, VTC '00—Fall, Boston, MA, vol. 3, 24–28 September 2000, pp. 1296–1303.

[1204] O. Seleznjev, Large deviations in the piecewise linear approximation of Gaussian processes with stationary increments, Journal of Applied Probability 28 (2) (1996) 481–499.

[1205] E. Serpedin, G.B. Giannakis, Blind channel identification and equalization with modulation induced cyclostationarity, in: 31st Conference on Information Sciences and Systems, CISS '97, Baltimore, MD, 19–21 March 1997, pp. 792–797.

[1206] E. Serpedin, G.B. Giannakis, Blind identification of ARMA models with periodically modulated inputs, 31st Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 2, 2–5 November 1997, pp. 1633–1637.

[1207] E. Serpedin, G.B. Giannakis, Blind channel identification and equalization with modulation-induced cyclostationarity, IEEE Transactions on Signal Processing 46 (7) (July 1998) 1930–1944.

[1208] E. Serpedin, G.B. Giannakis, A. Chevreuil, P. Loubaton, Blind joint estimation of carrier frequency offset and channel using non-redundant periodic modulation precoders, Ninth IEEE Signal Processing Workshop on Statistical Signal and Array Processing, SSAP '98, Portland, OR, 14–16 September 1998, pp. 288–291.

[1209] E. Serpedin, Semi-blind equalization of nonlinear communication channels using transmitter precoding, 32nd Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 2, 1–4 November 1998, pp. 1129–1133.

[1210] E. Serpedin, A. Chevreuit, G.B. Giannakis, P. Loubaton, Non-data aided joint estimation of carrier frequency offset and channel using periodic modulation precoders: performance analysis, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '99, Phoenix, AZ, vol. 5, 5–19 March 1999, pp. 2635–2638.

[1211] E. Serpedin, A. Chevreuil, G.B. Giannakis, P. Loubaton, Blind channel and carrier frequency offset estimation using periodic modulation precoders, IEEE Transactions on Signal Processing 48 (8) (August 2000) 2389–2405.

[1212] E. Serpedin, P. Ciblat, G.B. Giannakis, P. Loubaton, Performance analysis of blind carrier phase estimators for general QAM constellations, 10th IEEE Workshop on Statistical Signal and Array Processing, SSAP '00, Pocono Manor, PA, 14–16 August 2000, pp. 171–175.

[1213] E. Serpedin, P. Ciblat, G.B. Giannakis, P. Loubaton, Performance analysis of blind carrier phase estimators for general QAM constellations, IEEE Transactions on Signal Processing 49 (8) (August 2001) 1816–1823.

[1214] E. Serpedin, Y. Wang, P. Ciblat, P. Loubaton, Performance analysis of a class of non-data aided carrier frequency offset and symbol timing delay estimators for flat-fading channels, IEEE Transactions on Signal Processing 50 (9) (September 2002) 2295–2305.

[1215] E. Serpedin, Y. Wang, A class of NDA phase recovery techniques for large QAM modulations: estimators and bounds, IEEE Signal Processing Letters 9 (10) (October 2002) 301–304.

[1216] E. Serpedin, Y. Wang, P. Ciblat, Optimal feedforward nonlinear least-squares carrier phase and frequency offset estimation for general QAM modulations, IEEE Transactions on Wireless Communications 2 (5) (September 2003) 1040–1054.

[1217] E. Serpedin, Y. Wang, P. Ciblat, An alternative feedforward symbol estimator using two samples per

symbol, IEEE Transactions on Communications 51 (9) (September 2003) 1451–1455.
[1218] E. Serpedin, Y. Wang, P. Ciblat, Optimal NDA carrier recovery for burst M-PSK transmissions, IEEE Transactions on Communications 51 (9) (September 2003) 1571–1581.
[1219] E. Serpedin, Y. Wang, P. Ciblat, Blind feedforward cyclostationarity-based timing estimation for linear modulations, IEEE Transactions on Wireless Communications 3 (3) (May 2004) 709–715.
[1220] E. Serpedin, K. Shi, Y. Wang, On the design of a digital blind feedforward jitter free timing recovery scheme for linear modulations, IEEE Transactions on Communications 52 (9) (September 2004) 1464–1469.
[1221] E. Serpedin, K. Shi, Almost jitter-free feedforward symbol timing recovery for GMSK modulations, Asilomar Conference, Pacific Grove, CA, vol. 2, November 2004, pp. 1113–1117.
[1222] E. Serpedin, Y. Wang, Non-data aided feedforward carrier frequency offset estimators for QAM constellations: a nonlinear least-squares approach, EURASIP Applied Signal Processing Journal 13 (November 2004) 1993–2001.
[1223] S.R. Seydnejad, R.I. Kitney, Detection of nonlinearity in HRV using cyclostationary analysis, First Joint BMES/EMBS Conference [Engineering in Medicine and Biology, 1999. 21st Annual Conference and the 1999 Annual Fall Meeting of the Biomedical Engineering Society], Atlanta, GA, vol. 2, 13–16 October 1999, p. 993.
[1224] L. Seymour, Modeling plant growth using regression with periodically correlated errors, Journal of Agricultural, Biological and Environmental Statistics 7 (2) (1 June 2002) 191–207.
[1225] S. Shamsunder, G.B. Giannakis, On periodic processes multivariate modeling and polyspectra, in: 26th Conference on Information Sciences and Systems, CISS '92, Princeton, NJ, March 1992, pp. 583–588.
[1226] S. Shamsunder, G.B. Giannakis, Estimation of multicomponent random amplitude polynomial phase signals using higher-order cyclic cumulants, in: 27th Conference on Information Sciences and Systems, CISS '93, Baltimore, MD, March 1993, pp. 629–634.
[1227] S. Shamsunder, Exploiting cyclostationarity for range and bearing estimation, IEEE International Conference on Acoustics, Speech, and Signal Processing ICASSP '93, Minneapolis, MN, vol. 4, 27–30 April 1993, pp. 280–283.
[1228] S. Shamsunder, G.B. Giannakis, Ambiguity function, polynomial phase signals and higher-order cyclostationarity, IEEE Signal Processing Workshop on Higher-Order Statistics, Lake Tahoe, CA, 7–9 June 1993, pp. 173–177.
[1229] S. Shamsunder, G.B. Giannakis, Parameter estimation of random modulated chirp signals, Ocean Engineering Society Conference, OCEANS '93, Victoria, BC, Canada, vol. 1, 18–21 October 1993, pp. 397–398.
[1230] S. Shamsunder, G.B. Giannakis, Detection and estimation of chirp signals in non-Gaussian noise, 27th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 2, 1–3 November 1993, pp. 1191–1195.
[1231] S. Shamsunder, Array and multichannel signal processing using higher-order and cyclic statistics, Ph.D. Thesis, University of Virginia, Charlottesville, VA, January 1994.
[1232] S. Shamsunder, G.B. Giannakis, Detection and estimation of non-Gaussian sources using higher-order statistics, IEEE Transactions on Signal Processing 42 (May 1994) 1145–1155.
[1233] S. Shamsunder, G.B. Giannakis, On cyclostationarity and the use of source receiver motion for localization, in: Seventh European Signal Processing Conference, EUSIPCO '94, Edinburgh, Scotland, 13–16 September 1994, pp. 191–194.
[1234] S. Shamsunder, G.B. Giannakis, Signal selective localization of nonGaussian cyclostationary sources, IEEE Transactions on Signal Processing 42 (10) (October 1994) 2860–2864.
[1235] S. Shamsunder, G.B. Giannakis, B. Friedlander, Estimating random amplitude polynomial phase signals: a cyclostationary approach, IEEE Transactions on Signal Processing 43 (2) (February 1995) 492–505.
[1236] S. Shamsunder, R.N. Challa, Performance of near-field localization algorithms based on high-order statistics, IEEE International Conference on Acoustics, Speech, and Signal Processing ICASSP '96, Atlanta, GA, vol. 5, 7–10 May 1996, pp. 3010–3013.
[1237] S. Shamsunder, G.B. Giannakis, Cyclic and high-order sensor array processing, in: C.T. Leondes (Ed.), Digital Signal Processing Techniques and Applications, vol. 75, Academic Press, New York, NY, 1996, pp. 259–300.
[1238] S. Shamsunder, G.B. Giannakis, Multichannel blind signal separation and reconstruction, IEEE Transactions on Speech and Audio Processing 5 (6) (November 1997) 515–528.
[1239] Q. Shao, P.P. Ni, Least-squares estimation and ANOVA for periodic autoregressive time series, Statistics and Probability Letters 69 (3) (September 2004) 287–297.
[1240] B.S. Sharif, T.C. Chuah, O.R. Hinton, S.A. Jimaa, Nonlinear RLS algorithm for impulsive CDMA channels, in: SPIE '03, Proceedings of Internet Quality of Service, Orlando, FL, 7–11 September 2003, pp. 46–53.
[1241] P.J. Sherman, Random processes from rotating machinery, in: A.G. Miamiee (Ed.), Proceedings of Workshop on Nonstationary Stochastic Processes and their Applications, World Scientific, New Jersey, 1991, pp. 211–218.
[1242] P.J. Sherman, L.B. White, R.R. Bitmead, On AR representations for cyclostationary processes, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '93, Minneapolis, MN, vol. 4, 27–30 April 1993, pp. 260–263.

[1243] P.J. Sherman, Development of a comprehensive method for time-frequency analysis of rotating machinery, Tech. Rep. A538733, Avaiable online at http://www.stormingmedia.us/53/5387/A538733.html (27 January 1998).

[1244] K. Shi, Y. Wang, E. Serpedin, On the design of a digital blind feedforward, nearly jitter-free timing-recovery scheme for linear modulations, IEEE Transactions on Communications 52 (9) (September 2004) 1464–1469.

[1245] P. Shiktorov, E. Starikov, V. Gruzinskis, L. Reggiani, L. Varani, J.C. Vaissiere, S. Perez, T. Gonzalez, Monte Carlo simulation of electronic noise in semiconductor materials and devices operating under cyclostationary conditions, Journal of Computational Electronics 2 (2–4) (December 2003) 455–458.

[1246] P. Shiktorov, E. Starikov, V. Gruzinskis, S. Perez, T. Gonzalez, L. Reggiani, L. Varani, J.C. Vaissiere, Monte Carlo simulation of schottky diodes operating under terahertz cyclostationary conditions, IEEE Electron Device Letters 25 (1) (January 2004) 1–3.

