

# Supplementary Material for “Observation of the Pinning-Induced Crystal-Hexatic-Glass Transition in Two-Dimensional Colloidal Suspensions”

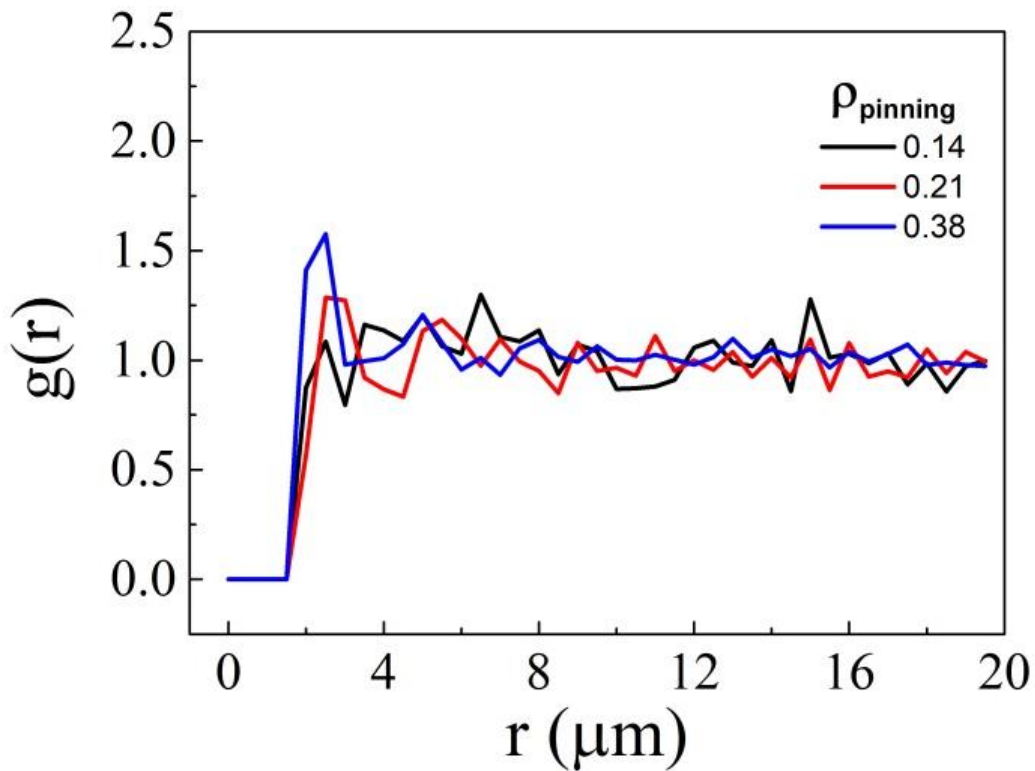
Xiao-Yan Sun (孙晓燕)<sup>1,#</sup>, Hua-Guang Wang(王华光)<sup>2,#</sup>, Hao Feng(冯浩)<sup>3</sup>, Ze-Xin Zhang(张泽新)<sup>2,3,\*\*</sup>, and Yu-Qiang Ma(马余强)<sup>4,\*\*</sup>

<sup>1</sup>Department of Optoelectronics and Energy Engineering, City College of Suzhou, Suzhou 215104, PR China

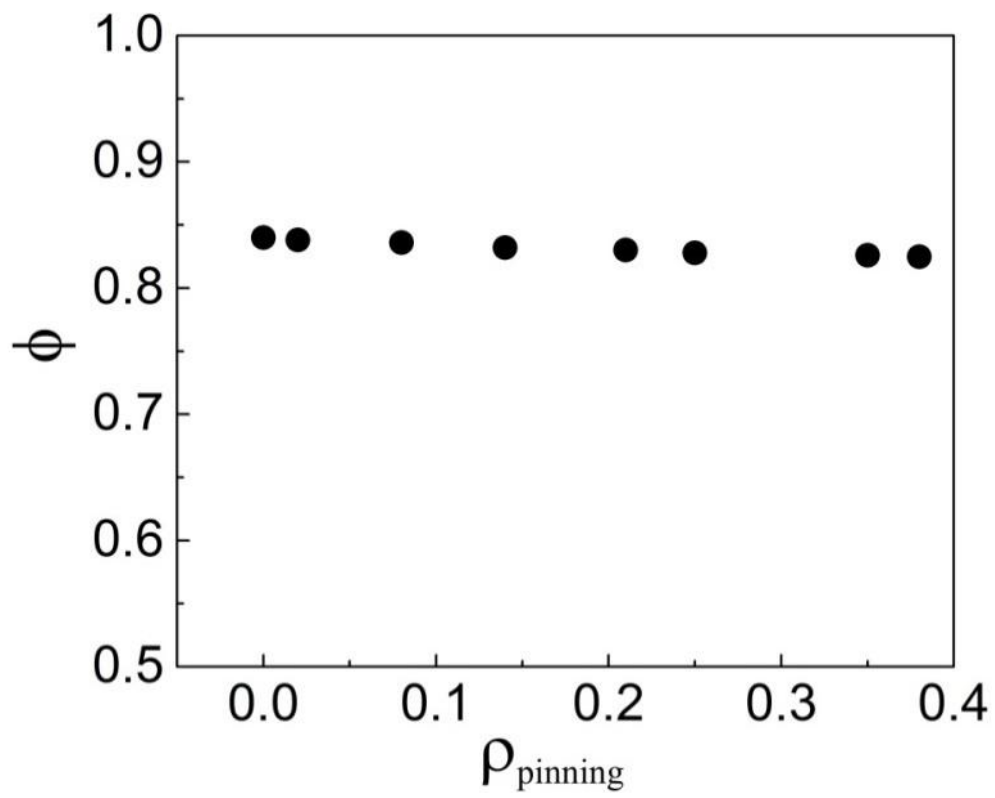
<sup>2</sup>College of Chemistry, Chemical Engineering and Materials Science, Soochow University, Suzhou 215123, PR China

<sup>3</sup>Center for Soft Condensed Matter Physics and Interdisciplinary Research, Soochow University, Suzhou 215006, PR China

<sup>4</sup>National Laboratory of Solid State Microstructures and Department of Physics, Nanjing University, Nanjing 210093, PR China



**Fig. S1**  $g(r)$  of pinning particles at different pinning concentrations,  $\rho_{\text{pinning}}$ .



**Fig. S2** The area fraction vs. pinning concentration,  $\rho_{\text{pinning}}$ .