

Description of Additional Supplementary Files

File Name: Supplementary Movie 1

Description: (MXeneTAEA)20 on PET film under bending and twisting conditions connected into a circuit lighting up a LED.

File Name: Supplementary Movie 2

Description: (MXeneTAEA)30 on nonwoven under extreme knotted conditions connected into a circuit lighting up a LED.

File Name: Supplementary Movie 3

Description: The reversible compressing of (MXeneTAEA)10 on melamine resin.