

Description of Additional Supplementary Files

File Name: Supplementary Movie 1

Description: The recording of the fracture processes and digital image correlation (DIC) analyses of the 3D and 2D damage-programmable (DP) specimens.

File Name: Supplementary Movie 2

Description: The recording of the fracture processes, normalized fracture load-displacement curves, and digital image correlation (DIC) analyses of the conventional comparison specimen and specimen with damage-programmable (DP) metamaterials with combined crack resistances.