

Photothermal Polymer Nanocomposites of Tungsten Bronze Nanorods with Enhanced Tensile Elongation at Low Filler Contents

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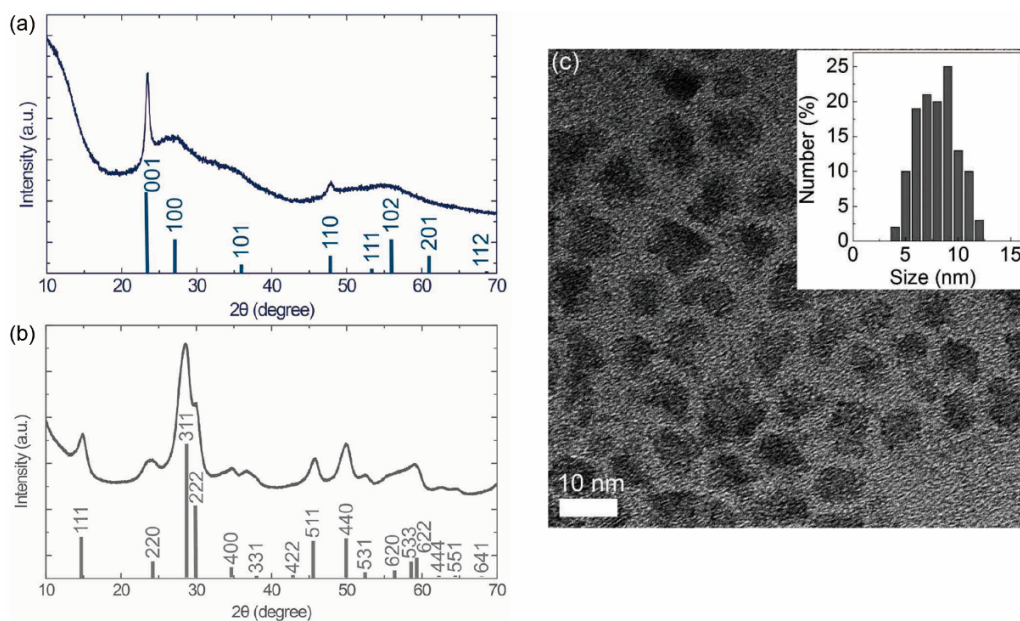


Figure S1. X-ray diffraction patterns of (a) $\text{Na}_{0.33}\text{WO}_3$ and (b) $\text{Cs}_{0.33}\text{WO}_3$. (c) TEM image of $\text{Cs}_{0.33}\text{WO}_3$ TBNPs.

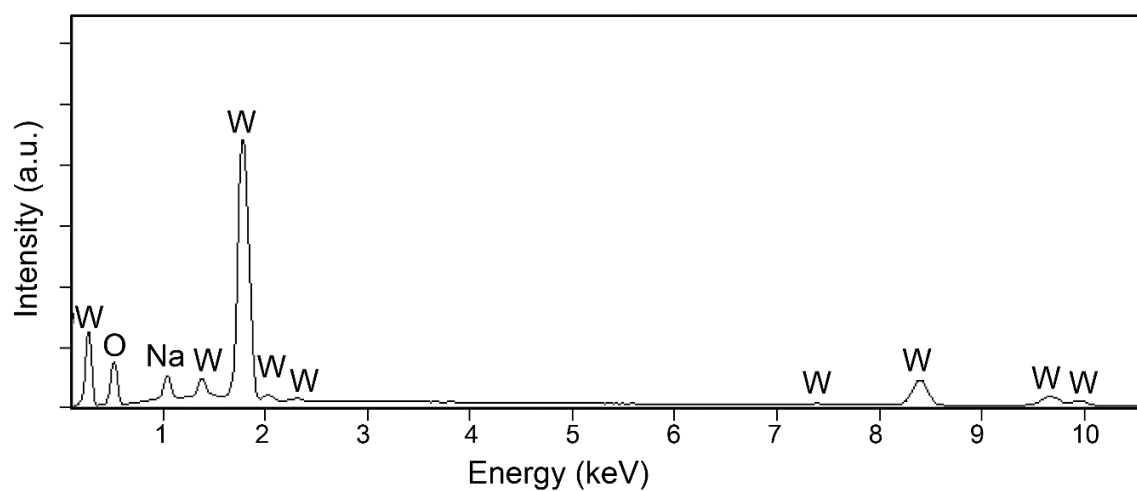


Figure S2. EDS spectrum of $\text{Na}_{0.33}\text{WO}_3$ nanorods.

