Shape Control of Ag Nanocrystals

Shape Control – Ag Nanocubes

Ag Nanocubes: 99%
Size Distribution: 42.7±3.3 nm
Shape Control – Ag Nanowires

Ag Nanowires: 99%
Diameter Distribution: 60.2±10.1 nm; Length Distribution: 2.3-5.6 µm
Shape Control – Ag Nanoplates

Ag Nanoplates: 90%
Size Distribution: 390±52 nm

Size Control of Ag Nanocubes

Tunable Range: 20-50 nm

Size Range: 25.7±4.3 nm

Size Range: 31.1±3.1 nm

Size Range: 42.7±3.3 nm

Reaction Time:

12 min

15 min

20 min
Size Control of Ag Nanocubes

Size Range: 42.7±3.3 nm
Size Range: 133±15 nm

Etch with HNO₃
Reduce the Number of Seeds

Density of Seeds: 5 × 10¹¹ /L
Density of Seeds: 2 × 10¹⁰ /L