## **Supporting Information**

## On the Ionic Liquid Film 'Pinned' by Core-Shell Structured Fe<sub>3</sub>O<sub>4</sub>@Carbon Nanoparticles and Their Tribological Properties

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(a)



**Fig. S1** (a) The macroscale friction coefficient, (b) the corresponding optical image after tribological test for 0.0005N+IL-Si and 0.002N+IL-Si.