Supplementary Material (ESI) for RSC Advances

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On-chip thermo-triggered coalescence of controllable Pickering emulsion droplet pairs

Supplementary Material

Jian Sun,^a Wei Wang,^{a*} Fan He,^a Zhi-Hao Chen,^a Rui Xie,^a Xiao-Jie Ju,^{ab} Zhuang Liu,^a and Liang-Yin Chu^{abc*}

- ^a School of Chemical Engineering, Sichuan University, Chengdu, Sichuan, P. R. China.
 E-mail: wangwei512@scu.edu.cn (W. Wang), chuly@scu.edu.cn (L.-Y. Chu); Tel & Fax: +86
 28 8546 0682
- ^b State Key Laboratory of Polymer Materials Engineering, and Collaborative Innovation Center for Biomaterials Science and Technology, Sichuan University, Chengdu, Sichuan, P. R. China.
- ^c Jiangsu National Synergetic Innovation Center for Advanced Materials (SICAM), Nanjing, Jiangsu 211816, P. R. China.

Part I. Supplementary Fig. S1

Part II. Supplementary Movies S1-S3

Part I. Supplementary Fig. S1



Fig. S1 Thermo-triggered coalescence of droplets in bulk O/W emulsions for phase separation. Digital photos showing three bulk O/W emulsions with droplets stabilized by PNIPAM microgels (A), PLGA nanoparticles (B) and surfactant Pluronic F-127 (C) at 25 °C (a) and 40 °C (b). The concentrations of PNIPAM microgels, PLGA nanoparticles and Pluronic F-127 are all 0.4 (w/v)%.

Part II. Supplementary Movies S1-S3

Supplementary Movie S1. 3D structure of a Pickering emulsion droplet stabilized by fluorescent PNIPAM microgels.

Supplementary Movie S2. Thermo-triggered coalescence of Pickering emulsion droplets stabilized by PNIPAM microgels.

Supplementary Movie S3. On-chip thermo-triggered coalescence of Pickering emulsion droplet pairs stabilized by PNIPAM microgels.