Electronic Supplementary Material (ESI) for RSC Advances.

Supplementary Information

Enhanced electrical conductivity of poly(methyl methacrylate) -*quasi-block*-polystyrene /multiwalled carbon nanotubes composite with an optimized double percolation mechanism

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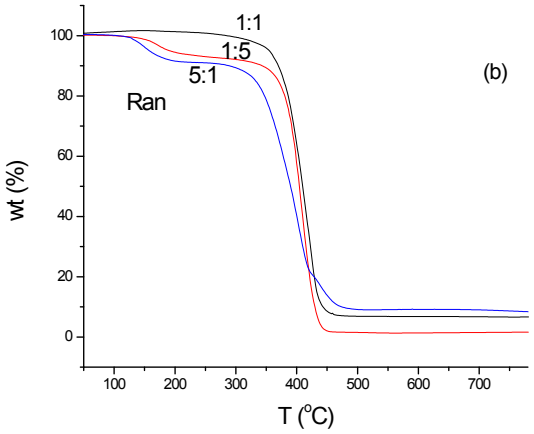
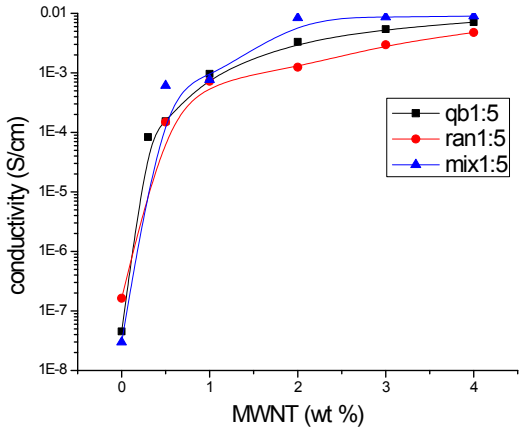
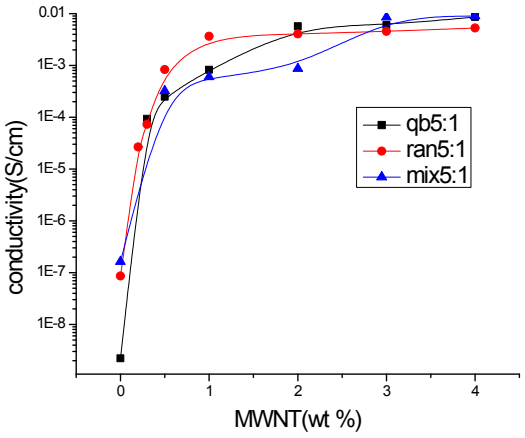


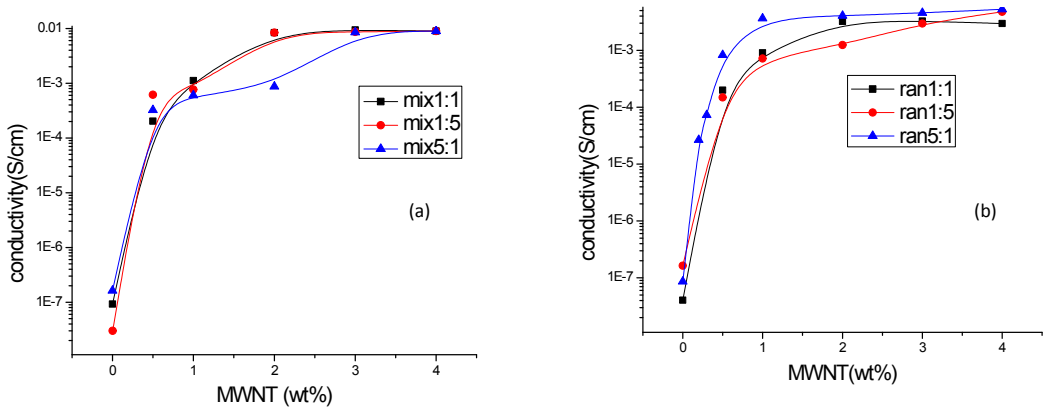
SI Fig.1 Thermal gravity analysis of random copolymer at weight ratio (MMA: St) of 5:1, 1:1, 1:5



SI Fig.2 Dependence of sheet conductivity on MWNTs fillers weight fraction.at weight ratio (MMA: St) of 1:5

