

Construction of supramolecular oil gels via acid-amide bicomponent gelator for enhanced mechanical lubrication

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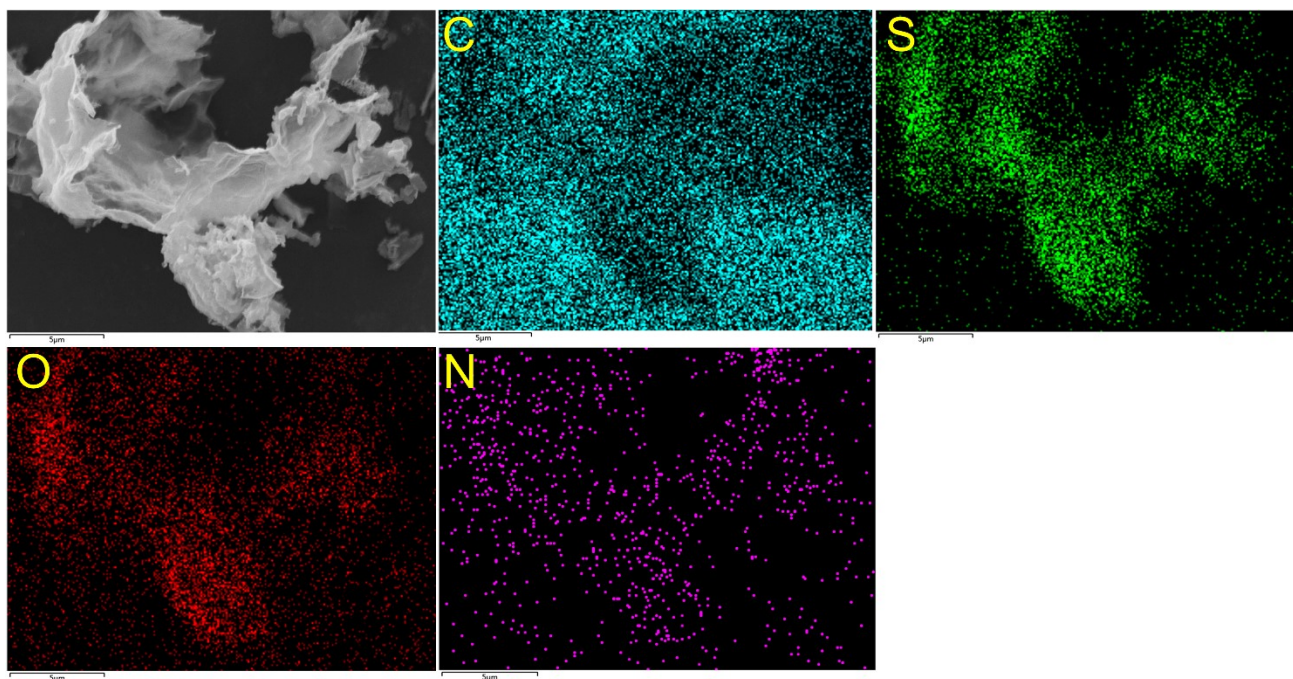


Fig. S1 The typical SEM image and its corresponding EDS elemental mappings of PEG200 xerogel.

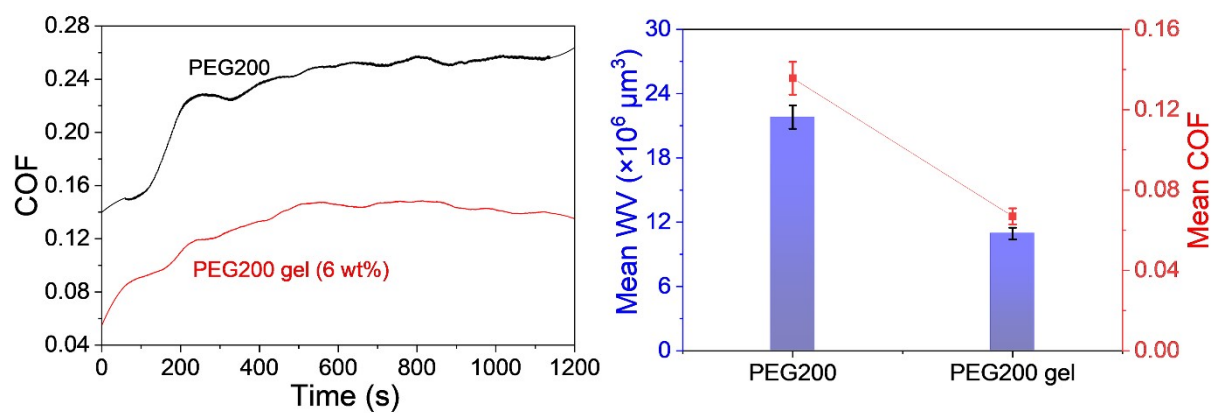


Fig. S2 COF curves, mean WV and COF values of PEG200 and PEG200 gels (6 wt% gelator) under steel-aluminum contact (Load: 40 N; duration: 20 min; temperature: room temperature).

