

**Enhanced dielectric performance of PDMS-based  
three-phase percolative nanocomposite films  
incorporated with high dielectric constant ceramic  
and conductive multi-walled carbon nanotubes**

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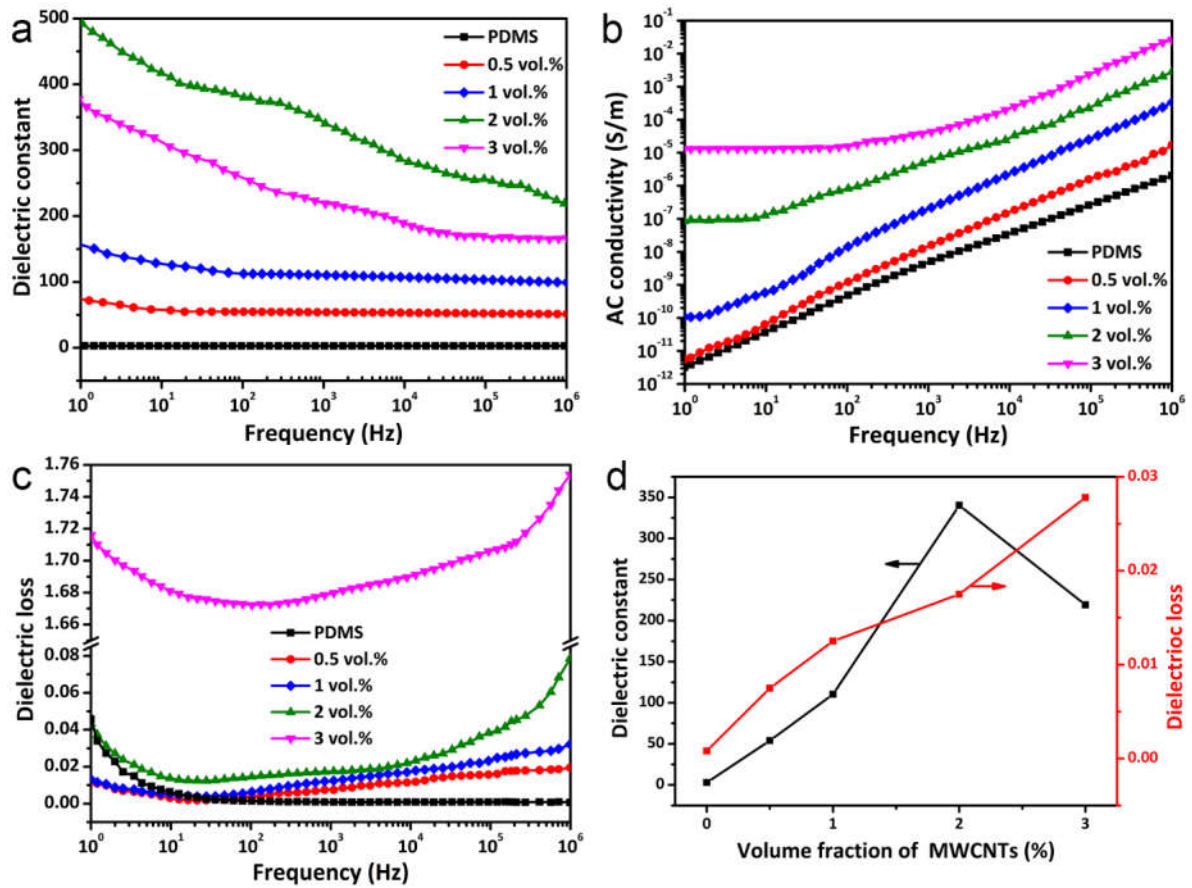


Fig. S1 (a) Dielectric constant, (b) conductivity and (c) dielectric loss as a function of frequency for pure PDMS and MWCNTs/PDMS films with various amounts of MWCNTs at room temperature, (d) dielectric constant and dielectric loss as a function of volume fraction of MWCNTs at 1 kHz and room temperature.

**Table S1** The dielectric and mechanical properties of pure PDMS and CCTO@MWCNTs/PDMS (10 vol.% CCTO) with various amounts of MWCNTs.

Sample	$\epsilon$	$E_b$ (kV mm <sup>-1</sup> )	Young' s modulus (MPa)	Tensile strength (MPa)	Breaking elongation (%)
Pure PDMS	2.93	65.3 ± 0.6	0.70 ± 0.009	0.37 ± 0.016	255 ± 5
0.5 vol.%	96.5	57.0 ± 1.3	0.85 ± 0.013	0.47 ± 0.012	242 ± 9
1 vol.%	138	55.7 ± 1.4	0.95 ± 0.012	0.69 ± 0.023	222 ± 9
2 vol.%	308	52.8 ± 1.0	1.06 ± 0.008	1.07 ± 0.016	179 ± 8
2.3 vol.%	419	52.1 ± 0.6	1.08 ± 0.010	1.08 ± 0.013	162 ± 11
3 vol.%	699	50.7 ± 1.1	1.12 ± 0.012	1.12 ± 0.021	134 ± 7
4 vol.%	2133	47.1 ± 0.8	1.16 ± 0.011	0.83 ± 0.013	93 ± 5