

Supplementary Martials

Structural Design of Three-Dimensional Graphene/Nano fillers (Al_2O_3 , BN or TiO_2) Resins and Its Application on Electrically Conductive Adhesives

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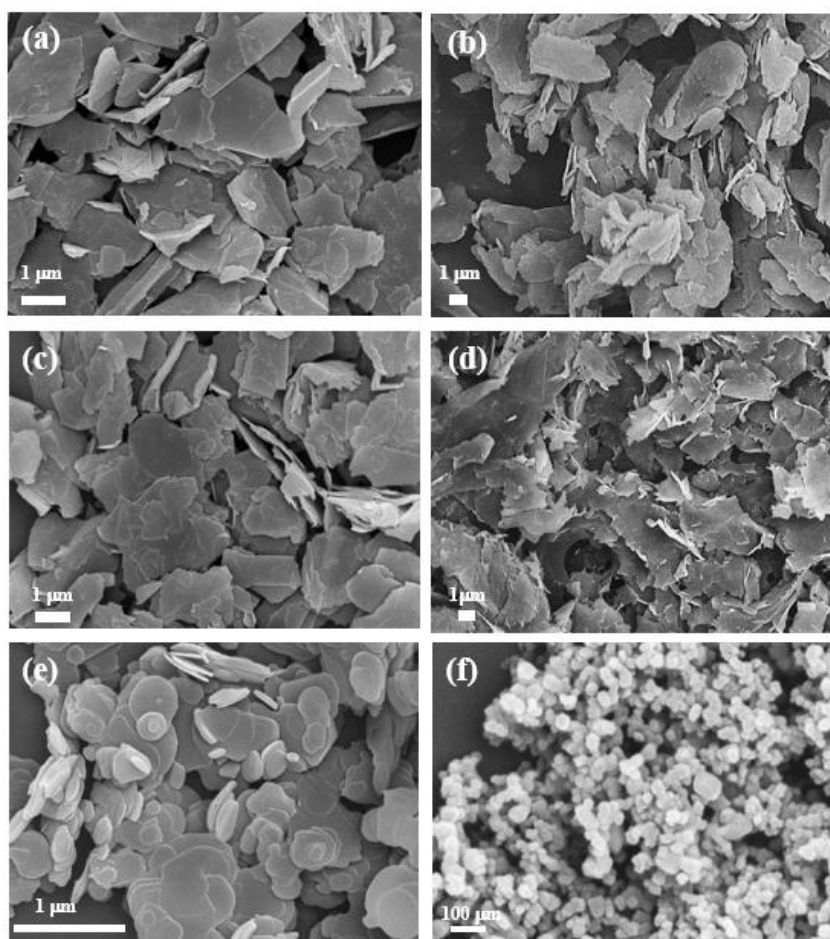


Fig. S1 SEM images of (a) KS-6, (b) 8 μm , (c) MoKS-6, (d) Mo8 μm , (e) BN and (f) TiO_2 .