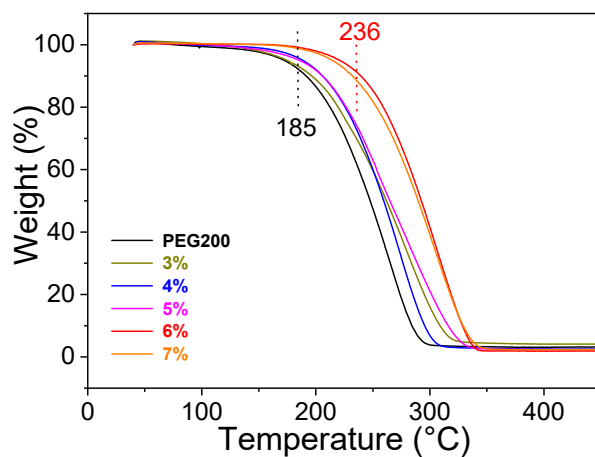


Fig. S3 TGA curves of PEG200 and PEG200 gels with varying c of DPA-ODA gelator.

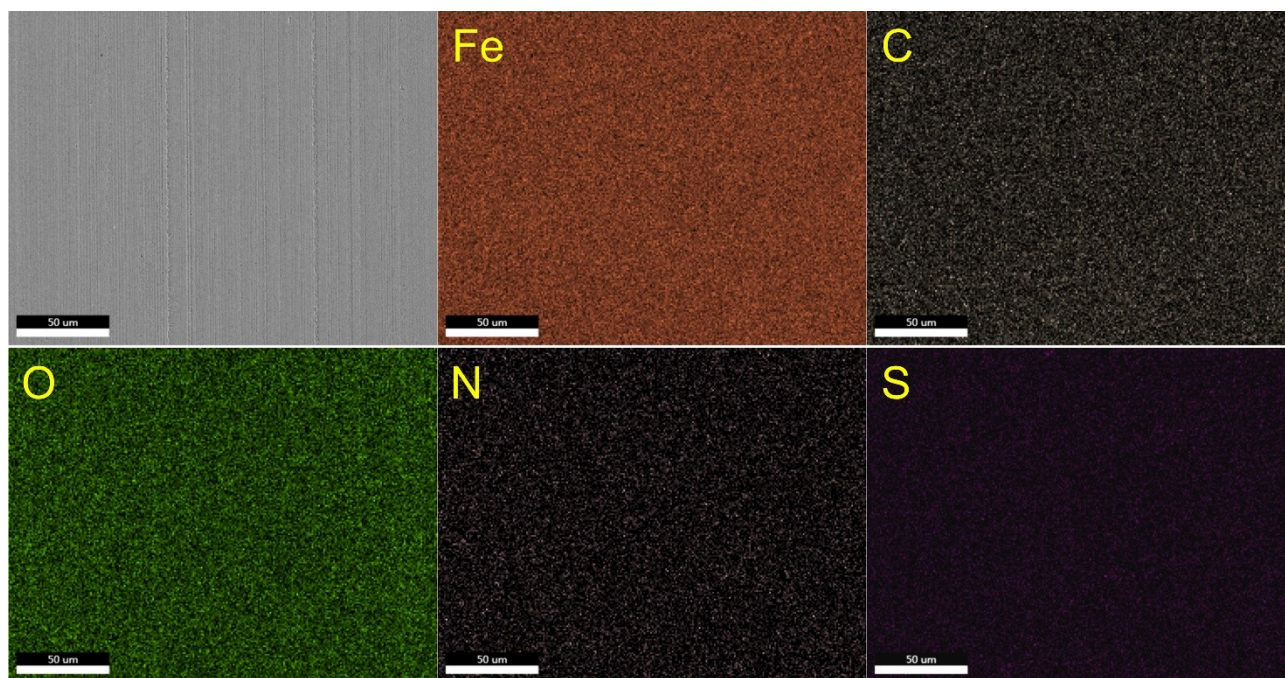


Fig. S4 The SEM image and corresponding EDS elemental mappings of wear tracks lubricated with PEG200 gel (6 wt% gelator) (Load: 40 N; duration: 20 min; temperature: room temperature).

Table S1 Elemental compositions of PEG200- and PEG200 gel-lubricated surfaces derived from the EDS analyses

Lubricant	Fe (%)	Cr (%)	C (%)	O (%)	N (%)	S (%)
PEG200	92.94	1.54	3.70	1.82	-	-
PEG200 gel	93.25	1.15	4.21	0.82	0.25	0.32