Electronic Supplementary Material (ESI) for CrystEngComm

Facile synthesis of Scandium Fluoride oriented single-crystalline rods and urchin-like structures by Gas-Solution Interface Technique

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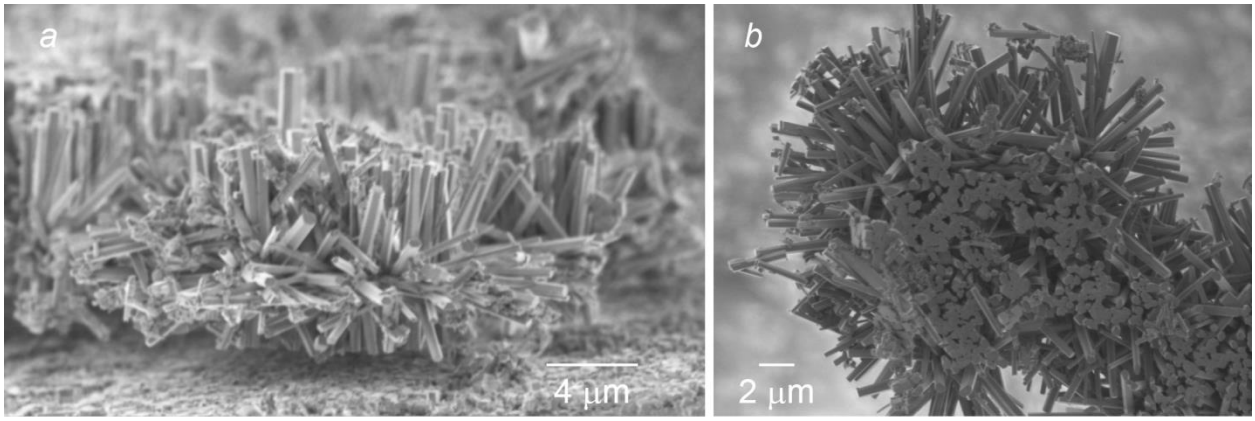

Figure S1. SEM images of scandium fluoride rod crystals synthesized from 0.05 M $ScCl_3$ solution: *a)* cross view image; *b)* bottom view image

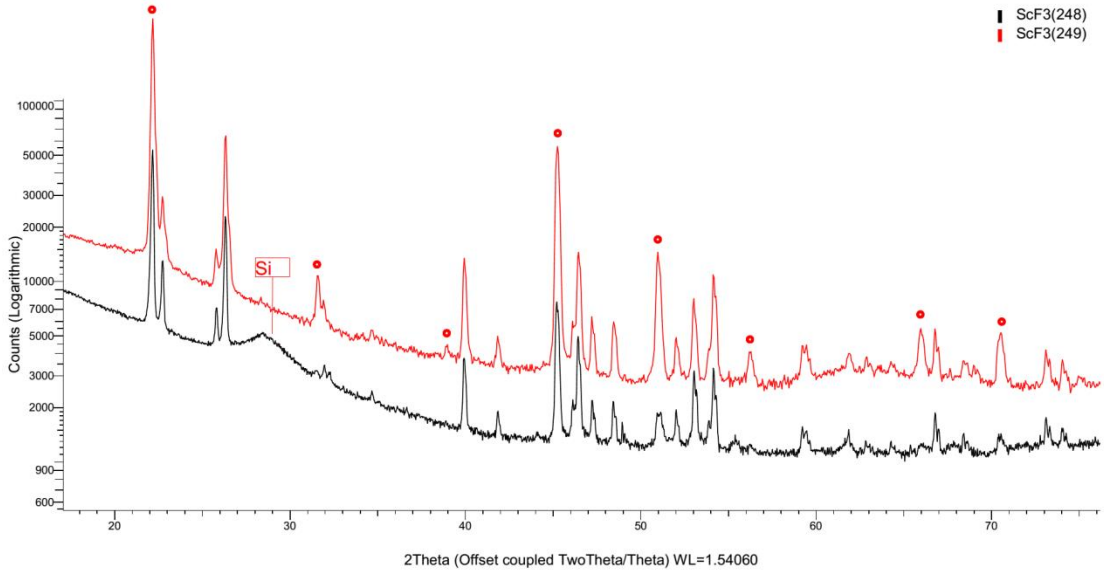

Figure S2. XRD patterns of scandium fluoride crystals, synthesized from 0.02 M (black curve) and 0.1 M (red curve) solutions on the silicon surface. The contents of ScF_3 cubic phase is 10 % and 35 % correspondingly. The peaks of the cubic phase are marked with red circles.

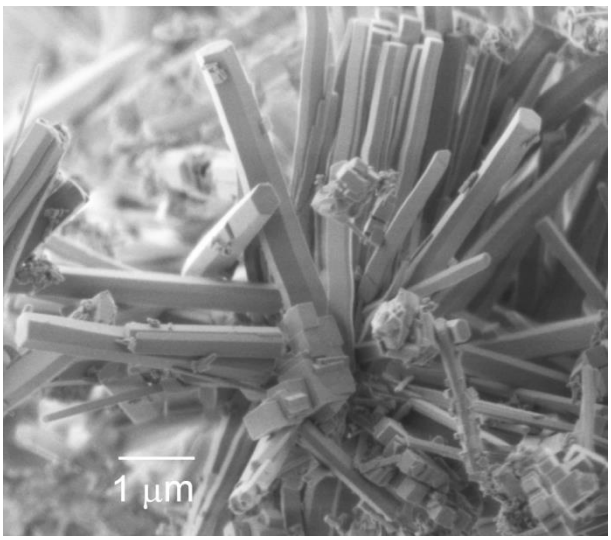

Figure S3. SEM images of scandium fluoride rod crystals synthesized from 0.02 M $ScCl_3$ solution: agglomeration of cubic and rod crystals is clearly visible.

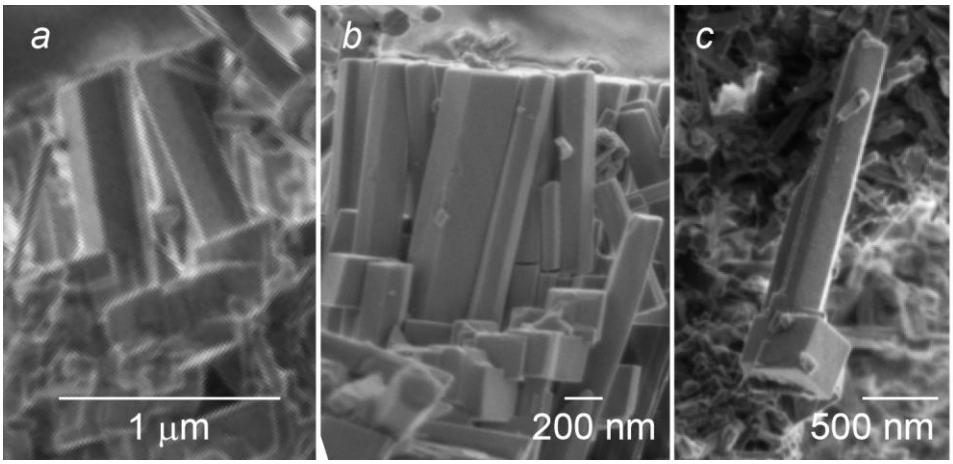

Figure S4. SEM images of scandium fluoride rod crystals synthesized from 0.05 M $ScCl_3$ solution during 10 min: agglomerations of cubic and rod crystals are clearly visible.