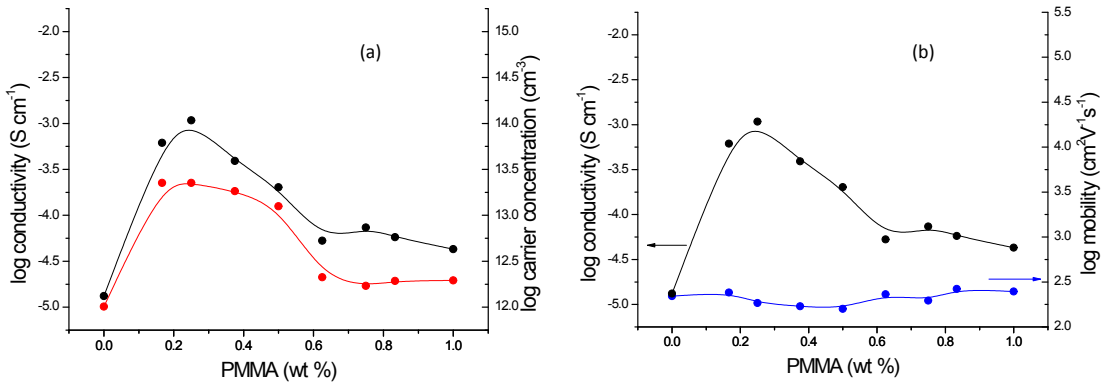


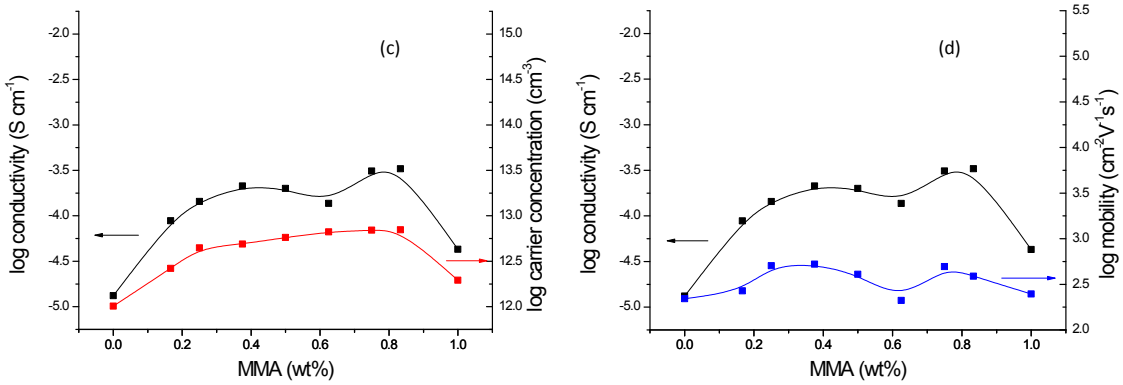
SI Fig.3 Dependence of sheet conductivity on MWNTs fillers weight fraction.at weight ratio (MMA: St) of 5:1



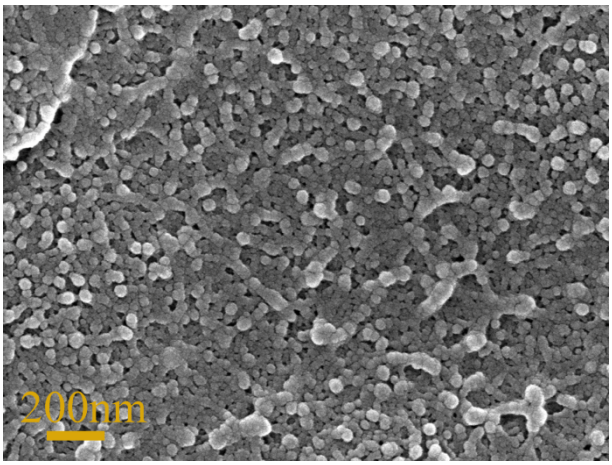
SI Fig.4 Dependence of sheet conductivity on MWNTs fillers weight fraction:

(a)mix1:1, mix1:5, mix5:1; (b)ran1:1, ran1:5, ran5:1





SI Fig. 5 Comparison of (a) carrier concentration (red) and sheet conductivity; (b) Comparison of mobility (blue) and sheet conductivity blends/MWNTs composites; (c) carrier concentration (red) and sheet conductivity; (d) Comparison of mobility (blue) and sheet conductivity of random copolymer/MWNTs composites



SI Fig. 6 SEM of cross-section of 0.5% qb1:1,

SI Table 1 Main peak positions (cm^{-1}) of Phenyl groups from FTIR spectra of 1%qb1:1, 1%mix1:1, 1% ran1:1

PS	1493	1600		1670
1%mix1:1	1488	1610	1541	1692
1%rand1:1	1489	1607	1540	1681
1%qb1:1	1489	1605	1543	1680