

Electronic Supplementary Information

Synthesis of self-assembled mesoporous 3D In₂O₃ hierarchical micro flowers composed of nanosheets and its electrochemical properties

Balasubramaniam Arul Prakasam,^{a, b,*} Manu Lahtinen,^c Anssi Peuronen,^c Govindhasamy Manikandan,^b Manickavachagam Muruganandham,^d Mika Sillanpää^{a, e}

^aLaboratory of Green Chemistry, School of Engineering Science, Lappeenranta University of Technology, Sammonkatu 12, FI-50130 Mikkeli, Finland

^bDepartment of Chemistry, Annamalai University, Annamalainagar, 608002, India

^cDepartment of Chemistry, Laboratories of Inorganic and Analytical Chemistry, P.O.Box 35, FI-40014, University of Jyväskylä, Finland

^dDepartment of Civil and Environmental Engineering, Temple University, Philadelphia, PA-19122, USA

^eDepartment of Civil and Environmental Engineering, Florida International University, Miami, FL-33174, USA

* Corresponding author.

E-mail address: arul7777@yahoo.com (B. Arul Prakasam)

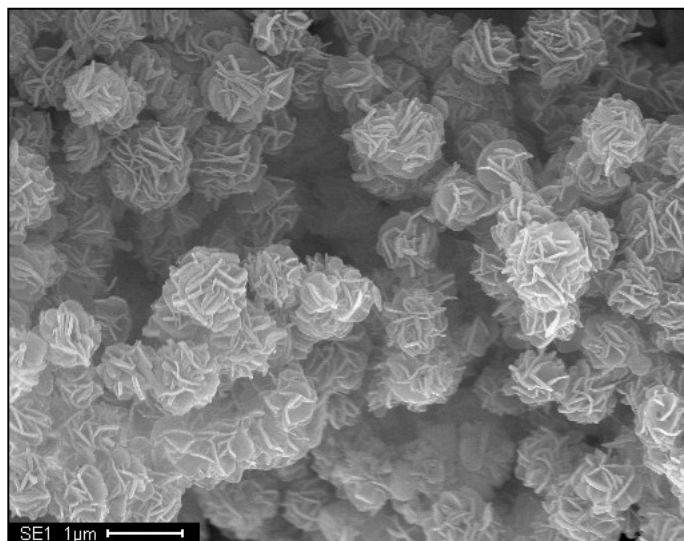
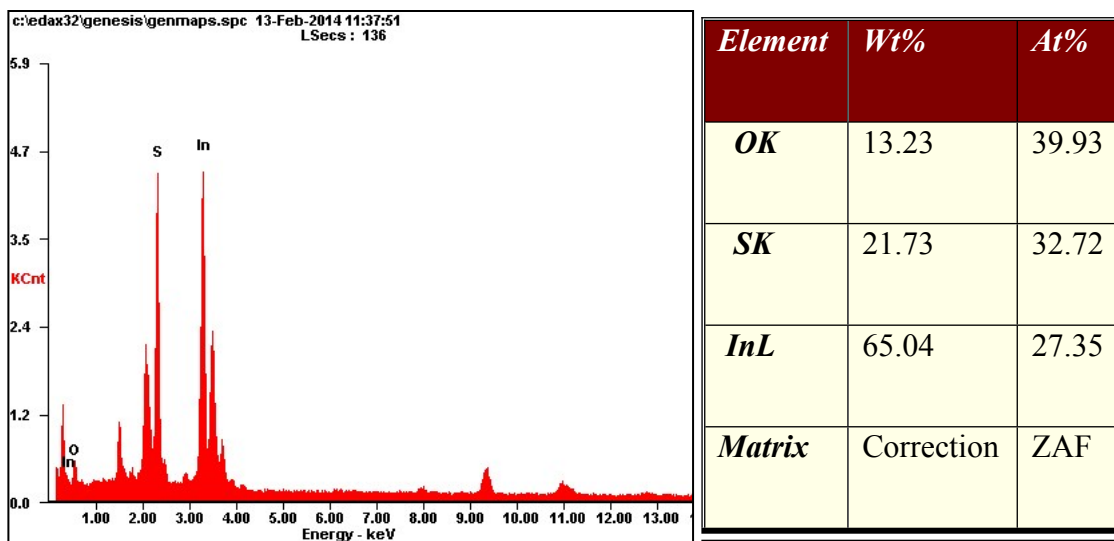
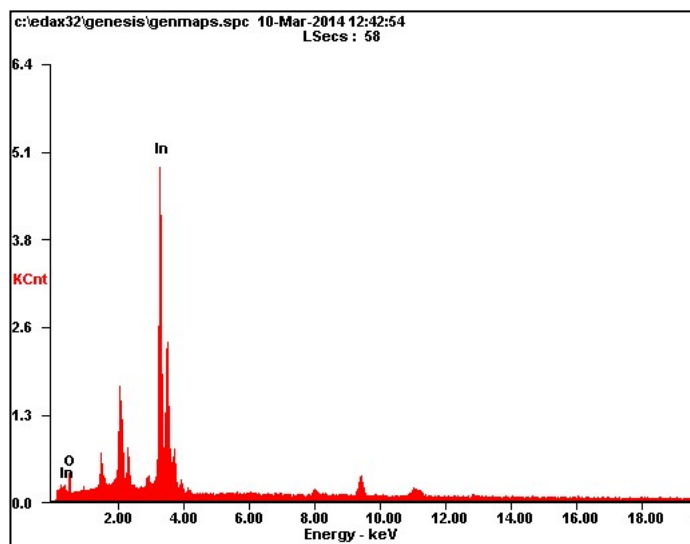