[1247] P. Shiktorov, E. Starikov, V. Gruzinskis, L. Reggiani, L. Varani, J.C. Vaissiere, S. Perez, T. Gonzalez, Dynamical formation of hot-carrier intergroup noise under subterahertz cyclostationary conditions, Semiconductor Science and Technology 19 (4) (April 2004) 170–172.

[1248] D.-B. Shin, G.R. North, Errors incurred in sampling a cyclostationary field, Journal of Atmospheric and Oceanic Technology 17 (5) (2000) 656–664.

[1249] B. Shishkov, J. Cheng, T. Ohira, Adaptive beamforming of ESPAR antenna-unconventional approach, IEICE Transactions 85 (3) (2002) 452–457.

[1250] B. Shishkov, J. Cheng, T. Ohira, Adaptive control algorithm of ESPAR antenna based on stochastic approximation theory, IEICE Transaction 85 (4) (2002) 802–811.

[1251] T.E. Shrimpton, S.V. Schell, Source enumeration using a signal-selective information theoretic criterion, IEEE Military Communications Conference, MILCOM '97, Monterey, CA, vol. 3, 2–5 November 1997, pp. 1092–1097.

[1252] A. Signoroni, R. Leonardi, Modeling and reduction of PSNR fluctuations in 3D wavelet coding, International Conference on Image Processing, Thessaloniki, Greece, vol. 3, 7–10 October 2001, pp. 812–815.

[1253] C. Simon, J. Shen, R. Seip, E.S. Ebbini, A robust and computationally efficient algorithm for mean scatterer spacing estimation, IEEE Transactions on Ultrasonics, Ferroelectrics and Frequency Control 44 (4) (July 1997) 882–894.

[1254] B.J. Skinner, F.M. Ingels, J.P. Donohoe, The effect of radar signal construction on detectability, in: 26th Southeastern Symposium on System Theory, Los Alamitos, CA, 20–22 March 1994, pp. 147–150.

[1255] B.J. Skinner, F.M. Ingels, J.P. Donohoe, Stationary and cyclostationary random process models, in: IEEE Southeastcon '94, Miami, FL, 10–13 April 1994, pp. 450–454.

[1256] J. Skoglund, W.B. Kleijn, P. Hedelin, Audibility of pitch synchronously modulated noise, IEEE Workshop on Speech Coding for Telecommunications, Pocono Manor, PA, 7–10 September 1997, pp. 51–52.

[1257] J. Skoglund, W.B. Kleijn, On time-frequency masking in voiced speech, IEEE Transactions on Speech and Audio Processing 8 (4) (July 2000) 361–369.

[1258] D.T.M. Slock, Blind fractionally-spaced equalization, perfect-reconstruction filter banks and multichannel linear prediction, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '94, Adelaide, Australia, vol. 4, 19–22 April 1994, pp. 585–588.

[1259] D.T.M. Slock, C.B. Papadias, Blind fractionally-spaced equalization based on cyclostationarity, 44th IEEE Vehicular Technology Conference, VTC '94, Stockholm, Sweden, vol. 2, 8–10 June 1994, pp. 1286–1290.

[1260] J.E. Smee, H.C. Huang, Mitigating interference in wireless local loop DS-CDMA systems, Ninth IEEE International Symposium on Personal, Indoor and Mobile Radio Communications, PIMRC '98, Boston, MA, vol. 1, 8–11 September 1998, pp. 1–5.

[1261] J.E. Smee, S.C. Schwartz, Adaptive feedforward/feedback architectures for multiuser detection in high data rate wireless CDMA networks, IEEE Transactions on Communications 48 (6) (June 2000) 996–1011.

[1262] A.K. Soman, P.P. Vaidyanathan, Wavelets and filter banks: theory and design, IEEE Transactions on Signal Processing 41 (5) (May 1993) 1824–1835.

[1263] D. Sornette, Discrete time invariance and complex dimensions, Physics Reports 297 (5) (1998) 239–270.

[1264] A. Soule, A. Nucci, R. Cruz, E. Leonardi, N. Taft, Statistical analysis of internet traffic: How to identify and estimate the largest traffic matrix elements in a dynamic environment, in: Joint International Conference on Measurement and Modeling of Computer Systems, SIGMETRICS/Performance '04, New York, NY, 12–16 June 2004, pp. 73–84.

[1265] C.E. de Souza, G. Goodwin, Intersample variances in discrete minimum variance control, IEEE Transactions on Automatic Control 29 (8) (August 1984) 759–761.

[1266] C.E. de Souza, A. Trofino, An LMI approach to stabilization of linear discrete-time periodic systems, International Journal of Control 73 (8) (2000) 696–703.

[1267] J.M. Spanjaard, L.B. White, Adaptive period estimation of a class of periodic random processes, International Conference on Acoustics, Speech, and Signal Processing, ICASSP '95, Detroit, MI, vol. 3, 9–12 May 1995, pp. 1792–1795.

[1268] C.A. Speirs, J.J. Soraghan, R.W. Stewart, S. Bryne, Least squares time sequenced adaptive filtering for the detection of fragmented micropotentials, in: Computers in Cardiology, Bethesda, MD, 25–28 September 1994, pp. 613–616.

[1269] C.M. Spooner, Performance evaluation of detectors for cyclostationary signals, Master's Thesis, University of California, Davis, CA, June 1988.

[1270] C.M. Spooner, C.-K. Chen, W.A. Gardner, Maximum likelihood two-sensor detection and TDOA estimation for cuclostationary signals, Sixth Multidimensional Signal Processing Workshop, Pacific Grove, CA, 6–8 September 1989, pp. 119–120.

[1271] C.M. Spooner, W.A. Gardner, Estimation of cyclic polyspectra, 25th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 1, 4–6 November 1991, pp. 370–376.

[1272] C.M. Spooner, Theory and application of higher-order cyclostationarity, Ph.D. Thesis, University of California, Davis, CA, June 1992.

[1273] C.M. Spooner, W.A. Gardner, An overview of the theory of higher-order cyclostationarity, Workshop on Nonstationary Stochastic Processes and their Applications, Hampton, VA, 1–2 August 1992, pp. 111–125.

[1274] C.M. Spooner, W.A. Gardner, Exploitation of higher-order cyclostationarity for weak-signal detection and time-delay estimation, Sixth IEEE Signal Processing Workshop on Statistical Signal and Array Processing, SSAP '92, Victoria, BC, Canada, 7–9 October 1992, pp. 197–201.

[1275] C.M. Spooner, W.A. Gardner, Performance evaluation of cyclic polyspectrum estimators, 26th Asilomar Conference on Signals Systems and Computers, Pacific Grove, CA, vol. 1, 26–28 October 1992, pp. 477–483.

[1276] C.M. Spooner, W.A. Gardner, Exploitation of higher-order cyclostationarity for weak-signal detection and time-delay estimation, Tech. Rep. A953092. Available online at http://www.stormingmedia.us/95/9530/A953092.html (October 1992).

[1277] C.M. Spooner, Cubic frequency shift filtering for co channel interference removal, Tech. Rep. A963092. Available at http://www.stormingmedia.us/96/9630/A963092.html (5 December 1993).

[1278] C.M. Spooner, W.A. Gardner, Robust feature detection for signal interception, IEEE Transactions on Communications 42 (5) (May 1994) 2165–2173.

[1279] C.M. Spooner, An overview of recent developments in cyclostationary signal processing, Second Workshop on Cyclostationary Signals, Monterey, CA, 1–2 August 1994, pp. 1–17.

[1280] C.M. Spooner, W.A. Gardner, The cumulant theory of cyclostationary time-series. II. Development and applications, IEEE Transactions on Signal Processing 42 (12) (December 1994) 3409–3429.

[1281] C.M. Spooner, Higher-order statistics for nonlinear processing of cyclo-stationary signals, in: W.A. Gardner (Ed.), Cyclostationarity in Communications and Signal Processing, IEEE Press, New York, NY, 1994, pp. 91–168 (Chapter 2).

[1282] C.M. Spooner, Classification of co-channel communication signals using cyclic cumulants, 29th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 1, 30 October–2 November 1995, pp. 531–536.

[1283] C.M. Spooner, et al., Automatic radio-frequency environment analysis, in: 34th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, 29 October–1 November 2000, pp. 1181–1186.

[1284] C.M. Spooner, On the utility of sixth-order cyclic cumulants for RF signal classification, 35th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 1, 4–7 November 2001, pp. 890–897.

[1285] M.S. Spurbeck, L.L. Scharf, Least squares filter design for periodically correlated times series, Seventh IEEE Signal Processing Workshop on Statistical Signal and Array Processing, Quebec, Canada, 26–29 June 1994, pp. 267–270.

[1286] J.P. Stephens, Advances in signal processing technology for electronic warfare, IEEE National Aerospace and Electronics Conference, NAECON '96, Dayton, OH, vol. 1, 20–23 May 1996, pp. 129–136.

[1287] J.P. Stephens, Advances in signal processing technology for electronic warfare, IEEE Aerospace and Electronic Systems Magazine 11 (11) (November 1996) 31–38.

[1288] H. von Storch, F.W. Zwiers, Time Series, in Statistical Analysis in Climate Research, Cambridge University Press, Cambridge, UK, 15 July 1999, pp. 193–289 (Chapter 4).

[1289] D.A. Streight, Application of cyclostationary signal selectivity to the carry-on multi-platform GPS assisted time difference of arrival system, Master's Thesis, Naval Postgraduate School, Monterey, CA, 1997.

[1290] D.A. Streight, Maximum-likelihood estimators for the time and frequency differences of arrival of cyclostationary digital communications signals, Ph.D. Thesis, Naval Postgraduate School, Monterey, CA, 1999.

[1291] D.A. Streight, G.K. Lott, W.A. Brown, Maximum likelihood estimates of the time and frequency differences of arrival of weak cyclostationary digital communications signals, IEEE Military Communications Conference, MILCOM '00, Los Angeles, CA, vol. 2, 22–25 October 2000, pp. 957–961.

[1292] T. Strom, S. Signell, Analysis of periodically switched linear circuits, IEEE Transactions on Circuits and Systems 24 (10) (October 1977) 531–541.

[1293] N.S. Subotic, B.J. Thelen, D.A. Carrara, Cyclostationary signal models for the detection and characterization of vibrating objects in SAR data, 32nd Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 2, 1–4 November 1998, pp. 1304–1308.

