

Supporting Information

J. Mater. Chem., paper no. c0jm04519e

Synthesis and modelling of gold nanostars with tunable morphology and extinction spectrum

Silvana Trigari,[†] Alessio Rindi,^{†,‡} Giancarlo Margheri,[†] Stefano Sottini,[†] Giovanna Dellepiane,^{‡,§} and Emilia Giorgetti^{†,§}

[†] CNR - National Research Council of Italy - Istituto dei Sistemi Complessi, Via Madonna del Piano 10, 50019 Sesto Fiorentino, Italy. E-mail: silvana.trigari@isc.cnr.it.

[‡] Dipartimento di Chimica e Chimica Industriale, Università di Genova, Via Dodecaneso 31, 16146 Genova, Italy

[§] INSTM, Consorzio Interuniversitario Nazionale per la Scienza e Tecnologia dei Materiali, Via G. Giusti, 9, 50121 Firenze, Italy.

batch		core diameter <i>dia</i> (nm)	branch length <i>h</i> (nm)	tip angle α (°)
NS55	fresh	68 ± 5	57 ± 19	34 ± 9
	after 11 months	88 ± 9	44 ± 21	38 ± 10
NS42.5	fresh	97 ± 6	76 ± 30	36 ± 9
	after 11 months	121 ± 7	61 ± 28	36 ± 11

Table SI Averaged geometrical features of the freshly prepared nanostars for batches NS55 and NS42.5 compared with the same batches after 11 months.

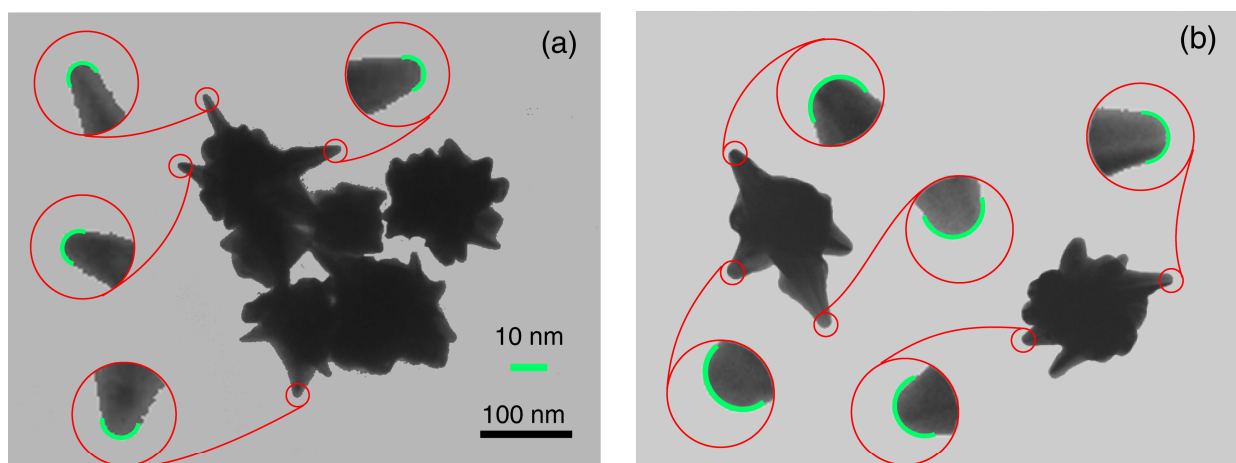


Fig. SI1 TEM images of nanostars from batch NS55: (a) freshly prepared and (b) after 11 months. The insets show the main difference between the two cases, that is the increase of tip curvature radius. The two images have the same scale.