

### Supporting Information

Table S1. Preparation of PS and PMMA by solution polymerizations.

	styrene, g	methyl methacrylate, g	THF, g	AIBN, mg	$M_w^c$ , $\times 10^4$ g/mol	$M_w/M_n^d$
PS <sup>a</sup>	17.82		55.28	90.4	3.8	1.255
PMMA <sup>b</sup>		44.54	135.03	222.0	3.5	1.015

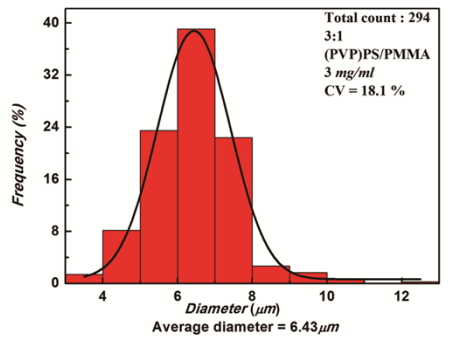
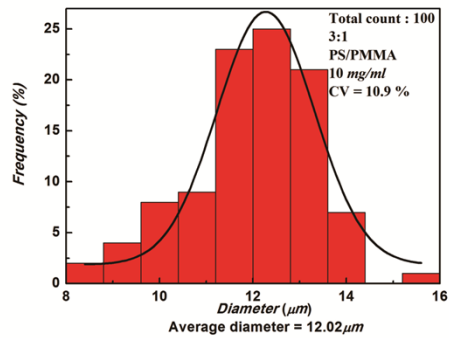
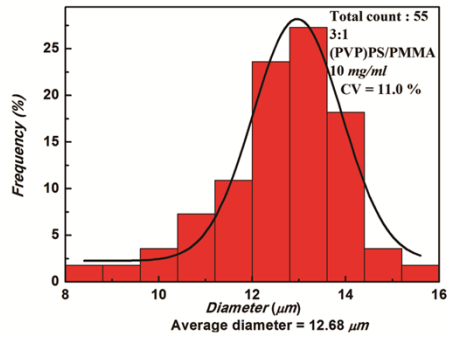
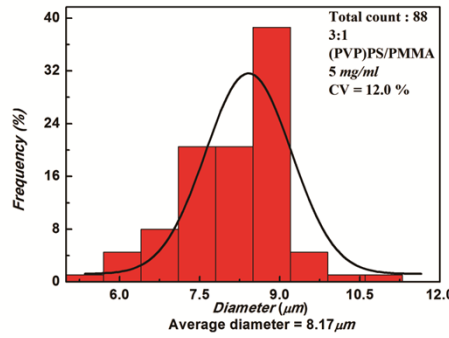
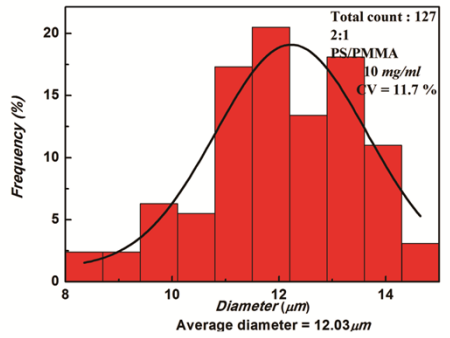
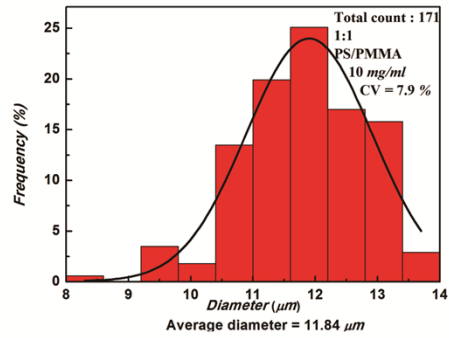
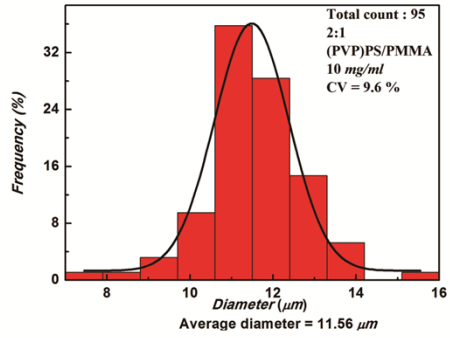
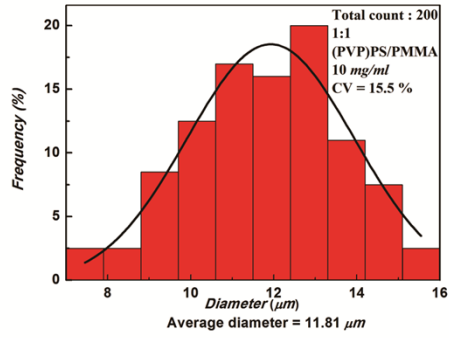
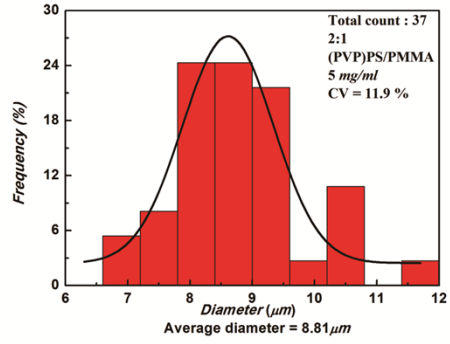
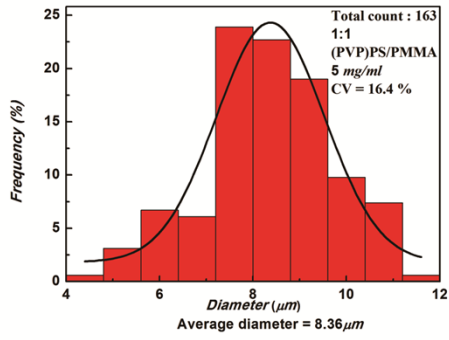
<sup>a</sup> 70°C, 21h, Ar.

<sup>b</sup> 65°C, 21h, Ar.

<sup>c</sup> Weight-average molecular weight, measured by gel permeation chromatography.

<sup>d</sup> Number-average molecular weight, measured by gel permeation chromatography.

THF: tetrahydrofuran; AIBN: 2,2'-Azobis(2-methylpropionitrile).



**Fig. S1.** Corresponding particle size distribution of PS/PMMA and (PVP)PS/PMMA Janus particles with different concentrations and components of disperse phases in microfluidics in Fig. 3. The black curves are the fits to the data using a Gaussian distribution. For the concentration  $3\text{mg/ml}$ , statistical error is very large due to poor particle size distribution; thus, the corresponding size distribution was not displayed for weight ratios 2:1 PS/PMMA and 1:1 PS/PMMA.