Table S1. Compositions of tungsten bronze nanoparticles estimated by energy dispersive spectrometer

Sample	Elements	O-K	Na-K	W-L
$\text{Na}_{0.33}\text{WO}_3$	Mass (%)	20.64	3.25	76.11
	Mol (%)	3.11	0.34	1

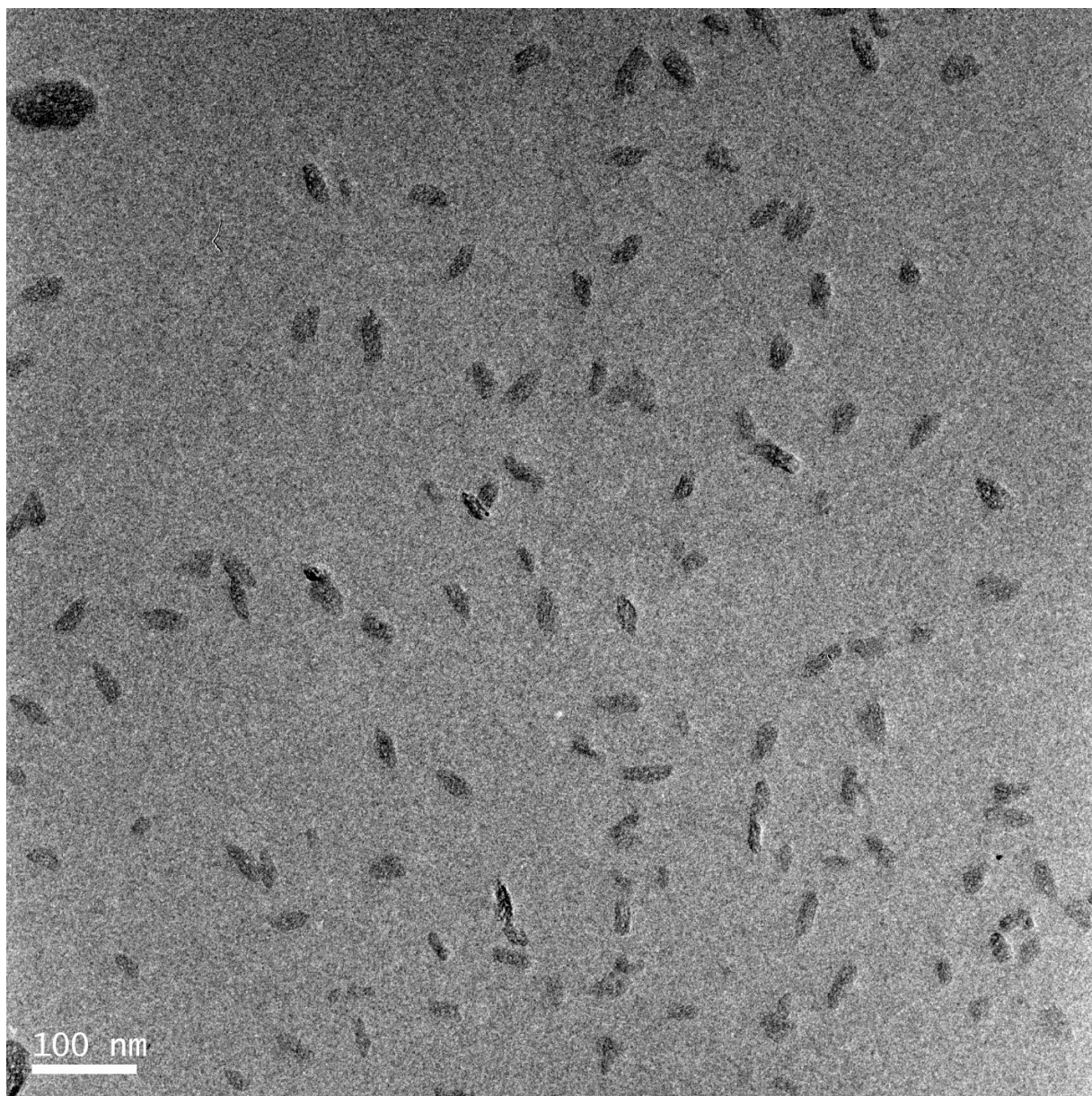


Figure S3. TEM image of rubber nanocomposites with 3-wt% Na_{0.33}WO₃ TBNRs.