[1294] K. Sugimoto, H. Okada, T. Yamazato, M. Katayama, Performance improvement of OFDM system with consideration on the characteristics of power-line noise, IEICE Transactions 85 (12) (2002) 2822–2829.

[1295] M.C. Sullivan, E.J. Wegman, Estimating spectral correlations with simple nonlinear transformations, IEEE Transactions on Signal Processing 43 (6) (June 1995) 1525–1526.

[1296] L. Sun, H. Ohmori, A. Sano, Blind identification of transfer function model, IEICE Transactions 82 (8) (1999) 1391–1401.

[1297] L. Sun, H. Ohmori, A. Sano, Frequency domain approach to closed-loop identification based on output inter-sampling scheme, American Control Conference, Chicago, IL, vol. 3, 28–30 June 2000, pp. 1802–1806.
[1298] W. Sun, H. Li, Blind channel identification for multi-carrier CDMA systems with transmit diversity, IEEE International Conference on Communications, ICC '02, New York, NY, vol. 2, 28 April–2 May 2002, pp. 727–731.
[1299] S. Sung, D. Brady, Spectral spatial equalization for OFDM in time-varying frequency-selective multipath channels, IEEE Sensor Array and Multichannel Signal Processing Workshop, Cambridge, MA, 16–17 March 2000, pp. 434–438.
[1300] A. Swami, M. Ghogho, Performance analysis of cyclic estimators for harmonics in multiplicative and additive noise, in: IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '98, Seattle, WA, April 1998, pp. 2309–2313.
[1301] M. Tanda, Utilisatione della proprieta dei processi ciclostazionnari nella rivelazione di segnali immersi in rumore non gaussiano, Ph.D. Thesis, University of Napoli, Napoli, Italy, 1992 (in Italian).
[1302] H. Tang, K.M. Wong, A.B. Gershman, S. Vorobyov, Blind adaptive beamforming for cyclostationary signals with robustness against cycle frequency mismatch, IEEE Sensor Array and Multichannel Signal Processing Workshop, Rosslyn, VA, 4–6 August 2002, pp. 18–22.
[1303] M. Taniguchi, P.R. Krishnaiah, Asymptotic distributions of functions of the eigenvalues of the sample covariance matrix and canonical correlation matrix in multivariate time series, Journal of Multivariate Analysis 22 (1987) 156–176.
[1304] S. Tardu, Characterization of unsteady time periodical turbulent flows, Comptes Rendus Mecanique 331 (11) (November 2003) 767–774.
[1305] R. Telichevesky, K. Kundert, J. White, Efficient AC and noise analysis of two-tone RF circuits, in: Conference on Design Automation, CDA '96, Las Vegas, NV, June 1996, pp. 292–297.
[1306] M. Terrovitis, R. Meyer, Cyclostationary noise in communication systems, Tech. Rep. M99/36, University of California, Berkeley, CA, 1999 (Available through Electronics Research Laboratory Publications).
[1307] M. Terrovitis, K. Kundert, R. Meyer, Cyclostationary noise in radio-frequency communication systems, IEEE Transactions on Circuits and Systems I: Fundamental Theory and Applications 49 (11) (November 2002) 1666–1671.
[1309] C.W. Therrien, R. Cristi, Two-dimensional spectral representation of periodic, cyclostationary, and more general random processes, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '02, Orlando, FL, vol. 4, 13–17 May 2002, pp. 3561–3563.
[1310] C.W. Therrien, Some considerations for statistical characterization of nonstationary random processes, 36th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 2, 3–6 November 2002, pp. 1554–1558.
[1311] C.W. Therrien, A.H. Hawes, Least squares optimal filtering with multirate observations, 36th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 2, 3–6 November 2002, pp. 1782–1786.
[1312] H.A. Thomas, M.B. Fiering, Mathematical synthesis of stream Sow sequences for the analysis of river basins by simulation, in: A. Maass, et al. (Eds.), Design of Water Resources, Harvard University Press, Cambridge, MA, 1962.
[1313] J.E. Thomas, Multispectral detection of ground targets in highly correlated backgrounds, Tech. Rep. A292982. Available online at http://www.stormingmedia.us/29/2929/A292982.html (December 1994).
[1314] C.J. Tian, A limiting property of sample autocovariances of periodically correlated processes with application to period determination, Journal of Time Series Analysis 9 (4) (1988) 411–417.
[1315] Z. Tian, A cyclostationary approach to timing estimation of UWB signals, in: IEEE Symposium on Wireless Communications, ISWC '02, Victoria, BC, Canada, September 2002, pp. 45–46.
[1316] Z. Tian, L. Yang, G.B. Giannakis, Symbol timing estimation in ultra-wideband communications, in: 36th Asilomar Conference on Signals, Systems, and Computers, Pacific Grove, CA, 3–6 November 2002, pp. 1924–1928.
[1317] Z. Tian, L. Yang, G.B. Giannakis, Non-data aided timing-offset estimation for ultra-wideband transmissions, IEEE Transactions on Communications, 2004, accepted for publication.
[1318] G.C. Tiao, M.R. Grupe, Hidden periodic autoregressive moving average models in time series data, Biometrika 67 (2) (1980) 365–373.
[1319] W.-C. Ting, R. He, J.H. Reed, Interference rejection for AMPS using time dependent adaptive filtering and model-based demodulation, 47th IEEE Vehicular Technology Conference, VTC '97, Phoenix, AZ, vol. 3, 4–7 May 1997, pp. 2196–2200.
[1320] L. Tong, G. Xu, T. Kailath, A new approach to blind identification and equalization of multipath channels, 25th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 2, 4–6 November 1991, pp. 856–860.
[1321] L. Tong, G. Xu, T. Kailath, Blind identification and equalization of multipath channels, IEEE International Conference on Communications, ICC '92, Chicago, IL, vol. 3, June 1992, pp. 1513–1517.
[1322] L. Tong, Necessary and sufficient conditions of channel identifiability based on second-order cyclostationary statistics, in: IEEE International Symposium on Information Theory, ISIT '93, San Antonio, TX, 17–22 January 1993, p. 188.
[1323] L. Tong, G. Xu, T. Kailaith, Fast blind equalization via antenna arrays, IEEE International Conference on

Acoustics, Speech, and Signal Processing, ICASSP '93, Minneapolis, MN, vol. 4, 27–30 April 1993, pp. 272–275.

[1324] L. Tong, X. Guanghan, T. Kailath, Blind identification and equalization based on second-order statistics: a time domain approach, IEEE Transactions on Information Theory 40 (2) (March 1994) 340–349.

[1325] L. Tong, Blind identification of channels with rational transfer function, in: IEEE Global Telecommunications Conference, GLOBECOM '94, San Francisco, CA, 28 November–2 December 1994, pp. 56–60.

[1326] L. Tong, G. Xu, T. Kailath, Blind channel identification and equalization using spectral correlation measurements, Part II: a time-domain approach, in: W.A. Gardner (Ed.), Cyclostationarity in Communications and Signal Processing, IEEE Press, New York, NY, 1994, pp. 437–455 (Chapter 5, Part II).

[1327] L. Tong, G. Xu, B. Hassibi, T. Kailath, Blind channel identification based on second-order statistics: a frequency-domain approach, IEEE Transactions on Information Theory 41 (1) (January 1995) 329–334.

[1328] L. Tong, Identifiability of minimal, causal systems using second-order output cyclic spectra, IEEE Transactions on Automatic Control 40 (5) (May 1995) 959–962.

[1329] C. Tontiruttananon, J.K. Tugnait, Equation-error closed-loop system identification using cyclic spectral analysis, 31st Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 1, 2–5 November 1997, pp. 473–477.

[1330] C. Tontiruttananon, J.K. Tugnait, Identification of closed-loop linear systems via cyclic spectral analysis: an equation-error formulation, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '98, Seattle, WA, vol. 4, 12–15 May 1998, pp. 2077–2080.

[1331] C. Tontiruttananon, J.K. Tugnait, Closed-loop linear model validation and order estimation using cyclic-spectral analysis, American Control Conference, Philadelphia, PA, vol. 4, 24–26 June 1998, pp. 2354–2358.

[1332] C. Tontiruttananon, J.K. Tugnait, Parametric identification of closed-loop linear systems using cyclic-spectral analysis, American Control Conference, Philadelphia, PA, vol. 6, 24–26 June 1998, pp. 3597–3601.

[1333] C. Tontiruttananon, J.K. Tugnait, Performance analysis of two approaches to closed loop system identification via cyclic spectral analysis, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '99, Phoenix, AZ, vol. 4, 15–19 March 1999, pp. 1781–1784.

[1334] C. Tontiruttananon, J.K. Tugnait, Identification of closed-loop linear systems via cyclic spectral analysis given noisy input-output time-domain data, IEEE Transactions on Automatic Control 46 (2) (February 2001) 258–275.

[1335] S. Touati, J.-C. Pesquet, Wavelet estimation of cyclospectra, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '03, Hong Kong, vol. 6, 6–10 April 2003, pp. 289–292.

[1336] S. Touati, Wavelet estimation of cyclospectra the case of unknown cyclic frequency, in: IEEE International Symposium on Information Theory, ISIT '03, Yokohama, Japan, 29 June–4 July 2003, pp. 213–216.

[1337] J.R. Treichler, V. Wolff, C.R. Johnson Jr., Observed misconvergence in the constant modulus adaptive algorithm, 25th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 2, 4–6 November 1991, pp. 663–667.

[1338] M.K. Tsatsanis, G.B. Giannakis, Object and texture classification using higher order statistics, IEEE Transactions on Pattern Analysis and Machine Intelligence 14 (7) (July 1992) 733–750.

[1339] M.K. Tsatsanis, G.B. Giannakis, Principal component filter banks for optimum wavelet analysis, Sixth IEEE Signal Processing Workshop on Statistical Signal and Array Processing, Victoria, BC, Canada, 7–9 October 1992, pp. 50–53.

[1340] M.K. Tsatsanis, G.B. Giannakis, Blind equalization of rapidly fading channels via exploitation of cyclostationarity and higher-order statistics, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '93, Minneapolis, MN, vol. 4, 27–30 April 1993, pp. 85–88.

[1341] M.K. Tsatsanis, G.B. Giannakis, Blind equalization of mobile radio channels using higher-order cyclostationarity, in: Fourth International Conference on Advances in Communication and Control, Rhodes, Greece, 14–18 June, 1993.

