Electronic Supplementary Material (ESI) for Dalton Transactions

Electronic Supplementary Information for

Surfactant-free Sacrificial template synthesis of submicrometer-sized $YVO_4:Eu^{3+}$ hierarchical hollow spheres with tunable textual parameters and luminescent properties

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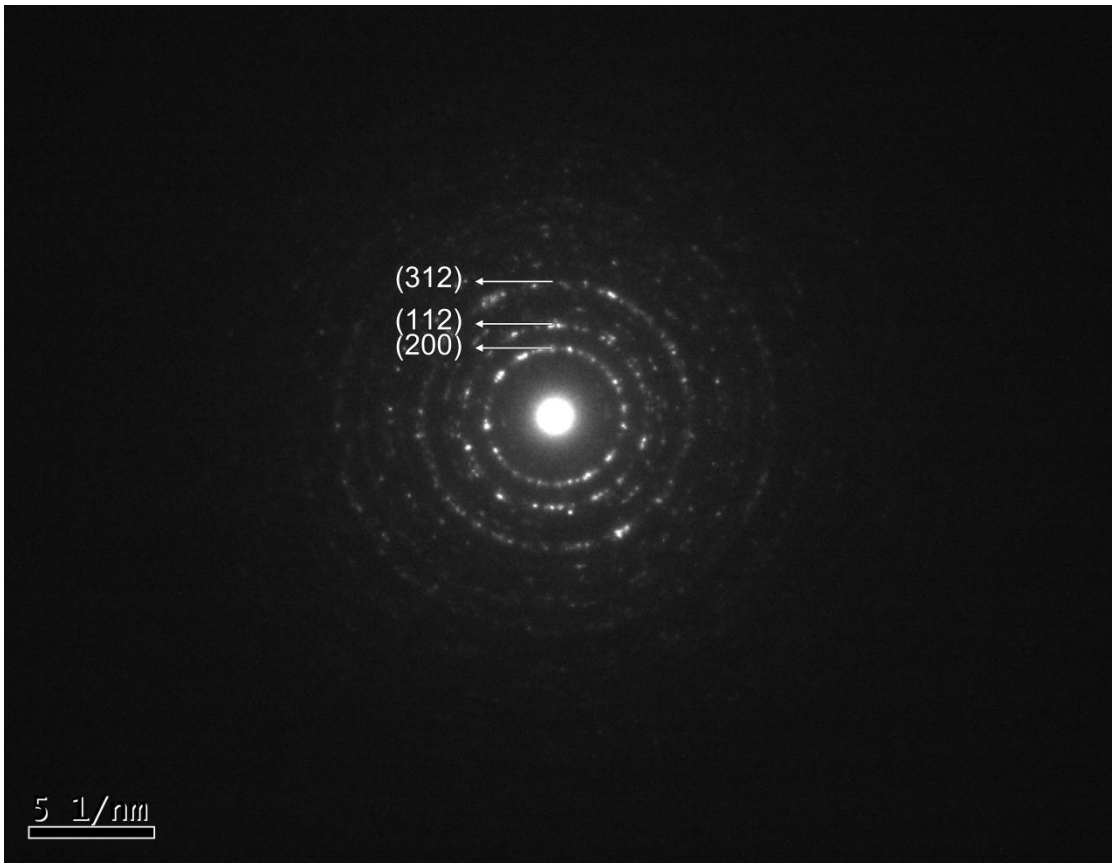
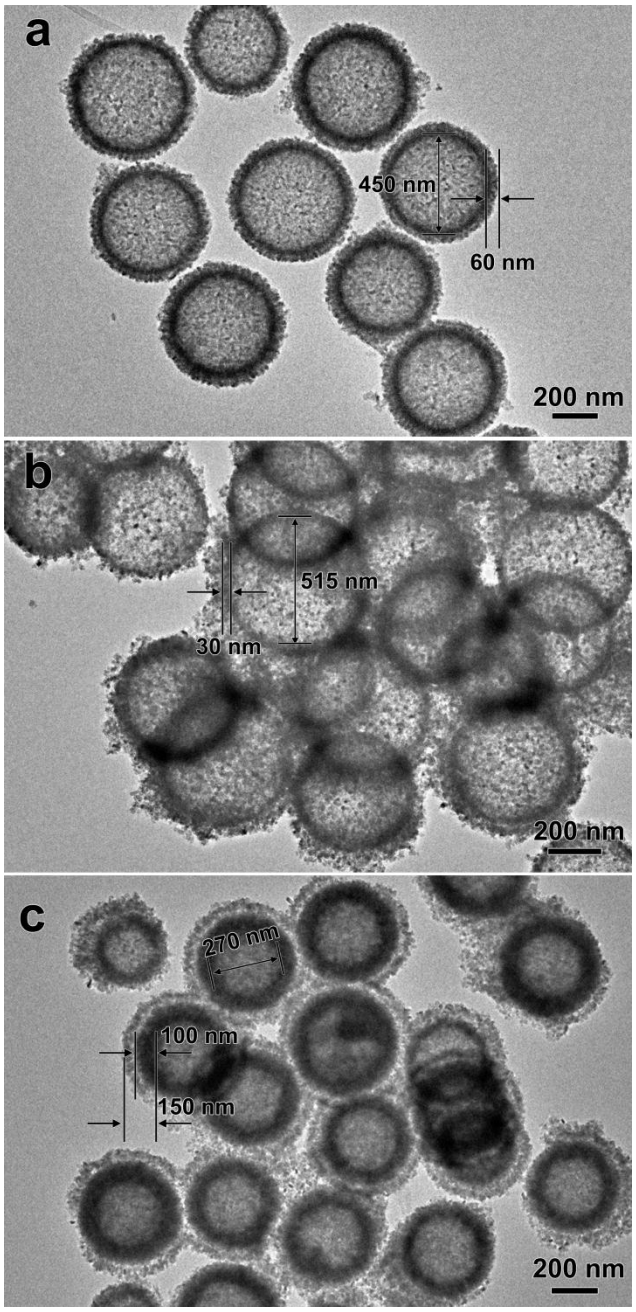
Electronic Supplementary Information, Table S1. Textual parameters of YVO_4:Eu^{3+} spheres obtained with different amounts of NH_4VO_3.

Sample No.	Amount of NH_4VO_3 (n_Y : n_V)	Outer diameter D_{out} /nm	Inner diameter D_{in} /nm	Shell thickness R_{shell} /nm	Thickness of interior shell $R_{in\text{-}shell}$ /nm	Thickness of exterior shell $R_{ex\text{-}shell}$ /nm
S1	0.07 g (1:1)	~580	~440	~70	----	----
S2	0.35 g (1:5)	~560	~400	~80	~ 50[c]	~30[c]
S3	0.70 g (1:10)	580-630	350-400	110-115	50-65	50-60
S4	1.40 g (1:20)	~570	~270	~150	~100	~50
S5[a]	0.07 g (1:1)	~570	~450	~60	----	----
S6[b]	0.70 g (1:10)	~530	~470	~30	----	----

Note: [a] obtained via acid erosion with 0.05 M HNO_3. [b] obtained via acid erosion with 0.15 M HNO_3. [c] some of spheres have double shells.



Electronic Supplementary Information, Figure S1. SAED pattern of the shell for sample S1.



Electronic Supplementary Information, Figure S2. TEM images of $YVO_4:Eu^{3+}$ hollow spheres (a) S5, (b) S6 and (c) S4.