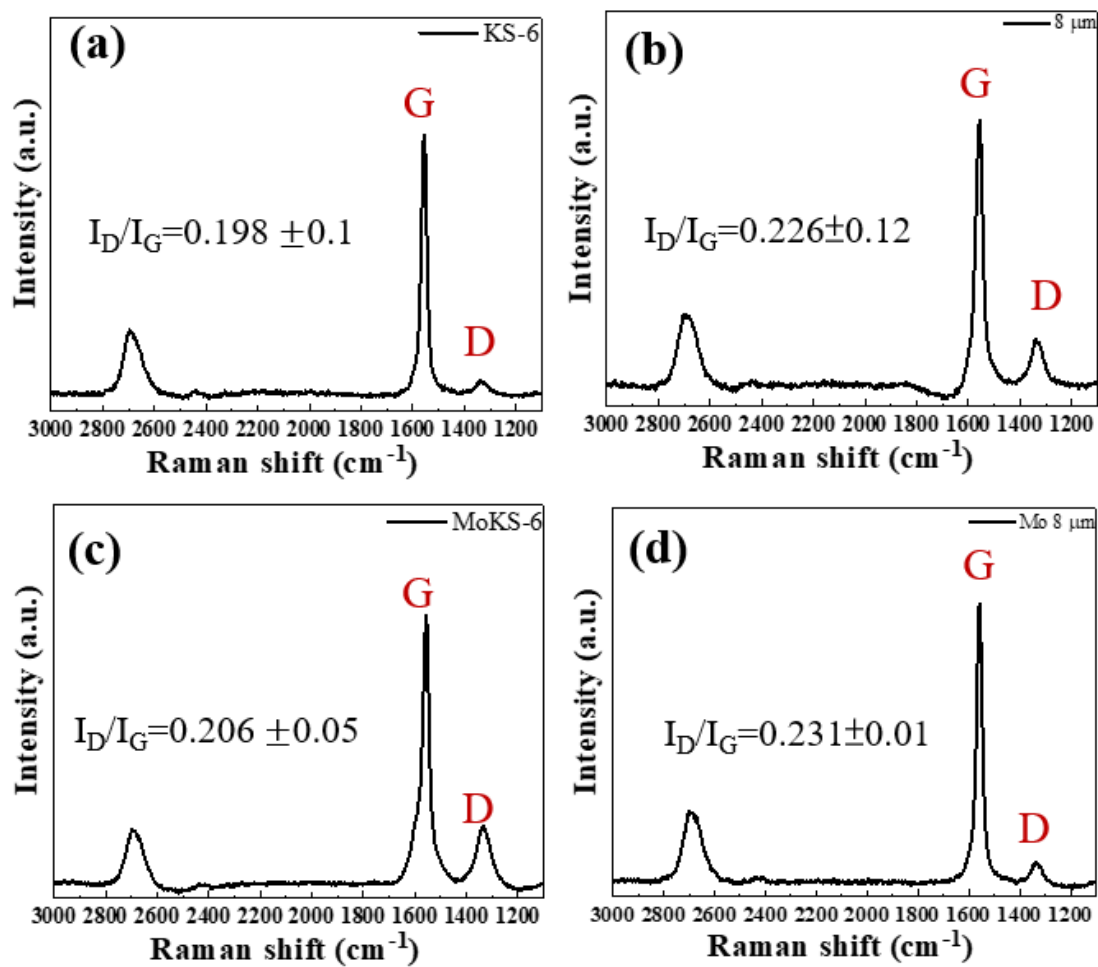


Fig. S2 Raman spectra of (a) KS-6, (b) 8 μm, (c) MoKS-6 and (d) Mo8 μm.

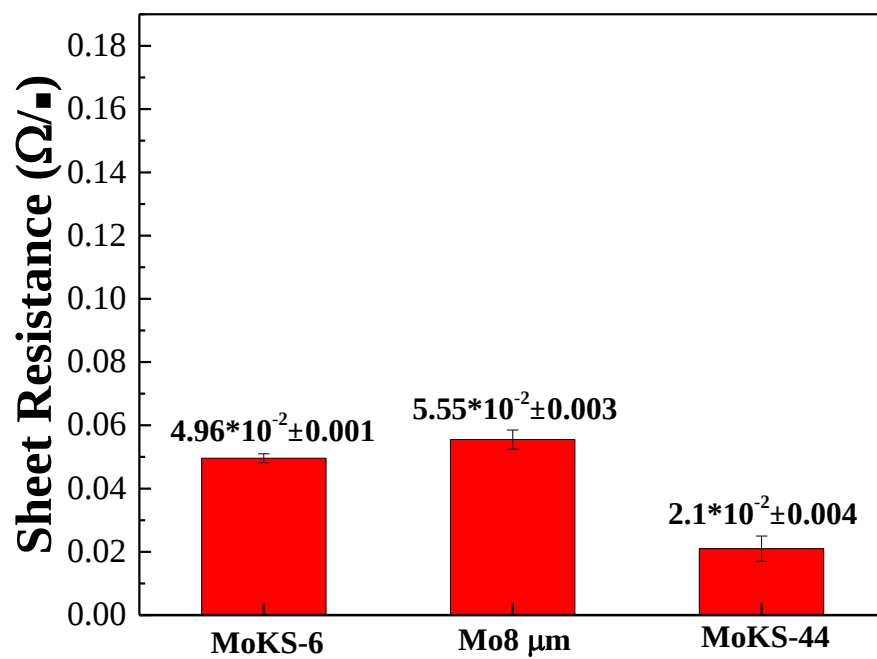


Fig. S3 Sheet resistance of MoKS-6, Mo8 μm and MoKS-44.

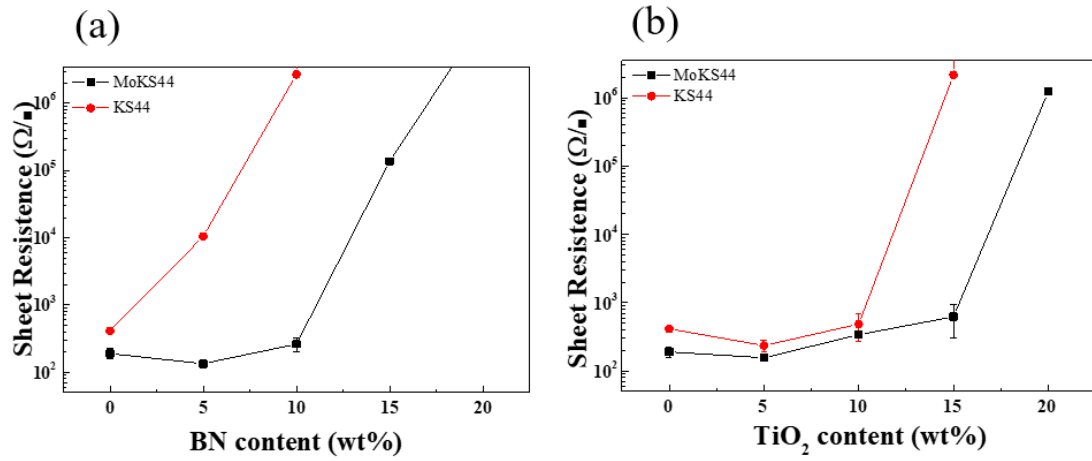


Fig. S4 KS-44 and MoKS-44 composite with various content (a) BN and (b) TiO₂.

Table. S1 KS-44 and MoKS-44 composite with various content BN and TiO₂.

	100:0 (Ω/□)	95:5 (Ω/□)	90:10 (Ω/□)	85:15 (Ω/□)	80:20 (Ω/□)
KS-44:TiO ₂	414±39.4	235±47.8	486±210.7	2.15*10 ⁶ ±3.5*10 ⁴	3.23*10 ³⁷
MoKS-44:TiO ₂	190±33.2	156±16.7	339±29.4	622±312.9	1.23*10 ⁶ ±7.54*10 ⁴
KS-44:BN	414±39.4	1.05*10 ⁴ ±47.8	2.69*10 ⁶ ±779.4	3.23*10 ³⁷	3.23*10 ³⁷
MoKS-44:BN	190±33.2	135±19.77	262±57.02	1.37*10 ⁵ ±2.29*10 ³	1.72*10 ⁷ ±4.5*10 ⁵