[1342] M.K. Tsatsanis, G.B. Giannakis, Adaptive methods for equalization of rapidly fading channels, IEEE Military Communications Conference, MILCOM '93, Bedford, MA, vol. 2, 11–14 October 1993, pp. 639–643.

[1343] M.K. Tsatsanis, G.B. Giannakis, A basis expansion approach for detecting transient plant disturbances and jumps, 33rd IEEE Conference on Decision and Control, Lake Buena Vista, FL, vol. 4, 14–16 December 1994, pp. 3412–3417.

[1344] M.K. Tsatsanis, G.B. Giannakis, Coding induced cyclostationarity for blind channel equalization, 29th Conference on Information Sciences and Systems, CISS'95, Baltimore, MD, 22–24 March 1995, pp. 685–690.

[1345] M.K. Tsatsanis, G.B. Giannakis, Principal component filter banks for optimal multiresolution analysis, IEEE Transactions on Signal Processing 43 (8) (August 1995) 1766–1777.

[1346] M.K. Tsatsanis, G.B. Giannakis, Modelling and equalization of rapidly fading channels, International Journal of Adaptive Control and Signal Processing 10 (2–3) (March 1996) 159–176.

[1347] M.K. Tsatsanis, G.B. Giannakis, Cyclostationarity in partial response signaling: a novel framework for blind equalization, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '97,

Munich, Germany, vol. 5, 21–24 April 1997, pp. 3597–3600.

[1348] M.K. Tsatsanis, G.B. Giannakis, Transmitter induced cyclostationarity for blind channel equalization, IEEE Transactions on Signal Processing 45 (7) (July 1997) 1785–1794.

[1349] M.K. Tsatsanis, G.B. Giannakis, Subspace methods for blind estimation of time-varying FIR channels, IEEE Transactions on Signal Processing 45 (12) (December 1997) 3084–3093.

[1350] M.K. Tsatsanis, Time-varying system identification and channel equalization using wavelets and higher-order statistics, in: C.T. Leondes (Ed.), Digital Signal Processing Techniques and Applications, Academic Press, New York, NY, 1997.

[1351] H. Tsou, R. Sampaio-Neto, R.A. Scholtz, Noncoherent direct-sequence code-tracking in the presence of pulsed jamming, 25th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 2, 4–6 November 1991, pp. 873–877.

[1352] H. Tsou, On the performance of the direct-sequence spread-spectrum code tracking in the presence of cyclostationary interference, Ph.D. Thesis, University of Southern California, Los Angeles, CA, April 1992.

[1353] H. Tsou, R. Sampaio-Neto, R.A. Scholtz, Linear cyclostationary analysis of noncoherent direct-sequence code tracking in pulsed jamming, IEEE Military Communications Conference, MILCOM '92, San Diego, CA, vol. 2, 11–14 October 1992, pp. 422–426.

[1354] H. Tsuji, J. Xin, S. Yoshimoto, A. Sano, New approach for finding DOA in array antennas using cyclostationarity, in: Wireless Communications Conference, Boulder, CO, 11–13 August 1997, pp. 73–78.

[1355] H. Tsuji, J. Xin, S. Yoshimoto, A. Sano, Detection of direction and number of impinging signals in array antennas using cyclostationarity, Electronics and Communications in Japan (Part I: Communications) 82 (10) (1999) 29–39.

[1356] H. Tsuji, M. Mizuno, Applications of adaptive array antennas in mobile communications, Electronics and Communications in Japan (Part III: Fundamental Electronic Science) 83 (12) (December 2000) 38–50.

[1357] J.K. Tugnait, Fractionally spaced blind equalization and estimation of FIR channels, IEEE International Conference on Communications, ICC '93, Geneva, Switzerland, vol. 1, 23–26 May 1993, pp. 428–432.

[1358] J.K. Tugnait, Fractionally spaced blind equalization of FIR channels under symbol timing offsets, 27th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 1, 1–3 November 1993, pp. 741–745.

[1359] J.K. Tugnait, On blind identifiability of multipath channels using fractional sampling and second-order cyclostationary statistics, IEEE Global Telecommunications Conference, GLOBECOM '93, Houston, TX, vol. 3, 29 November–2 December 1993, pp. 2001–2005.

[1360] J.K. Tugnait, A parallel multimodel: CMA/Godard adaptive filter bank approach to fractionally spaced blind adaptive equalization, IEEE International Conference on Communications, ICC '94, New Orleans, LA, vol. 1, 1–5 May 1994, pp. 549–553.

[1361] J.K. Tugnait, On blind identifiability of multipath channels using fractional sampling and second-order cyclostationary statistics, IEEE Transactions on Information Theory 41 (1) (January 1995) 308–311.

[1362] J.K. Tugnait, Blind equalization and estimation of FIR communications channels using fractional sampling, IEEE Transactions on Communications 44 (3) (March 1996) 324–336.

[1363] J.K. Tugnait, On blind equalization of SIMO time-varying channels, IEEE Third Workshop on Signal Processing Advances in Wireless Communications, SPAWC '01, Taoyuan, Taiwan, 20–23 March 2001, pp. 98–101.

[1364] J.K. Tugnait, Linear prediction error method for blind identification of time-varying channels: theoretical results, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '01, Salt Lake City, UT, vol. 4, 7–11 May 2001, pp. 2125–2128.

[1365] J.K. Tugnait, W. Luo, On blind identification of SIMO time-varying channels using second-order statistics, 35th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 1, 4–7 November 2001, pp. 747–752.

[1366] J.K. Tugnait, W. Luo, Linear prediction error method for blind identification of periodically time-varying channels, IEEE Transactions on Signal Processing 50 (12) (December 2002) 3070–3082.

[1367] J.K. Tugnait, W. Luo, On channel estimation using superimposed training and first-order statistics, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '03, Hong Kong, vol. 4, 6–10 April 2003, pp. 624–627.

[1368] J.K. Tugnait, W. Luo, On channel estimation using superimposed training and first-order statistics, IEEE Communications Letters 7 (9) (September 2003) 413–415.

[1369] J.K. Tugnait, W. Luo, Blind identification of time-varying channels using multistep linear predictors, IEEE Transactions on Signal Processing 52 (6) (June 2004) 1739–1749.

[1370] A.M. Tulino, E.M. Biglieri, S. Glisic, Iterative interference suppression and decoding in DS/FH spread-spectrum systems, IEICE Transactions 83 (8) (2000) 1591–1601.

[1371] N. Uzun, R.A. Haddad, Modeling and analysis of floating point quantization errors in subband filter structures, SPIE '93, Visual Communications and Image Processing, Boston, MA, vol. 2094, October 1993, pp. 647–653.

[1372] N. Uzun, R.A. Haddad, Cyclostationary modeling, analysis, and optimal compensation of quantization

errors in subband codecs, IEEE Transactions on Signal Processing 43 (9) (September 1995) 2109–2119.
[1373] P.P. Vaidyanathan, J. Tuqan, Oversampling PCM techniques and optimum noise shapers for quantizing a class of nonbandlimited signals, Tech. Rep. A586323. Available online at http://www.stormingmedia.us/58/5863/A586323.html (December 1996).
[1374] P. Vanassche, G. Gielen, W. Sansen, Constructing symbolic models for the input/output behavior of periodically time-varying systems using harmonic transfer matrices, in: Conference on Design, Automation and Test in Europe, Munich, Germany, March 2002, p. 279.
[1375] P. Vanassche, G. Gielen, W. Sansen, On the difference between two widely publicized methods for analyzing oscillator phase behavior, in: IEEE/ACM International Conference on Computer-Aided Design, ICCAD '02, San Jose, CA, November 2002, pp. 229–233.
[1376] T. Varghese, K.D. Donohue, Characterization of tissue microstructure scatterer distribution with spectral correlation, Ultrasonic Imaging 15 (3) (July 1993) 238–254.
[1377] T. Varghese, K.D. Donohue, Mean scatterer spacing estimates with spectral correlation, Journal of the Acoustical Society of America 96 (December 1994) 3504–3515.
[1378] T. Varghese, K.D. Donohue, Estimating mean scatterer spacing with the frequency-smoothed spectral autocorrelation function, IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control 42 (3) (May 1995) 451–463.
[1379] V. Vasudevan, M. Ramakrishna, Mixed-signal design and simulation: Computation of noise spectral density in switched capacitor circuits using the mixed-frequency-time technique, in: Conference on Design Automation, CDA '03, Anaheim, CA, June 2003, pp. 538–541.
[1380] V. Vasudevan, M. Ramakrishna, Computation of the average and harmonic noise power-spectral density in switched-capacitor circuits, IEEE Transactions on Circuits and Systems I: Regular Papers 51 (11) (November 2004) 2165–2174.
[1381] R. Vaughan, J.B. Andersen, Signal repetition distance (cyclostationarity from simulations), in: Channels, Propagation and Antennas for Mobile Communications, INSPEC/IEE, Edison, NJ, 3 February 2003, pp. 335–338 (Chapter 7.1.4).
[1382] A.V. Vecchia, Periodic autoregressive-moving average modeling with applications to water resources, Water Resources Bulletin 21 (5) (1985) 721–730.
[1383] A.V. Vecchia, R. Ballerini, Testing for periodic autocorrelations in seasonal time series data, Biometrika 78 (1) (1991) 53–63.
[1384] V. Venkataraman, J.J. Shynk, R.P. Gooch, A cyclostationary receiver for aperiodic CDMA signals, Conference Record of the 38th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 1, 7–10 November 2004, pp. 923–927.
[1385] S. Verdu, Multiuser Detection, Cambridge University Press, Cambridge, 13 August 1998.
[1386] C. Vignat, P. Loubaton, Blind beamforming in a cyclostationary context using an optimally weighted quadratic cost function, in: European Signal Processing Conference, EUSIPCO '96, Trieste, Italy, 10–13 September 1996.
[1387] P. Viravau, P. Gournay, Correlation spectrale theoretique des modulations CPM-Partie II: Methode de calcul generale et analyse, Annals of Telecommunications 53 (7–8) (1998) 279–288 (in French).
[1388] B. Vo, N. Ma, P.C. Ching, K.M. Wong, Tracking moving speech source using cyclic adaptive beamforming, Electronics Letters 36 (19) (14 September 2000) 1666–1668.
[1389] K. Vokurka, Analysis of cyclostationary noise and vibration, Vysoka skola banska - Technicka Univerzita Ostrava, Ostrava - Poruba, Czech Republic, vol. 2, 1996, pp. 719–722 (in Czech).
[1390] K. Vokurka, Exploitation of vibration and noise signals cyclostationarity in condition based maintenance, NOISE-CON '97, University Park, PA, vol. 1, 15–17 June 1997, pp. 337–340.
[1391] K. Vokurka, Cyclostationarity of diagnostic signals, in: TD 2000—DIAGON '97, Academia Centrum Fakulty Technologicke ve Zline, Zlin, Czech Republic, 1997, pp. 147–150 (in Czech).
[1392] K. Vokurka, Time-frequency statistical characteristics of cyclostationary signals, in: IEEE-SP International Symposium on Time-Frequency and Time-Scale Analysis, 6–9 October 1998, pp. 1–4.
[1393] K. Vokurka, Comparison of methods for analysis of diagnostic cyclostationary signals, in: TD 2000—DIAGON '98, Academia Centrum Fakulty Technologicke ve Zline, Zlin, Czech Republic, 1998, pp. 194–197 (in Czech).
[1394] K. Vokurka, Comparison of methods for analysis of cyclostationary noise, Journal of the Acoustical Society of America 1 (1998) 629–630.
[1395] K. Vokurka, Exploitation of vibration and noise signals cyclostationarity in condition based maintenance, Shock and Vibration Digest 30 (4) (1998) 325.
[1396] K. Vokurka, Stationary vs. nonstationary approach to cyclostationary signals analysis, Technische Universitat Ilmenau, Ilmenau, Germany, vol. 1, 1998, pp. 405–410.
[1397] K. Vokurka, Practical aspects of analyzing cyclostationary noise emitted by real acoustic sources, Journal of the Acoustical Society of America 105 (2) (1999) 1359.
[1398] K. Vokurka, Quadratic statistical characteristics of cyclic noise, Inter.noise '00, Nice, France, 27–30 August 2000, pp. 1–6.
[1399] K.S. Vouivcivsin, Y.P. Dragan, The elimination of rhythm from periodically correlated random processes, Otbor i Peredavca Informacii 33 (1972) 12–16 (in Russian).
[1400] D.Z. Vucic, M.M. Obradovic, Method for spectral correlation characterization of digital modulation, in: CSDSP '98, Sheffield, UK, April 1998, pp. 190–193.

