

Supplementary information

Synthesis of grape-like conductive carbon black/Ag hybrid as the conductive filler for soft silicone rubber

Yanli Dou,^a Haijing Gu,^a Shixiang Sun,^a Weiguo Yao^a and Dongbo Guan^{*a}

^a The ministry of education key laboratory of automotive material, College of Materials Science and Engineering, Jilin University, Changchun PR China, 130025.

E-mail: guandb@jlu.edu.cn.

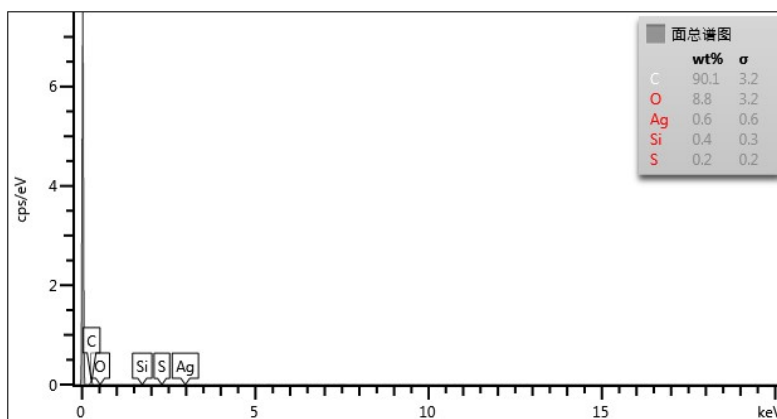


Fig. S1 The EDS spectra and elemental distribution of 6%SMCB@Ag/SR..

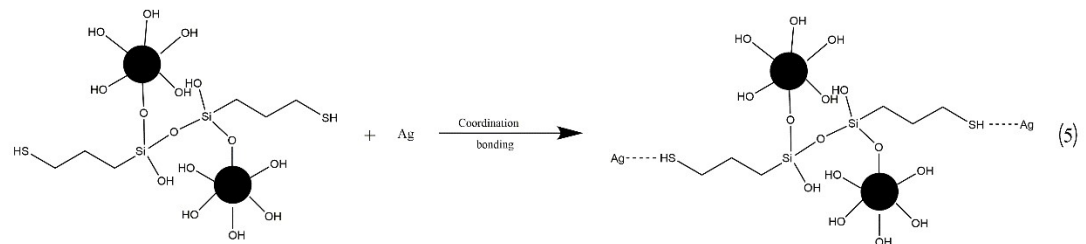
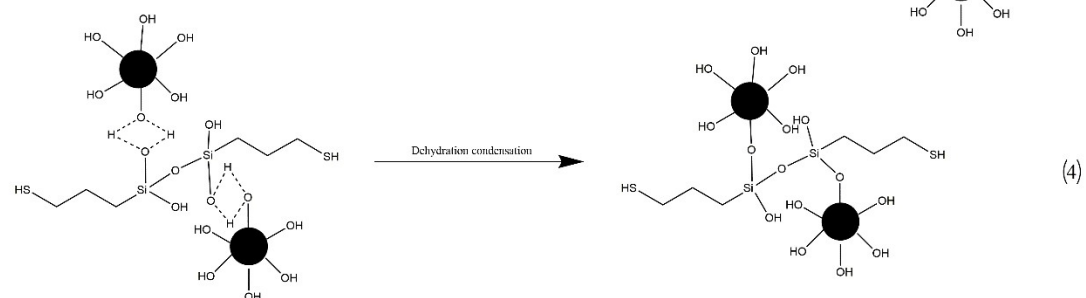
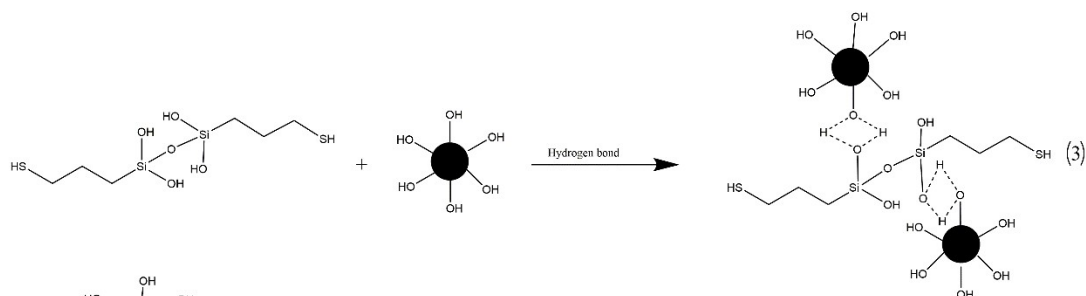
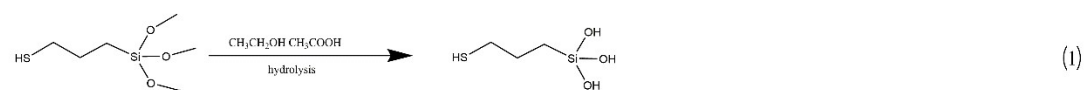


Fig. S2 Schematic of the reaction between each component.

Table S1 Summary of the performance of stretchable conductive composites.

Filler	Matrix	Conductivity (S/m)	Electrical properties	Application	Ref.
MWCNT	SR	~1	-	-	2
MWCNT forest	PU	50-100	Almost constant for strain up to 40%	-	40
MWCNT	PDMS	10 ⁻³	Decrease with the strain	-	9
CuNW-PVA	PDMS	83	Almost stable within 60% strain	-	42
Carbon fiber	PDMS	20-40	Almost stable within 80% train	Stretchable interconnects	41
MWCNT-PDA- Ag	SR foam	5	-	Electromagnetic shielding	48
SMCB@Ag	SR	10	Stable within 100% strain	Stretchable conductor	This work