Supporting information

Ultraflexible and mechanically strong polymer/polyaniline conductive interpenetrating nanocomposite via in situ polymerization of vinyl monomer

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Table S1 Performance comparison for polyaniline composites reported in this work and literatures

Materials	Electrical conductivity(S/cm)	Tensile strength (MPa)	Refs.
Nanostructured polyaniline-clay composite/Polystyrene	0.00076	70.6	[1]
Polyaniline/Polyacrylate	0.10	3.31	[2]
Polyethylene terephthalate/polyaniline	0.76	-	[3]
Polyaniline-clay nanocomposite/3-pentadecyl phenol 4-sulphonic acid	0.63	17.2	[4]
GPANI-PMB	2.8	43.54	This work

Table S2 Resistivity of nanocomposite films measured by four probe technique under different bending conditions

Folding times / Samples	0	20	40	60	80	100	120	140	160	180	200
GPANI-PMB1	0.529	0.532	0.538	0.538	0.541	0.543	0.543	0.546	0.550	0.552	0.555
GPANI-PMB2	0.476	0.478	0.481	0.483	0.483	0.485	0.488	0.488	0.490	0.490	0.493
GPANI-PMB3	0.357	0.358	0.358	0.360	0.361	0.361	0.362	0.364	0.364	0.365	0.366
GPANI-PMB4	0.452	0.455	0.457	0.459	0.459	0.461	0.463	0.467	0.470	0.470	0.472
GPANI-PMB5	0.559	0.562	0.565	0.568	0.568	0.571	0.578	0.581	0.581	0.588	0.592
GPANI/PMB3	166.7	166.7	169.5	175.4	178.6	188.7	204.1	222.2	250	263.2	277.8

References

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