[1401] D.Z. Vucic, M.M. Obradovic, Matrix-based stochastic method for the spectral correlation characterization of digital modulation, Facta Universitatis, Series: Electronics and Energetics 11 (3) (1998) 271–284.

[1402] D.Z. Vucic, M.M. Obradovic, Spectral correlation evaluation of MSK and offset QPSK modulation, Signal Processing 78 (3) (November 1999) 363–367.

[1403] D.Z. Vucic, M.M. Obradovic, Cyclic spectral analysis of phase-incoherent FSK signal by matrix-based stochastic method, Fifth International Conference on Telecommunications in Modern Satellite, Cable and Broadcasting Service, TELSIKS '01, Nis, Yugoslavia, vol. 1, 19–21 September 2001, pp. 267–270.

[1404] I. Vuorinen, T. Seppanen, J. Lilleberg, T. Kolehmainen, J. Roning, Adaptive filtering of cyclostationary interference from speech, Eighth IEEE International Conference on Electronics, Circuits and Systems, ICECS '01, Malta, vol. 3, 2–5 September 2001, pp. 1175–1178.

[1405] T. Wada, A study on the effect of turbo codes in cyclostationary Gaussian noise processes, IEICE Transactions E 86 (9) (2003) 2396–2404.

[1406] T. Wada, A study on performance of LDPC codes on power line communications, IEEE International Conference on Communications, Paris, France, vol. 1, 20–24 June 2004, pp. 109–113.

[1407] A. Walter, K. Eric, Q. Andre, OFDM parameters estimation a time approach, 34th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 1, 29 October–1 November 2000, pp. 142–146.

[1408] J. Wang, T. Chen, B. Huang, Closed-loop identification via output fast sampling, Journal of Process Control 14 (5) (August 2004) 555–570.

[1409] L. Wang, X. Shan, Y. Ren, A new synchronization algorithm for OFDM systems in multipath environment, Eighth International Conference on Communication Systems ICCS '02, Singapore, vol. 1, 25–28 November 2002, pp. 255–259.

[1410] L. Wang, X. Shan, Y. Ren, A new synchronization algorithm exploiting cyclostationarity for OFDM systems in multipath environment, IEICE Transactions on Communications 86 (8) (2003) 2389–2394.

[1411] W. Wang, M.G. Jafari, S. Sand, J.A. Chambers, Blind separation of convolutive mixtures of cyclostationary sources using an extended natural gradient method, Seventh International Symposium on Signal Processing and its Applications, ISSPA '03, Paris, France, vol. 2, 1–4 Jul. 2003, pp. 93–96.

[1412] W. Wang, M.G. Jafari, S. Sanei, J. Chambers, Blind source separation of convolutive mixtures of cyclostationary signals, in: IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '03, Hong Kong, April 2003, pp. 279–298.

[1413] W. Wang, M.G. Jafari, S. Sanei, J.A. Chambers, Blind separation of convolutive mixtures of cyclostationary signals, International Journal of Adaptive Control and Signal Processing 18 (3) (April 2004) 279–298.

[1414] Y. Wang, E. Serpedin, P. Ciblat, P. Loubaton, Performance analysis of blind carrier frequency offset and symbol timing delay estimators in flat-fading channels, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '01, Salt Lake City, UT, vol. 4, 7–11 May 2001, pp. 2321–2324.

[1415] Y. Wang, E. Serpedin, P. Ciblat, P. Loubaton, Blind cyclostationary statistics based carrier frequency offset and symbol timing delay estimators in flat-fading channels, IEEE Military Communications Conference, MILCOM '01, Washington DC, MD, vol. 2, 28–31 October 2001, pp. 1389–1393.

[1416] Y. Wang, E. Serpedin, P. Ciblat, P. Loubaton, Non-data aided feedforward cyclostationary statistics based carrier frequency offset estimators for linear modulations, IEEE Global Telecommunications Conference, GLOBECOM '01, San Antonio, TX, vol. 2, 25–29 November 2001, pp. 1386–1390.

[1417] Y. Wang, E. Serpedin, P. Ciblat, Optimal blind carrier synchronization for M-PSK burst transmissions, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '02, Orlando, FL, vol. 3, 13–17 May 2002, pp. 2441–2444.

[1418] Y. Wang, P. Ciblat, E. Serpedin, P. Loubaton, Performance analysis of a class of nondata-aided frequency offset and symbol timing estimators for flat-fading channels, IEEE Transactions on Signal Processing 50 (9) (September 2002) 2295–2305.

[1419] Y. Wang, E. Serpedin, P. Ciblat, Unified performance analysis of blind feedforward timing estimation, 36th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 1, 3–6 November 2002, pp. 639–643.

[1420] Y. Wang, E. Serpedin, P. Ciblat, An alternative blind feedforward symbol timing estimator using two samples per symbol, IEEE Transactions on Communications 51 (9) (September 2003) 1451–1455.

[1421] Y. Wang, E. Serpedin, P. Ciblat, Blind feedforward cyclostationarity-based timing estimation for linear modulations, IEEE Transactions on Wireless Communications 3 (3) (May 2004) 709–715.

[1422] Z. Wang, X. Yang, Ultra wide-band communications with blind channel estimation based on first-order statistics, Proceedings IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '04, Montreal, Quebec, Canada, vol. 4, 17–21 May 2004, pp. 529–532.

[1423] M. Wax, T. Kailath, Detection of signals by information theoretic criterion, IEEE Transactions on Acoustics, Speech and Signal Processing 33 (2) (April 1985) 387–392.

[1424] R. Weber, Spectral estimation of radio-sources corrupted by RFI, Ph.D. Thesis, Univ. Paris XI, Orsay, France, 1996.

[1425] R. Weber, C. Faye, Detecteur temps reel de signaux cyclostationnaires: Principe et implementation, in: Seizieme Colloque GRETSI sur le Traitment du Signal

et des Images, Grenoble, France, September 1997, pp. 1–5.

[1426] R. Weber, C. Faye, Real time detector for cyclostationary RFI in radio astronomy, in: European Signal Processing Conference, EUSIPCO '98, Rhodes, Greece, September 1998, pp. 1865–1868.

[1427] R. Weber, V. Clerc, L. Denis, C. Rosolen, Robust receiver for RFI mitigation in radio astronomy, in: 27th General Assembly of the International Union of Radio Science, URSI '02, Maastricht, Netherland, 17–24 August 2002.

[1428] M. Webster, N. Tepedelenlioglu, Frequency-domain techniques for the cyclostationary signals encountered in fractionally spaced equalizers, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '92, San Francisco, CA, vol. 4, 23–26 March 1992, pp. 705–708.

[1429] M. Webster, Polyspectra based, blind, MMSE, fractionally spaced equalization of a cyclostationary signal, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '93, Minneapolis, MN, vol. 4, 27–30 April 1993, pp. 276–279.

[1430] A.P. van der Wel, E.A.M. Klumperink, L.K.J. Vandamme, B. Nauta, Modeling random telegraph noise under switched bias conditions using cyclostationary RTS noise, IEEE Transactions on Electron Devices 50 (5) (May 2003) 1378–1384.

[1431] S. Wenndt, S. Shamsander, Speaker identification based on nonlinear speech models, 29th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 2, 30 October–2 November 1995, pp. 1031–1035.

[1432] F. Wenjiang, Y. Ping, Y. Shizhong, Blind parameter estimation on array antenna CDMA communication system, in: Third International Conference on Microwave and Millimeter Wave Technology, ICMMT '02, Beijing, China, 17–19 August 2002, pp. 681–684.

[1433] M. Wenzel, J. Schroter, D. Olbers, The annual cycle of the global ocean circulation as determined by 4D VAR data assimilation, Progress in Oceanography 48 (1) (2001) 73–119.

[1434] J.J. Werner, et al., Blind equalization for broadband access, IEEE Communications Magazine 37 (April 1999) 87–93.

[1435] A. Weron, A. Wylomanska, On ARMA(1,q) models with bounded and periodically correlated solutions, Tech. Rep. HSC/03/3, Wroclaw University of Technology, Wroclaw, Poland, 2003.

