

Supporting information

Realizing Enhanced Luminescence of Silver Nanoclusters- Peptide Soft Hydrogels by PEI Reinforcement

Xia Xin ^{a,b} ‡, Yuanyuan Gao ^c, Qingyu Zhang ^c, Zhi Wang ^c, Di Sun ^c *, Shiling Yuan ^c, Haibing Xia

^a *

^a State Key Laboratory of Crystal Materials, Shandong University, Jinan 250100, P. R. China

^b National Engineering Technology Research Center for Colloidal Materials, Shandong University,
Shanda Nanlu No. 27, Jinan 250100, P. R. China

^c Key Laboratory of Colloid and Interface Chemistry, Ministry of Education, School of Chemistry
and Chemical Engineering, Shandong University, Jinan 250100, P. R. China

Table S1 The states and fluorescence behavior of different samples.

Sample	State	Fluorescence behavior
1 mM Ag ₆ -NCs	S	No Fluorescence
2 mM DD-5	S	No Fluorescence
0.1 μM PEI	S	No Fluorescence
2 mM DD-5-0.05 μM PEI	S	No Fluorescence
1 mM Ag ₆ -0.05 μM PEI	S	Weak Fluorescence
1 mM Ag ₆ -2 mM DD-5	G	Weak Fluorescence

Solution: S; Hydrogel: G

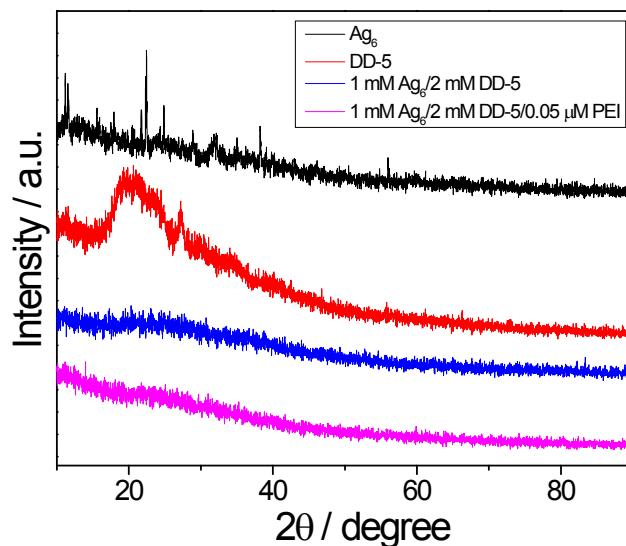


Figure S1 XRD patterns of different samples.

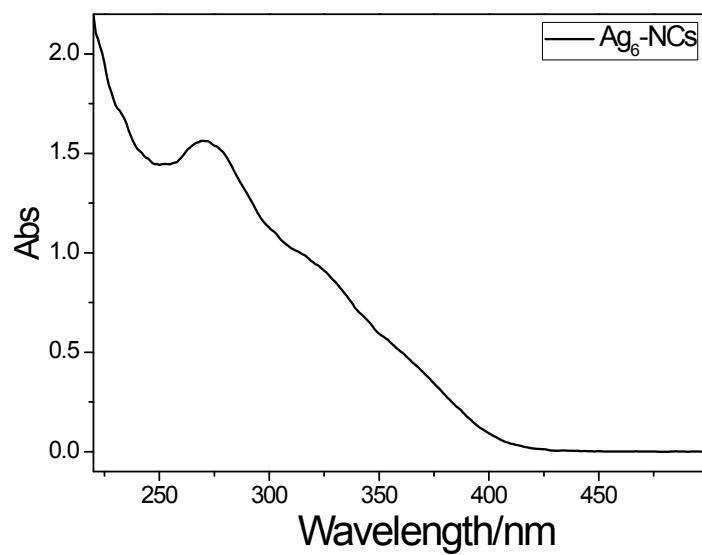


Figure S2. UV-vis spectra of $\text{Ag}_6\text{-NCs}$ ($c_{\text{Ag6-NCs}}=50 \mu\text{M}$).