Fig. S1. EDX spectrum of hydrothermal product.



<i>Element</i>	<i>Wt%</i>	<i>At%</i>
<i>OK</i>	22.07	67.03
<i>InL</i>	77.93	32.97
<i>Matrix</i>	Correction	ZAF

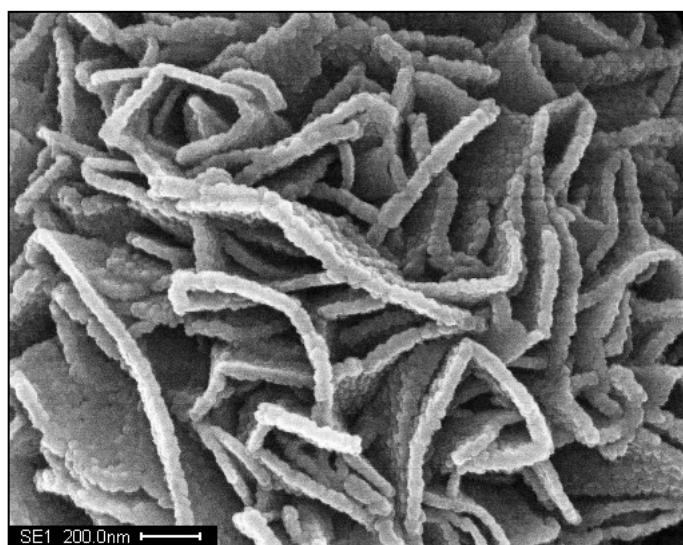


Fig. S2. EDX spectrum of calcinated product (In_2O_3 micro flowers).