[1436] J. Whitehead, F. Takawira, Low complexity constant modulus based cyclic blind adaptive multiuser detection, 7th AFRICON Conference in Africa, AFRICON'04, Gaborone, Botswana, vol. 1, 15–17 September 2004, pp. 115–120.

[1437] M.C. Wichmann, K. Johst, K.A. Moloney, C. Wissel, F. Jeltsch, Extinction risk in periodically fluctuating environments, Ecological Modelling 167 (3) (15 September 2003) 221–231.

[1438] S.S.H. Wijayasuriya, P.G. Turner, G.H. Norton, J.P. NcGeehan, A novel interference rejection scheme for DS-CDMA using adaptive noise cancellation, International Conference on Computational Science, ICCS '94, Singapore, vol. 2, 14–18 November 1994, pp. 364–368.

[1439] J. Wilbur, R.J. McDonald, Nonlinear analysis of cyclically correlated spectral spreading in modulated signals, Journal of Accoustic Society of America 92 (July 1992) 219–230.

[1440] R.L. Williams, Time-sequenced adaptive filtering using a modified P-vector algorithm, SPIE '96, Advanced Signal Processing Algorithms, Architectures, and Implementations VI, Dever, CO, vol. 2846, October 1996, pp. 141–150.

[1441] D. Williamson, K. Kadiman, Cyclostationarity in the digital regulation of continuous time systems, in: C.I. Byrnes, A. Lindquist (Eds.), Frequency Domain and State Space Methods for Linear Systems, North-Holland, Amsterdam, 1986, pp. 297–309.

[1442] G.R. Wilson, K. Hardwicke, R. Trochta, Coherent harmonic detection using nonstationary higher order spectra, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '92, San Francisco, CA, vol. 5, March 1992, pp. 201–204.

[1443] G.R. Wilson, K. Baugh, Non-parametric detection of a class of cyclo-stationary signals in stationary colored non-Gaussian noise using non-stationary higher order spectra, Sixth IEEE Signal Processing Workshop on Statistical Signal and Array Processing, SSAP '92, Victoria, BC, Canada, 7–9 October 1992, pp. 202–205.

[1444] M.Z. Win, On the power spectral density of digital pulse streams generated by M-ary cyclostationary sequences in the presence of stationary timing jitter, IEEE Transactions on Communications 46 (9) (September 1998) 1135–1145.

[1445] V. Wirth, Detection of hidden regimes in stochastic cyclostationary time series, Physical Review E 64 (016136) (2001) 1–6.

[1446] H.J. Woerdeman, The Caratheodory–Toeplitz problem with partial data, Linear Algebra and its Applications 342 (1) (15 February 2002) 149–161.

[1447] H.-C. Won, G.-H. Im, Crosstalk equalization for high-speed digital transmission systems, IEICE Transactions E 86 (3) (2003) 1063–1072.

[1448] H.E. Wong, J.A. Chambers, Two-stage interference immune blind equaliser which exploits cyclostationary statistics, Electronics Letters 32 (19) (12 September 1996) 1763–1764.

[1449] H.-K. Wu, W.-H. Fang, M.-L. Wu, A cascaded constrained beamforming and multiuser detection using cyclostationarity, 55th IEEE Vehicular Technology Conference, VTC '02—Spring, Birmingham, AL, vol. 4, 6–9 May 2002, pp. 1921–1925.

[1450] Q. Wu, K.M. Wong, R. Ho, A fast algorithm for adaptive beamforming of cyclic signals, in: Fifth International Conference on Wireless Communications, Calgary, AB, Canada, July 1993, pp. 325–334.

[1451] Q. Wu, K.M. Wong, Adaptive beamforming of cyclic signal and fast implementation, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '94, Adelaide, Australia, vol. 4, 19–22 April 1994, pp. 157–160.

[1452] Q. Wu, K.M. Wong, R. Ho, Fast algorithm for adaptive beamforming of cyclic signals, Radar, Sonar and Navigation, IEE Proceedings 141 (6) (December 1994) 312–318.

[1453] Q. Wu, K.M. Wong, Blind adaptive beamforming for cyclostationary signals, IEEE Transactions on Signal Processing 44 (11) (November 1996) 2757–2767.

[1454] W.W. Wu, E.F. Miller, W.L. Pritchard, R.L. Pickholtz, Mobile satellite communications, Proceeding of IEEE 82 (9) (September 1994) 1431–1448.

[1455] P. van der Wurf, On the spectral density of a cyclostationary process, IEEE Transactions on Communications 22 (10) (October 1974) 1727–1730.

[1456] M.P. Wylie, S. Roy, Virtual array processing using wideband cyclostationary signals, 29th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 2, 30 October–2 November 1995, pp. 506–510.

[1457] J. Xavier, V.A.N. Barroso, J.M.F. Moura, Closed-form correlative coding (CFC2) blind identification of MIMO channels: isometry fitting to second order statistics, IEEE Transactions on Signal Processing 49 (5) (May 2001) 1073–1086.

[1458] Y. Xiang, W. Yu, H. Zheng, S. Nahavandi, Blind separation of cyclostationary signals from instantaneous mixtures, Fifth World Congress on Intelligent Control and Automation, WCICA'04, Hangzhou, China, vol. 1, 15–19 June 2004, pp. 309–312.

[1459] J. Xin, H. Tsuji, S. Yoshimoto, A. Sano, Minimum MSE-based detection of cyclostationary signals in array processing, First IEEE Signal Processing Workshop on Signal Processing Advances in Wireless Communications, SPAWC '97, Paris, France, 16–18 April 1997, pp. 169–172.

[1460] J. Xin, H. Tsuji, Y. Hase, A. Sano, Array beamforming based on cyclic signal detection, 48th IEEE Vehicular Technology Conference, VTC '98, Ottawa, Canada, vol. 2, 18–21 May 1998, pp. 890–894.

[1461] J. Xin, H. Tsuji, Y. Hase, A. Sano, Directions-of-arrival estimation of cyclostationary coherent signals in array processing, Ninth European Signal Processing Conference, EUSIPCO '98, Rhodes, Greece, vol. 3, September 1998, pp. 1781–1784.

[1462] J. Xin, H. Tsuji, Y. Hase, A. Sano, Directions-of-arrival estimation of cyclostationary coherent signals in array processing, IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences 81 (8) (1998) 1560–1569.

[1463] J. Xin, H. Tsuji, A. Sano, Higher-order cyclostationarity based direction finding of coherent sources, Second IEEE Workshop on Signal Processing Advances in Wireless Communications, SPAWC '99, Annapolis, MD, 9–12 May 1999, pp. 358–361.

[1464] J. Xin, H. Tsuji, A. Sano, Higher-order cyclostationarity based direction estimation of coherent narrow-band signals, IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences 83 (8) (2000) 1624–1633.

[1465] J. Xin, H. Tsuji, H. Ohmori, A. Sano, Directions-of-arrival tracking of coherent cyclostationary signals without eigendecomposition, Third IEEE Workshop on Signal Processing Advances in Wireless Communications, SPAWC '01, Taiwan, China, 20–23 March 2001, pp. 318–321.

[1466] J. Xin, A. Sane, Linear prediction approach to direction estimation of cyclostationary signals in multipath environment, IEEE Transactions on Signal Processing 49 (4) (April 2001) 710–720.

[1467] J. Xin, A. Sano, Directions-of-arrival estimation of cyclostationary signals in multipath propagation environment, 11th IEEE Signal Processing Workshop on Statistical Signal Processing, Singapore, 6–8 August 2001, pp. 524–527.

[1468] J. Xin, A. Sano, Effect of subarray size on direction estimation of coherent cyclostationary signals based on forward-backward linear prediction, IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences 85 (8) (2002) 1807–1821.

[1469] J. Xin, A. Sano, Directions-of-arrival tracking of coherent cyclostationary signals in array processing, IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences 86 (8) (2003) 2037–2046.

[1470] G. Xu, T. Kailath, A new array signal processing method via exploitation of cyclostationarity, Fifth ASSP Workshop on Spectrum Estimation and Modeling, Rochester, NY, 10–12 October 1990, pp. 94–98.

[1471] G. Xu, T. Kailath, Direction-of-arrival estimation via exploitation of cyclostationary—a combination of temporal and spatial processing, IEEE Transactions on Signal Processing 40 (7) (July 1992) 1775–1786.

[1472] Z. Xu, P. Shi, TDOA estimation algorithm for cyclostationary signals in multipath environments, Electronics Letters 39 (5) (6 March 2003) 474–475.

[1473] H. Xuejun, B. Houjie, Blind channel identification and equalization in OFDM system without cyclic prefix, International Conference on Communication Technology, ICCT '03, Beijing, China, vol. 2, 9–11 April 2003, pp. 1919–1921.

[1474] A.M. Yaglom, Correlation Theory of Stationary and Related Random Functions, Springer, New York, NY, 1987.

[1475] H. Yan, H.H. Fan, DOA estimation for wideband cyclostationary signals under multipath environment, Proceedings IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '04, Montreal, Que., Canada, vol. 2, 17–21 May 2004, pp. 77–80.

[1477] Y. Yan, Z. Liu, A new blind signature waveform estimation approach in antenna array CDMA systems, IEEE International Symposium on Circuits and Systems, ISCAS '02, Phoenix, AZ, vol. 1, 26–29 May 2002, pp. 681–684.

[1478] B. Yang, J. Phillips, A multi-interval Chebyshev collocation method for efficient high-accuracy RF circuit simulation, in: 37th Conference on Design Automation, Los Angeles, CA, June 2000, pp. 178–183.

[1479] B. Yang, D. Feng, Efficient finite-difference method for quasi-periodic steady-state and small signal analyses, in: IEEE/ACM International Conference on Computer-Aided Design, ICCAD '00, San Jose, CA, November 2000, pp. 272–276.

[1480] B. Yang, J. Phillips, Advanced simulation techniques: time-domain steady-state simulation of frequency-dependent components using multi-interval Chebyshev method, in: 39th Conference on Design Automation, CDA '02, New Orleans, LA, June 2002, pp. 504–509.

[1481] J. Yang, S. Roy, On joint transmitter and receiver optimization for multiple-input-multiple-output (MIMO) transmission systems, IEEE Transactions on Communications 42 (11) (December 1994) 3221–3231.

[1482] K. Yang, A.S. Madhukumar, A two-dimensional multipath channel estimator for CDMA systems with timing-offset errors, IEEE Communications Letters 8 (6) (June 2004) 333–335.

