

Description of Additional Supplementary Files

File Name: Supplementary Movie 1

Description: in-plane breathing of the benzo[1,2-b;4,5-b']dithiophene donor unit

File Name: Supplementary Movie 2

Description: out-of-plane vibration of the 3-fluorothieno[3,4-b]thiophene donor unit

File Name: Supplementary Movie 3:

Description: out-of-plane vibration of the 3-fluorothieno[3,4-b]thiophene donor unit