

Facile fabrication of Janus magnetic microcapsules *via* double *in situ* miniemulsion polymerization

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Conversion ratio of the monomers in the synthesis of magnetic microcapsules

Equation for Conversion ratio of the monomers was obtained by combining Eq. (1) and (2). Eq. (1) is the simple definition of polymer solid contents:

$$N_s = (m_2 - m - m_s) / (m_1 - m - m_s) \quad (1)$$

Where N_s is the polymer solid contents, m is the mass of the container, m_1 is the mass of container and solution, m_2 is the mass of solid and container, which was got after drying the container and solution at 105 °C for 3 h. m_s is the mass of silica in the disperse system, which is obtained from the theoretic calculation of TEOS. So the overall conversion can be written by the Eq. (2):

$$S = (N_s \cdot W) / W_n \quad (2)$$

Where the W is the total mass of the monomer and the solvent, W_n is total mass of the monomer.

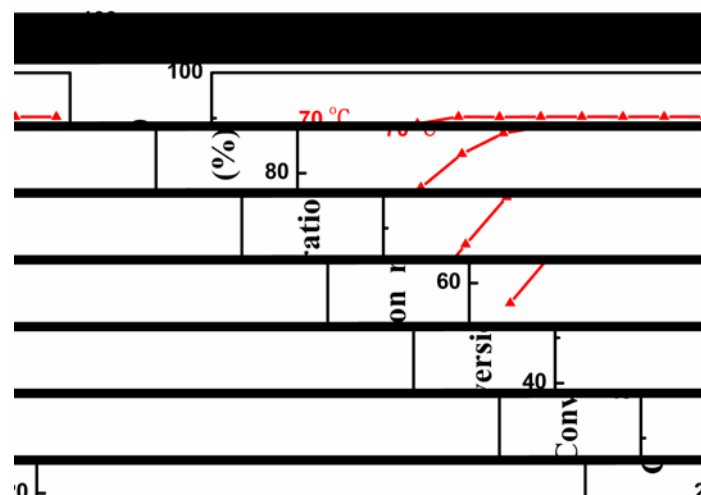


Fig. S1 The conversion ratio of organic monomers during the polymerization process at 70 °C