

## Fabrication of highly anisotropic particles via a microfluidic method

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We introduce a facile and promising strategy to fabricate polymer particles with a high degree of shape anisotropy, this method can be utilized with a variety of microfluidic generation methods. Low-density microparticles and high-density nanoparticles in a vertical manner migrated in a polymer solution confined in emulsion droplets that were produced via a microfluidic method. As the solvent evaporated in individual droplets at ambient conditions, the low-density microparticles migrated upward because their density was lower than that of the polymer solution. The high-density nanoparticles that were initially well-dispersed in the droplet phase became destabilized upon solvent removal, leading to the formation of aggregates and sedimentation in a downward direction. The migration of the particle components during solvent evaporation induced shape deformation/modification of the emulsion droplets; consequently, polymer particles with highly anisotropic shapes were created after drying.