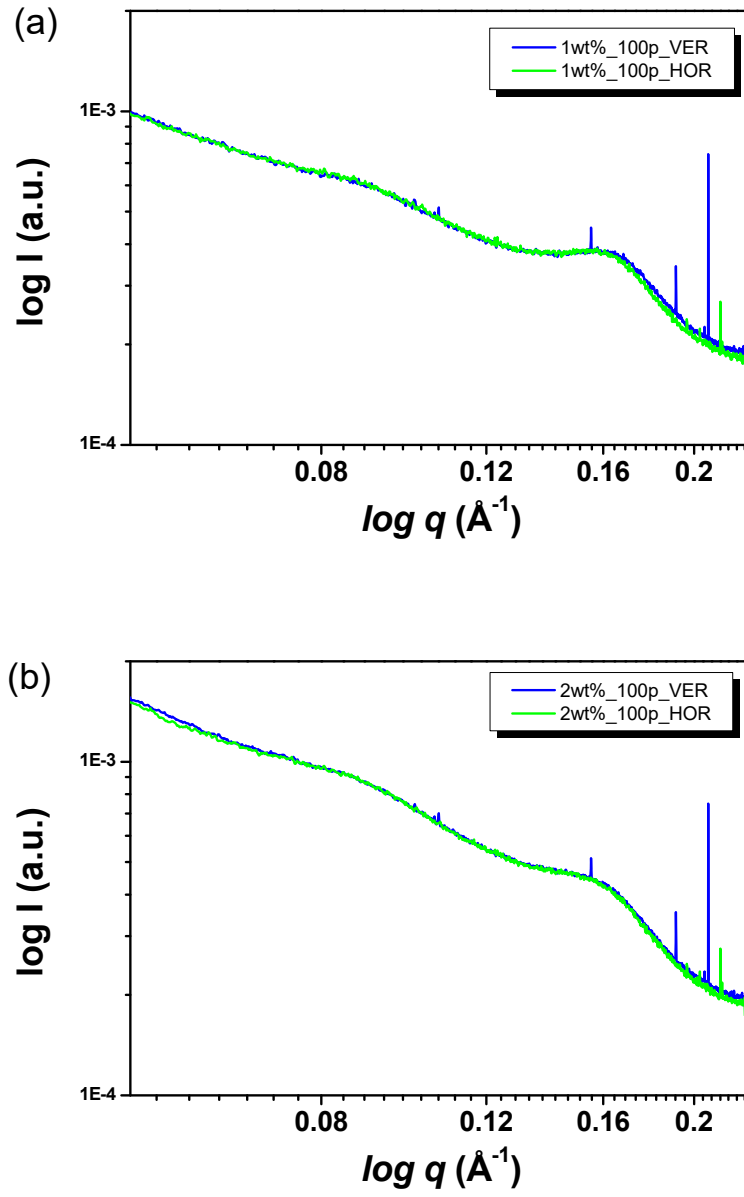


Figure S4. 1D SAXS profiles obtained by integrating azimuthal cuts of 2D images (vertical: 80–100° and 260–280°, horizontal: 170–190° and –10 to 10°); rubber nanocomposites with (a) 1-wt% and (b) 2-wt% $\text{Na}_{0.33}\text{WO}_3$ TBNR at 100% elongation.