[1483] L. Yang, Z. Tian, G.B. Giannakis, Non-data aided timing acquisition of ultra-wideband transmissions using cyclostationarity, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '03, Hong Kong, vol. 4, 6–10 April 2003, pp. 121–124.

[1484] L.T. Yang, Parallel Jacobi–Davidson method for multichannel blind equalization criterium, IEEE Region 10 Conference on Speech and Image Technologies for Computing and Telecommunications, TENCON '97, Brisbane, Australia, vol. 2, 2–4 December 1997, pp. 847–850.

[1485] L.T. Yang, Parallel Jacobi–Davidson method for multichannel blind equalization criterium, in: International Conference on Parallel Computing in Electrical Engineering, PARELEC '00, Trois-Rivieres, QC, Canada, 27–30 August 2000, pp. 67–72.

[1486] T. Yang, Analysis of cyclic spectral correlation and design of time-dependent adaptive filters for practical nonlinear communication channels, Ph.D. Thesis, University of California, Davis, CA, March 1992.

[1487] T. Yang, J.H. Reed, T.C. Hsia, Spectral correlation of BPSK and QPSK signals in a nonlinear channel with AM/AM and AM/PM conversion, IEEE International Conference on Communications, ICC '92, Chicago, IL, vol. 323, 1992, pp. 1–6.

[1488] M. Yao, L. Jin, Q. Yin, A novel approach for DOA estimation of cyclostationary signals based on improved array geometry, in: Midwest Symposium on Circuits and Systems, MWSCAS '98, Notre Dame, IN, 9–12 August 1998, pp. 612–615.

[1489] M. Yao, L. Jin, Q. Yin, Selective direction finding for cyclostationary signals by exploitation of new array configuration, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '99, Phoenix, AZ, vol. 5, 15–19 March 1999, pp. 2885–2888.

[1490] M. Yao, Y. Wang, Q. Yin, Direction finding for multiuser correlated signals based on spatial signature estimation in cyclic cumulant domain, IEEE International Symposium on Circuits and Systems ISCAS '99, Orlando, FL, vol. 4, 30 May–2 June 1999, pp. 443–446.

[1491] M. Yao, Q. Yin, Signal selective 2-D direction finding for non-Gaussian cyclostationary sources, IEEE International Symposium on Circuits and Systems, ISCAS '99, Orlando, FL, vol. 4, 30 May–2 June 1999, pp. 451–454.

[1492] S. Yatawatta, A.P. Petropulu, R. Dattani, Blind estimation of band limited channels: a low complexity approach, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '03, Hong Kong, vol. 6, 6–10 April 2003, pp. 293–296.

[1493] S. Yatawatta, A.P. Petropulu, R. Dattani, Blind channel estimation using fractional sampling, IEEE Transactions on Vehicular Technology 53 (2) (March 2004) 363–371.

[1494] I.N. Yavorsky, The statistical analysis of periodically correlated random processes, Radiotekhnika i Elektronika 30 (6) (1985) 1096–1104 (in Russian).

[1495] I.N. Yavorsky, Component estimates of the probability characteristics of periodic correlated random processes, Soviet Journal of Automation and Information Sciences 19 (4) (1986) 44–49.

[1496] I.N. Yavorsky, Statistical analysis of periodically correlated vector random processes, Otbor i Peredacha Informatsii 76 (1987) 3–12 (in Russian).

[1497] I.N. Yavorsky, Statistical analysis of poly- and almost periodically correlated random processes, Otbor i Obrabotka Informatsii 3 (79) (1989) 1–10 (in Russian).

[1498] I.N. Yavorsky, V. Mykhailyshyn, Probabilistic models and investigation of hidden periodicities, Applied Mathematics Letters 9 (2) (March 1996) 21–23.

[1499] I.N. Yavorsky, V. Mykhajlyshyn, Probabilistic analysis of electromagnetic phenomena with stochastic periodicity, in: Sixth International Conference on Mathematical Methods in Electromagnetic Theory, Lviv, Ukraine, 10–13 September 1996, pp. 252–255.

[1500] I.N. Yavorsky, V. Mykhajlyshyn, Detecting hidden periodicity of time-series generated by nonlinear processes in magneto-plasma, in: Sixth International Conference on Mathematical Methods in Electromagnetic Theory, Lviv, Ukraine, 10–13 September 1996, pp. 397–400.

[1501] I.N. Yavorsky, V. Mykhailyshyn, O. Zabolotnyj, Least squares method for statistical analysis of polyrhythmics, Applied Mathematics Letters 16 (8) (November 2003) 1217–1222.

[1502] G.K. Yeung, W.A. Gardner, Search-efficient methods of detection of cyclostationary signals, IEEE Transactions on Signal Processing 44 (5) (May 1996) 1214–1223.

[1503] M. Yi, P. Wei, X.-C. Xiao, H.-M. Tai, Delay and Doppler estimation using cyclostationarity based cross correlation in a multipath environment, 45th Midwest Symposium on Circuits and Systems, MWSCAS '02, Tulsa, OK, vol. 2, 4–7 August 2002, pp. 426–428.

[1504] Q. Yin, M. Yao, Spatial signature estimation in cyclic cumulant domain and multiuser signal separation in uplink SDMA, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '99, Phoenix, AZ, vol. 5, 15–19 March 1999, pp. 2861–2864.

[1505] L. Ying, W. Shuxun, L. Yingchang, L. Zhongxia, Multipath time delay estimation with unknown spatially correlated noise and multiple access interference using cyclic statistics, 40th IEEE Conference on Decision and Control, IDC '01, Orlando, FL, vol. 4, 4–7 December 2001, pp. 3338–3343.

[1506] P.C. Yip, Y. Zhou, A self-calibration algorithm for cyclostationary signals and its uniqueness analysis, International Conference on Acoustics, Speech, and Signal Processing, ICASSP '95, Detroit, MI, vol. 3, 9–12 May 1995, pp. 1892–1895.

[1507] G. Yong, X.C. Xiao, H.Y. Tang, Estimation of cycle frequency for multiple cyclostationary signals, Fourth International Conference on Signal Processing, ICSP '98, Beijing, China, vol. 1, 12–16 October 1998, pp. 331–334.

[1508] J.R. Yoo, LPI waveform shaping by modified chirp filter, IEEE Military Communications Conference, MILCOM '92, San Diego, CA, vol. 3, 11–14 October 1992, pp. 1231–1235.

[1509] Y.K. Yoon, H.S. Lee, Frequency and phase estimation for single sinusoid using cyclic autocorrelation, IEICE Transactions 81 (3) (1998) 689–693.

[1510] Y.C. Yoon, H. Leib, Chip-delay locked matched filter for DS-CDMA systems using long sequence spreading, IEEE Transactions on Communications 49 (8) (August 2001) 1468–1478.

[1511] S.-J. Yu, J.-H. Lee, Real-time algorithm for adaptive beamforming using cyclic signals, Antennas and Propagation Society International Symposium, AP-S '95, Newport Beach, CA, vol. 1, 18–23 June 1995, pp. 435–438.

[1512] S.-J. Yu, J.-H. Lee, Adaptive array beamforming for cyclostationary signals, IEEE Transactions on Antennas and Propagation 44 (7) (July 1996) 943–953.

[1513] S.-J. Yu, F.-B. Ueng, Implementation of cyclostationary signal-based adaptive arrays, Signal Processing 80 (10) (October 2000) 2249–2254.

[1514] S.-J. Yu, F.-B. Ueng, Blind adaptive beamforming based on generalized sidelobe canceller, Signal Processing 80 (12) (December 2000) 2497–2506.

[1515] S.-J. Yu, Direct blind channel equalization via the programmable canonical correlation analysis, Signal Processing 81 (8) (August 2001) 1715–1724.

[1516] M. Yuan, M. Zhao, S. Li, P. Qiu, Blind frequency offset recovery in fading channels, 55th IEEE Vehicular Technology Conference, VTC '02—Spring, Birmingham, AL, vol. 3, 6–9 May 2002, pp. 1313–1316.

[1517] O.V. Zabolotny, V.Y. Mikhauilishin, I.N. Yavorsky, The least squares method in the statistical analysis of polyrhythms, Dopovidi Nats. Akademi Nauk Ukr. Mat. Prirodozn. Tekh. Nauki 8 (2000) 93–101 (in Ukrainian).

[1518] Z. Zalevsky, D. Mendlovic, G. Shabtay, A.W. Lohmann, Pulse amplitude modulation masks for incoherent super resolution, Optics Communications 177 (1–6) (15 April 2000) 149–155.

[1519] A. Zali, F. Hendessi, Cyclostationary based interference cancellation in long code DS/CDMA systems, Fourth IEEE Workshop on Mobile and Wireless Communications Networks, Stockholm, Sweden, 9–11 September 2002, pp. 115–118.

[1520] S. Zazo, J.M. Paez-Borrallo, A new multichannel blind equalization criterium based on a generalized Rayleigh quotient, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '97, Munich, Germany, vol. 5, 21–24 April 1997, pp. 3457–3460.

[1521] S. Zazo, J.M. Paez-Borrallo, A new pencil criterium for multichannel blind deconvolution in data communication systems, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '98, Seattle, WA, vol. 4, 12–15 May 1998, pp. 2361–2364.

[1522] J. Zeeberg, S.L. Forman, Changes in glacier extent on north Novaya Zemlya in the twentieth century, The Holocene 11 (2) (March 2001) 161–175.

[1523] S. Zeng, H.H. Zeng, L. Tong, Blind channel equalization via multiobjective optimization, Eighth IEEE Signal Processing Workshop on Statistical Signal and Array Processing, Corfu, Greece, 24–26 June 1996, pp. 160–163.

[1524] S. Zeng, H.H. Zeng, L. Tong, Blind equalization using CMA: performance analysis and a new algorithm, IEEE International Conference on Communications, ICC '96, Dallas, TX, vol. 2, 23–27 June 1996, pp. 847–851.

[1525] H. Zhang, Maximum entropy modeling of periodically correlated processes, IEEE Transactions on Information Theory 43 (6) (November 1997) 2033–2035.

[1526] J. Zhang, K.M. Wong, Q. Jin, Q. Wu, A new kind of adaptive frequency shift filter, International Conference on Acoustics, Speech, and Signal Processing, ICASSP '95, Detroit, MI, vol. 2, 9–12 May 1995, pp. 913–916.