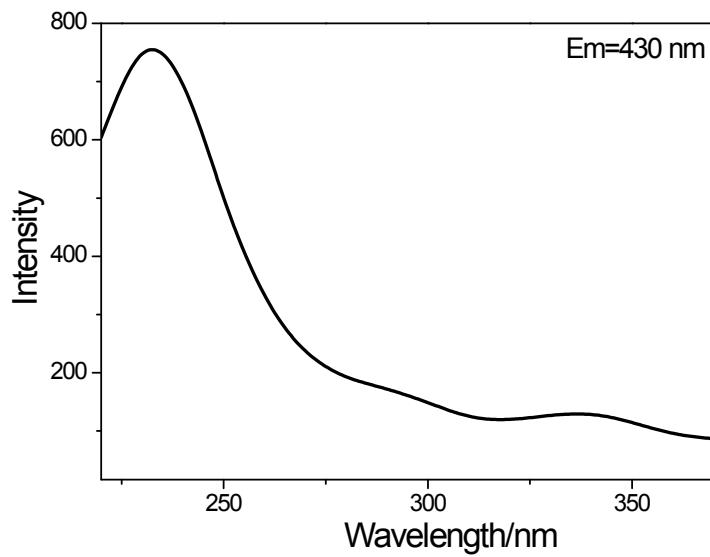


Figure S3. UV-vis spectra of $\text{Ag}_6\text{-NCs}$ ($c_{\text{Ag6-NCs}}=50 \mu\text{M}$).

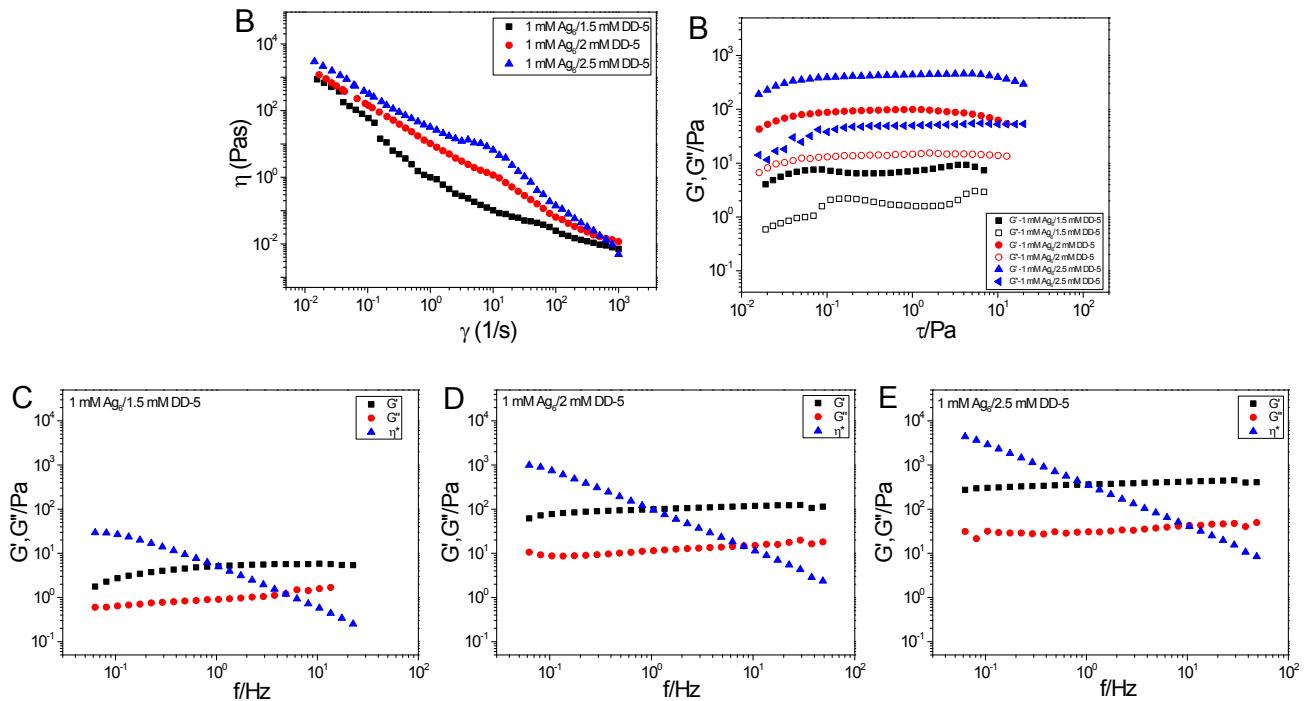


Figure S4 (A) Variation of shear viscosity as a function of shear rate. (B) Elastic modulus (G') and viscous modulus (G'') as a function of the applied stress at a constant frequency (1.0 Hz). (C) Variation of G' and G'' as a function of frequency for the hydrogel of 1 mM Ag_6 -NCs/1.5 mM DD-5. (D) Variation of G' and G'' as a function of frequency for the hydrogel of 1 mM Ag_6 -NCs/2 mM DD-5. (E) Variation of G' and G'' as a function of frequency for the hydrogel of 1 mM Ag_6 -NCs/2.5 mM DD-5.