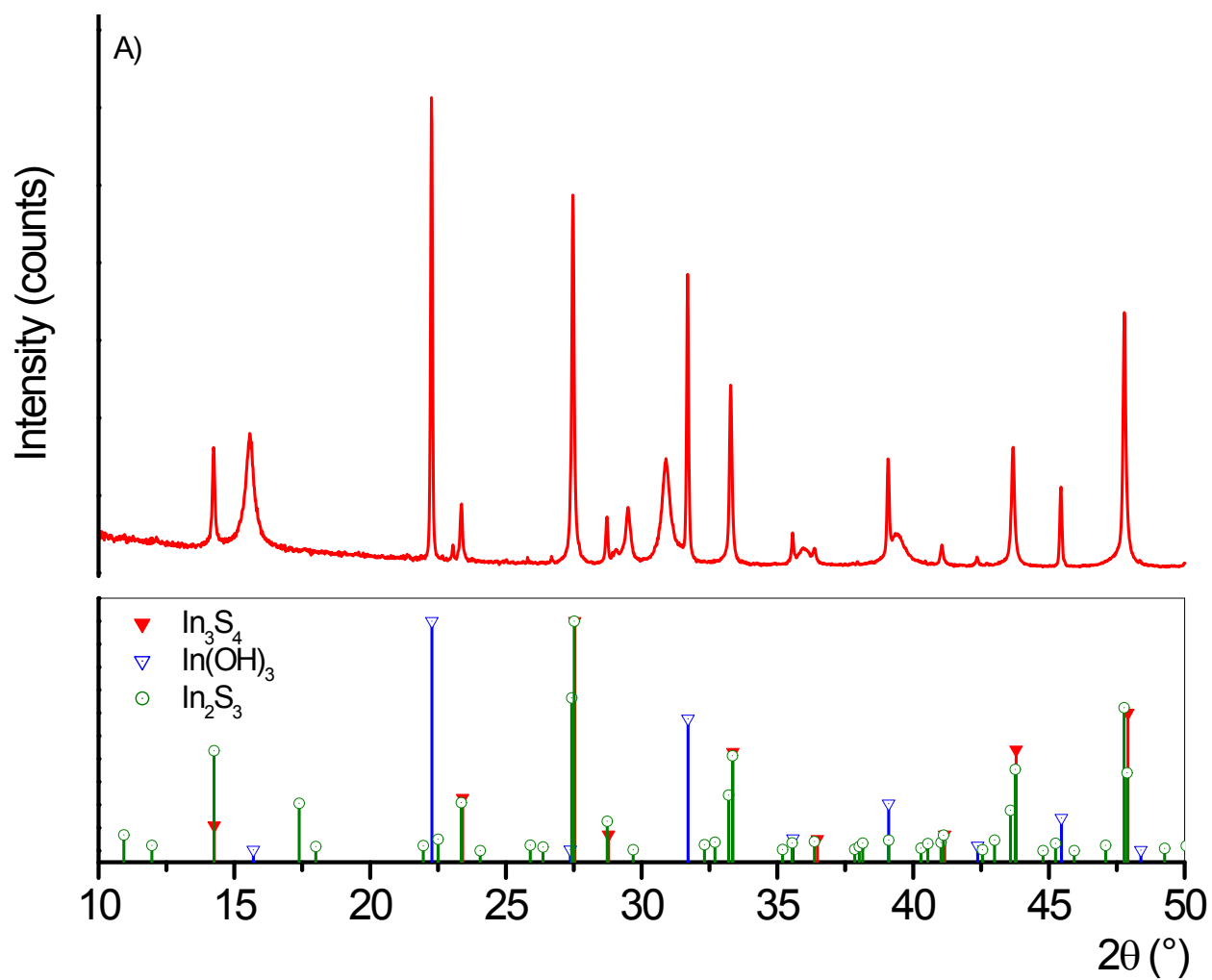


Fig. S3. Top: powder X-ray diffraction pattern of hydrothermal product, below: tick marks representing the characteristic Bragg peak positions of In_3S_4 , $\text{In}(\text{OH})_3$ and In_2S_3 (red, blue and green colors, respectively).