[1527] J. Zhang, K.M. Wong, Z.Q. Luo, A generalized structure of blind adaptive frequency-shift filter for signal extraction, IEEE International Symposium on Circuits and Systems, ISCAS '97, Hong Kong, vol. 2, 9–12 June 1997, pp. 1197–1200.

[1528] J. Zhang, K.M. Wong, Z.Q. Luo, P.C. Ching, Blind adaptive FRESH filtering for signal extraction, IEEE Transactions on Signal Processing 47 (5) (May 1999) 1397–1402.

[1529] X.-D. Zhang, X.-N. Hong, B.-X. Gao, Accurate Fourier transform method for almost-periodic response

simulation of microwave nonlinear circuits, Electronics Letters 25 (6) (6 March 1989) 404–406.

[1530] Y. Zhang, S. Wang, New signal-selective parameter estimation approach to time-delay estimation, SPIE '98, Radar Processing, Technology, and Applications III, vol. 3462, October 1998, pp. 341–347.

[1531] Y. Zhang, K. Yang, Y. Karasawa, Subband CMA adaptive arrays in multipath fading environment, Electronics and Communications in Japan (Part I: Communications) 83 (11) (November 2000) 43–54.

[1532] Y. Zhang, M.G. Amin, G.J. Frazer, A new approach to FM jammer suppression for digital communications, IEEE Sensor Array and Multichannel Signal Processing Workshop, Rosslyn, VA, 4–6 August 2002, pp. 264–268.

[1533] Y. Zhang, C.-M. Wang, L.M. Collins, Adaptive time delay estimation method with signal selectivity, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '02, Orlando, FL, vol. 2, 2002, pp. 1477–1480.

[1534] Z. Zhang, L. Li, X. Xiao, Carrier frequency and chip rate estimation based on cyclic spectral density of MPSK signals, International Conference on Communications, Circuits and Systems, ICCCAS'04, Chengdu, China, vol. 2, 27–29 June 2004, pp. 859–862.

[1535] T. Zhi, L. Yang, G.B. Giannakis, Symbol timing estimation in ultra wideband communications, 36th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 2, 3–6 November 2002, pp. 1924–1928.

[1536] G.T. Zhou, Amplitude modulated time-series, higher-order statistics, and cyclostationarity, Master's Thesis, University of Virginia, Charlottesville, VA, January 1993.

[1537] G.T. Zhou, G.B. Giannakis, Comparison of higher-order and cyclic approaches for estimating random amplitude modulated harmonics, IEEE Signal Processing Workshop on Higher-Order Statistics, Minneapolis, MN, 7–9 June 1993, pp. 225–229.

[1538] G.T. Zhou, G.B. Giannakis, Estimating coupled harmonics in additive and multiplicative noise, in: 27th IEEE Asilomar Conference on Signals, Systems, and Computers, Pacific Grove, CA, November 1993, pp. 1250–1254.

[1539] G.T. Zhou, G.B. Giannakis, Harmonics in multiplicative and additive noise: performance analysis of cyclic estimators, in: 28th Conference on Information Sciences and Systems, CISS '94, Princeton, NJ, 16–18 March 1994, pp. 915–919.

[1540] G.T. Zhou, G.B. Giannakis, Self coupled harmonics: stationary and cyclostationary approaches, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '94, Adelaide, Australia, vol. 4, 19–22 April 1994, pp. 153–156.

[1541] G.T. Zhou, G.B. Giannakis, Fourier series polyspectra and cyclostationarity: coupled and uncoupled harmonics in multiplicative and additive noise, Tech. Rep. UVA/192444B/EE94/135, University of Virginia, Charlottesville, VA, April 1994.

[1542] G.T. Zhou, G.B. Giannakis, On damped harmonics and polynomial phase signals, Conference on Advanced Signal Processing Algorithms, Architectures and Implementations, SPIE '94, San Diego, CA, vol. 2296, July 1994, pp. 213–224.

[1543] G.T. Zhou, G.B. Giannakis, Parameter estimation of FM signals using cyclic statistics, in: IEEE Signal Processing International Symposium on Time-Frequency and Time-Scale Analysis, Philadelphia, PA, 25–28 October 1994, pp. 248–251.

[1544] G.T. Zhou, G.B. Giannakis, On estimating random amplitude modulated harmonics using higher-order spectra, IEEE Journal of Oceanic Engineering 19 (4) (October 1994) 529–539.

[1545] G.T. Zhou, Random amplitude and polynomial phase modeling of nonstationary processes using higher-order and cyclic statistics, Ph.D. Thesis, University of Virginia, Charlottesville, VA, January 1995.

[1546] G.T. Zhou, G.B. Giannakis, Performance analysis of cyclic time-delay estimation algorithms, in: 29th Conference on Information Sciences and Systems, CISS '95, Baltimore, MD, 22–24 March 1995, pp. 780–785.

[1547] G.T. Zhou, G.B. Giannakis, Harmonics in Gaussian multiplicative and additive noise: Cramer–Rao bounds, IEEE Transactions on Signal Processing 43 (May 1995) 1217–1231.

[1548] G.T. Zhou, G.B. Giannakis, Harmonics in multiplicative and additive noise: performance analysis of cyclic estimators, IEEE Transactions on Signal Processing 43 (6) (June 1995) 1445–1460.

[1549] G.T. Zhou, G.B. Giannakis, Retrieval of self coupled harmonics, IEEE Transactions on Signal Processing 43 (1995) 1173–1186.

[1550] G.T. Zhou, G.B. Giannakis, Polyspectral analysis of mixed processes and coupled harmonics, IEEE Transactions on Information Theory 42 (3) (May 1996) 943–958.

[1551] G.T. Zhou, Y. Kim, Harmonic retrieval in nonstationary noise, IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP '99, Phoenix, AZ, vol. 3, 15–19 March 1999, pp. 1585–1588.

[1552] G.T. Zhou, M. Viberg, T. McKelvey, A first-order statistical method for channel estimation, IEEE Signal Processing Letters 10 (3) (March 2003) 57–60.

[1553] L. Zhu, J. Vlach, J. Valsa, Accelerated almost periodic steady state of switched networks, IEEE International Symposium on Circuits and Systems, ISCAS '96, Atlanta, GA, vol. 4, 12–15 May 1996, pp. 624–627.

[1554] Z.K. Zhu, Z.H. Feng, F.R. Kong, Cyclostationarity analysis for gearbox condition monitoring, Mechanical Systems and Signal Processing 19 (3) (1 May 2005) 467–482.

[1555] J. Zhuo, C. Sun, Simultaneous estimation of source number and directions-of-arrival via blind beamforming, Acoustical Science and Technology 25 (1) (2004) 24–29.

[1556] G.D. Zivanovic, W.A. Gardner, Degrees of cyclostationarity and their applications to signal detection and estimation, Signal Processing 22 (3) (March 1991) 287–297.
[1557] G.D. Zivanovic, Some aspects of the higher-order cyclostationary theory, International Conference on Acoustics, Speech, and Signal Processing, ICASSP '91, Toronto, ON, Canada, vol. 5, 14–17 April 1991, pp. 3497–3500.
[1558] G.D. Zivanovic, Instantaneous frequency and its periodicity for cyclostationary time-series, International Conference on Acoustics, Speech, and Signal Processing, ICASP '91, Toronto, ON, Canada, vol. 5, 14–17 April 1991, pp. 3721–3724.
[1559] G.D. Zivanovic, On the instantaneous frequency of cyclostationary random signal, IEEE Transactions on Signal Processing 39 (7) (July 1991) 1604–1610.

Further reading

[13] S.S. Abeysekera, P.K.S. Ong, Performance evaluation of blind channel estimation using a frequency domain baseband communication model, Eleventh IEEE Signal Processing Workshop on Statistical Signal Processing, 6–8 August 2001, pp. 556–558.
[271] J. Cui, D.D. Falconer, A.U.H. Sheikh, A PHASE algorithm for blind adaptive optimum diversity combining, 45th IEEE Vehicular Technology Conference, Chicago, IL, vol. 1, 25–28 July 1995, pp. 414–418.
[309] D. Dehay, Estimation de parametres fonctionnels spectraux de certains processus non-necessairement stationnaires, Comtes Rendus de l'Academie des Sciences 314 (4) (1992) 313–316 (in French).
[561] J. Goette, C.-A. Gobet, Exact noise analysis of SC circuits and an approximate computer implementation, IEEE Transactions on Circuits and Systems 36 (4) (April 1989) 508–521.
[575] M. Gouda, E.R. Adams, P.C.J. Hill, Detection and discrimination of covert DS/SS signals using triple correlation, 15th National Radio Science Conference, NRSC '98, Helwan, Cairo, Egypt, vol. C35, 24–26 February 1998, pp. 1–6.
[590] S. Guss, Cyclo-stationary maximum cross-covariance analysis for exogenously forced environmental systems, Environmental and Ecological Statistics 7 (4) (December 2000) 385–404.
[767] M.F. Kahn, M.A. Mow, W.A. Gardner, T.E. Biedka, A recursive programmable canonical correlation analyzer, Second Workshop on Cyclostationary Signals, Monterey, CA, August 1994.
[768] M.F. Kahn, W.A. Gardner, M.A. Mow, Programmable canonical correlation analyzers with recursion and feedback, 29th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 1, 30 October–2 November 1995, pp. 351–356.
[794] K.-Y. Kim, Investigation of ENSO variability using cyclostationary EOFs of observational data, Meteorology and Atmospheric Physics 81 (3) (2002) 149–168.
[1032] V.A. Omelchenko, Y.P. Dragan, O.A. Kolesnikov, Recognition of Gaussian periodically correlated random signals. I, Radiotekhnika 85 (1988) 75–79 (in Russian).
[1033] V.A. Omelchenko, Y.P. Dragan, O.A. Kolesnikov, Recognition of Gaussian periodically correlated random signals. II, Radiotekhnika 91 (1989) 42–49 (in Russian).
[1057] A. Papoulis, Random modulation: a review, IEEE Transactions on Acoustics, Speech, and Signal Processing 31 (1) (February 1983) 96–105.
[1308] C.W. Therrien, Issues in multirate statistical signal processing, 35th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, vol. 1, 4–7 November 2001, pp. 573–576.
[1476] R. Yan, R.X. Gao, Machine health diagnosis based on approximate entropy, Proceedings of the 21st IEEE Instrumentation and Measurement Technology Conference, IMTC'04, Como, Italy, vol. 3, 18–20 May 2004, pp. 2054–2059.