Supplementary Information

Article

Effect of Cu-doped Carbon Quantum Dot Dispersion Liquid on the Lubrication Performance of Polyethylene Glycol

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A B

Figure S1. Fluorescence emission spectrum of Cu-CQDs
A: Pure PEG200 B: 0.5 wt% Cu-CQDs in PEG

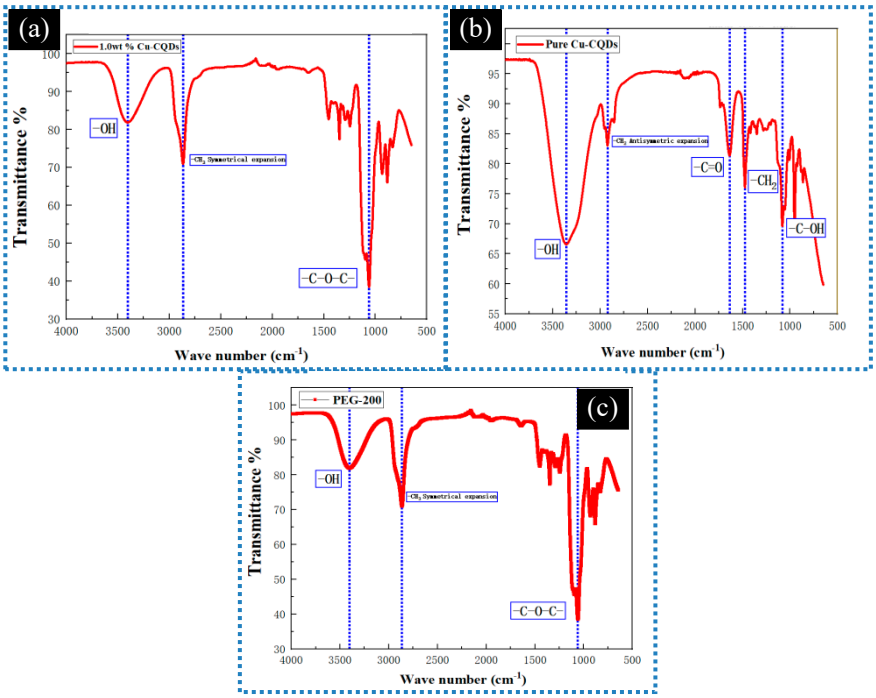

Figure S2. Infrared spectrogram analysis of CQDs and PEG (a) 1.0 wt%Cu-CQDs+PEG200；(b) pure Cu-CQDs；(c) PEG-200.

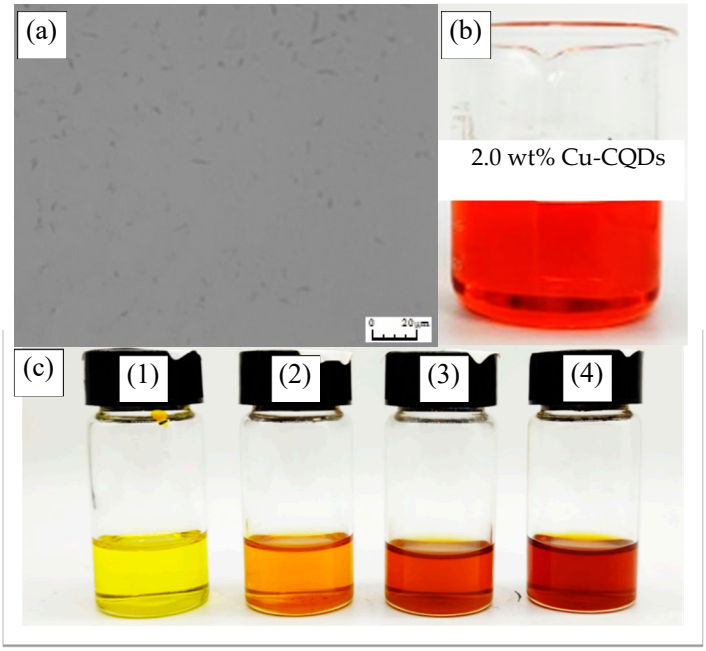

Figure S3 (a) Agglomeration morphology of Cu-CQDs in PEG after friction; (b) Color of 2.0 wt% Cu-CQDs after passing through an air blast drying oven at 100 ℃ for 30 min; (c) Appearance color of oil stain at different temperatures of 2.0 wt% Cu-CQDs (1) 2.0 wt% Cu-CQDs, (2) 2.0 wt% Cu-CQDs at 25 ℃, (3) 2.0 wt% Cu-CQDs at 75 ℃, (4) 2.0 wt% Cu-CQDs at 100 ℃