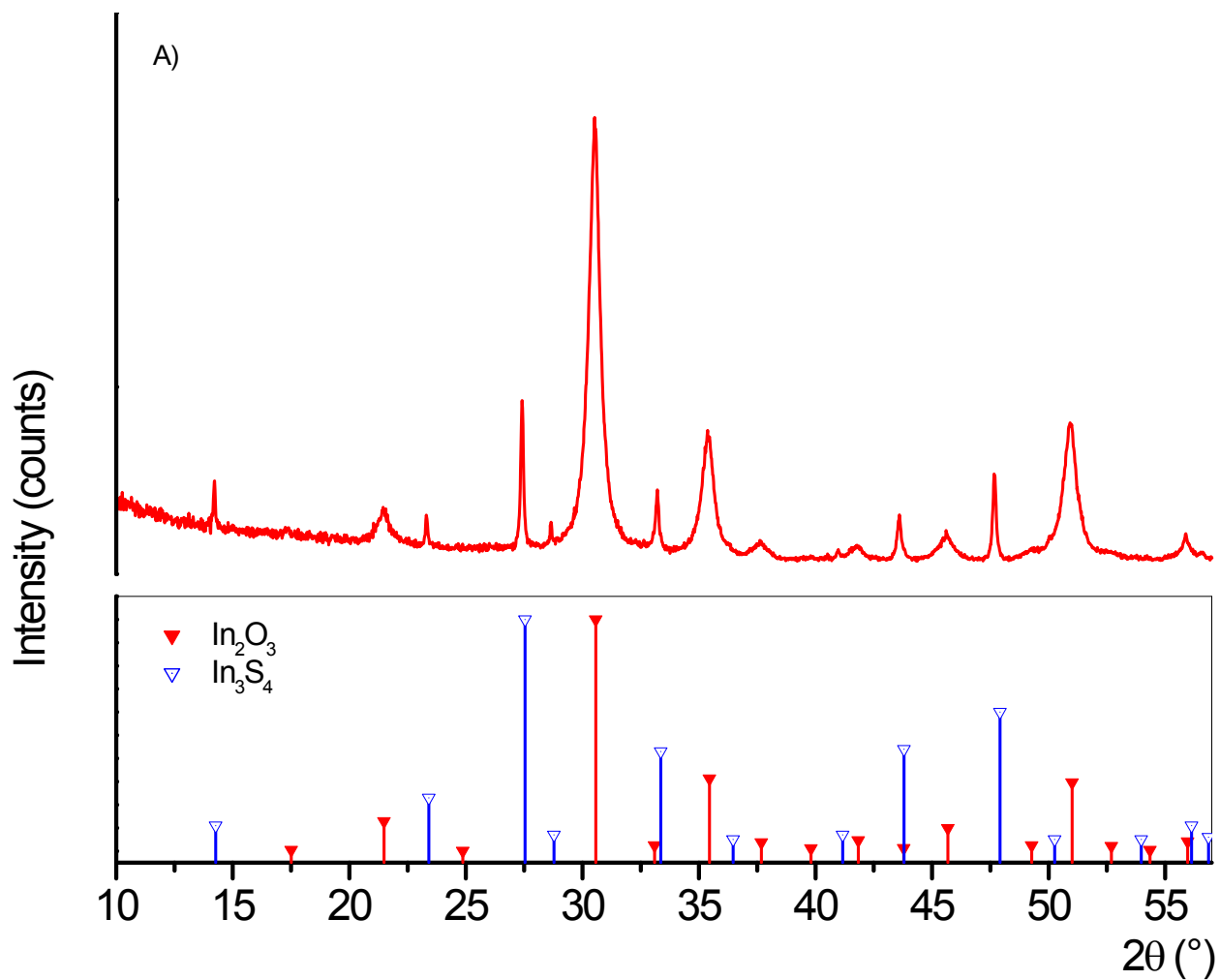


Fig. S4. Top: powder X-ray diffraction pattern of hydrothermal product calcinated at 400 °C for 2h, below: tick marks for characteristic Bragg peak positions of In_2O_3 and In_3S_4 (blue and red colors, respectively).

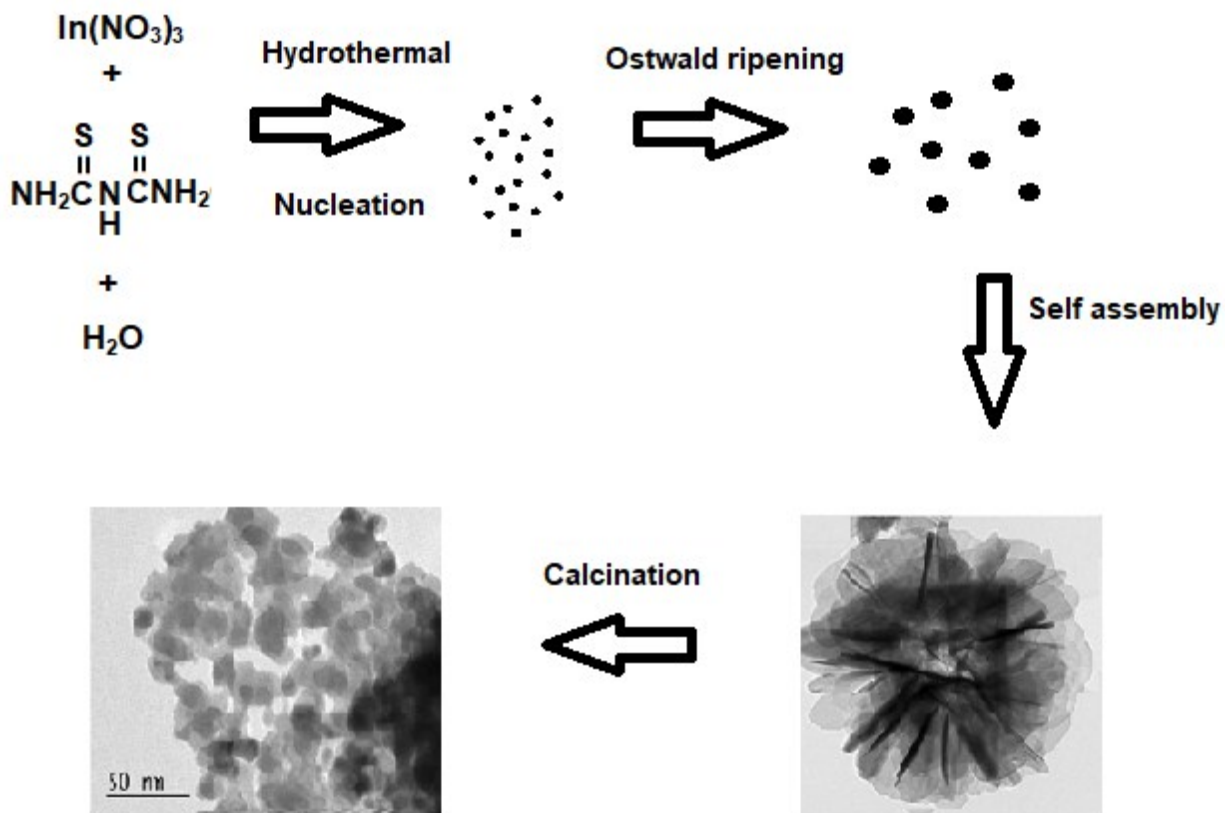


Fig. S5. Schematic formation of In_2O_3 microflowers.