Electronic Supplementary Material (ESI) for Soft Matter. This journal is © The Royal Society of Chemistry 2018

Supplementary Information

Pair Aligning Improved Motility of Quincke Rollers

Shi Qing Lu, a,b Bing Yue Zhang, a,b Zhi Chao Zhang, a,b Yan Shi a,b and Tian Hui Zhang*a,b

Movie 1A: Transient dynamic cluster. E/E_c = 1.10, ϕ = 0.03, acquisition rate 500 fps, video frame rate 20 fps.

Movie 1B: Dynamic evolution of velocity in Movie 1A

^{a.} Center for Soft Condensed Matter Physics and Interdisciplinary Research, Soochow University, Suzhou, 215006, P. R. China

^{b.} College of Physics, Optoelectronics and Energy, Soochow University, Suzhou, 215006, P. R. China

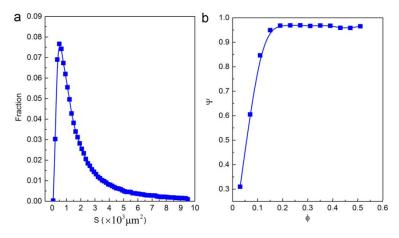


Figure S1. a. Distribution of $S_{\text{vor.}}\;\; \text{b. Polar order as the function of local}$ area fraction