

Supporting information

A New Inorganic-Organic Hybrid In₂Se₃(enh₂) Hollow
Nanospheres: Hydrothermal Synthesis and Their
Near-infrared Photoluminescence Properties

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Table S1. The simulated unit cell and diffraction peaks from the PXRD data by using Powder X.

A = 17.417974 Å ALFA= 90.000000 DEG.
B = 12.233826 Å BETA= 90.000000 DEG.
C = 3.992905 Å GAMMA= 90.000000 DEG.
UNIT CELL VOLUME = 850.84

H	K	L	SST-OBS	SST-CALC	DELTA	2TH-OBS	2TH-CALC	D-OBS
1	1	0	0.005868	0.00592	-0.000052	8.787	8.826	10.0556
2	0	0	0.007819	0.007823	-0.000004	10.146	10.149	8.7113
2	1	0	0.011956	0.011788	0.000168	12.555	12.466	7.0447
3	1	0	0.021702	0.021557	0.000136	16.943	16.890	5.2288
2	2	0	0.023690	0.023681	0.000009	17.708	17.705	5.0046
0	0	1	0.037304	0.037217	0.000087	22.272	22.246	3.9882
5	1	0	0.052814	0.052859	-0.000046	26.572	26.584	3.3519
6	1	0	0.074466	0.074373	0.000093	31.672	31.652	2.8228
5	2	1	0.101645	0.101970	-0.000325	37.183	37.245	2.4161

6	3	0	0.106210	0.106090	0.000120	38.040	38.018	2.3636
7	2	0	0.111817	0.111692	0.000125	39.071	39.048	2.3036
6	3	1	0.143369	0.143307	0.000062	44.499	44.489	2.0344
7	2	1	0.149216	0.148909	0.000306	45.447	45.398	1.9941
8	1	1	0.166207	0.166352	-0.000145	48.119	48.141	1.8894
1	3	2	0.186548	0.186505	0.000044	51.178	51.172	1.7835
7	5	0	0.194796	0.194948	-0.000152	52.381	52.403	1.7453
8	5	0	0.224395	0.224285	0.000111	56.550	56.535	1.6261

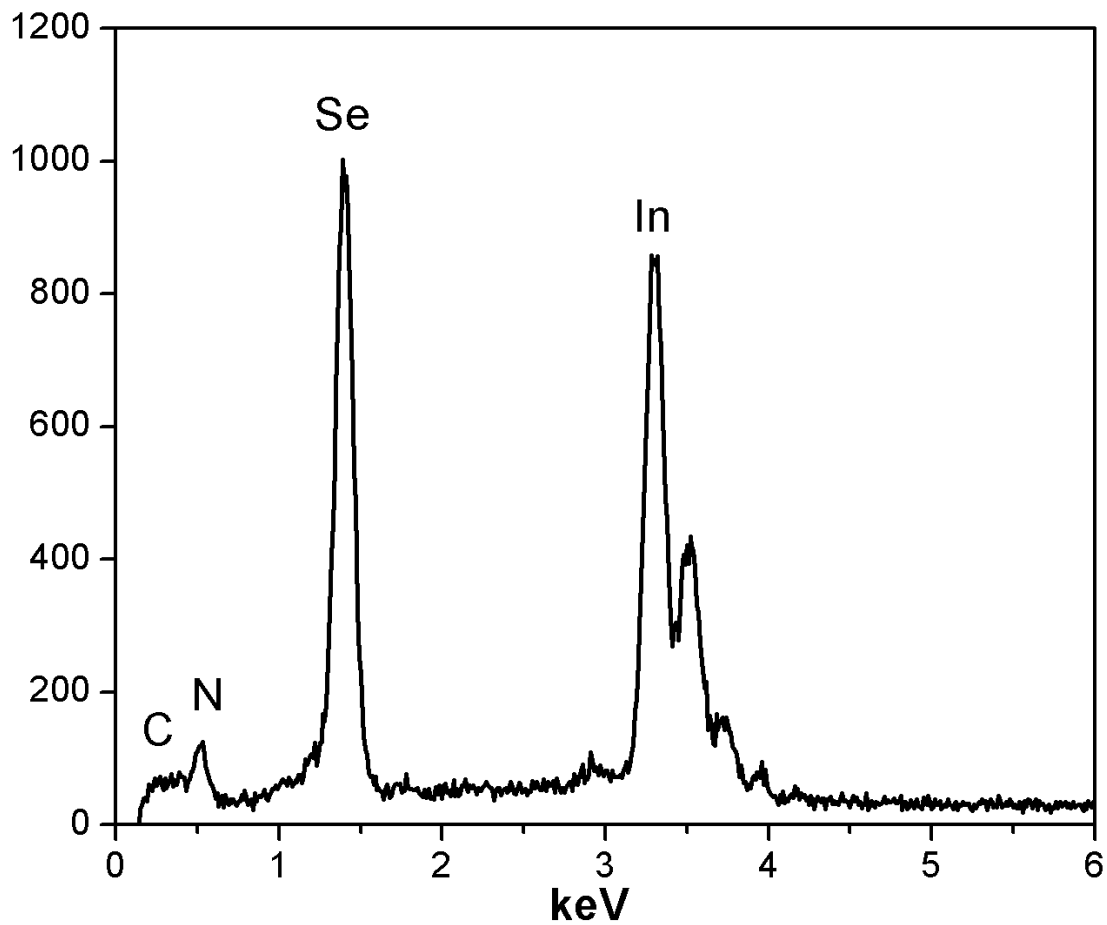


Fig. S1 EDS spectra of the obtained hybrid material.

Table S2. EDS data of the product prepared at 180°C for 24 h in a mixed solution with a volume ratio of $V_{\text{en}}/V_{\text{H}_2\text{O}}/V_{\text{N}_2\text{H}_4\cdot\text{H}_2\text{O}} = 4:10:3$

Element	C	N	In	Se
Atomic %	23. 55	19. 26	21. 8	35. 39
	22. 19	21. 26	23. 28	33. 27
	21. 65	22. 06	22. 15	34. 14
	22. 31	22. 14	22. 35	33. 2
	23. 47	19. 97	26. 61	29. 95
	22. 09	22. 08	22. 21	33. 62
	20. 68	22. 76	21. 33	35. 23
	21. 96	21. 84	22. 13	34. 07
	22. 17	22. 47	21. 95	33. 41
	21. 93	21. 97	22. 14	33. 96
Average Atomic%	22. 2	21. 581	22. 595	33. 624