

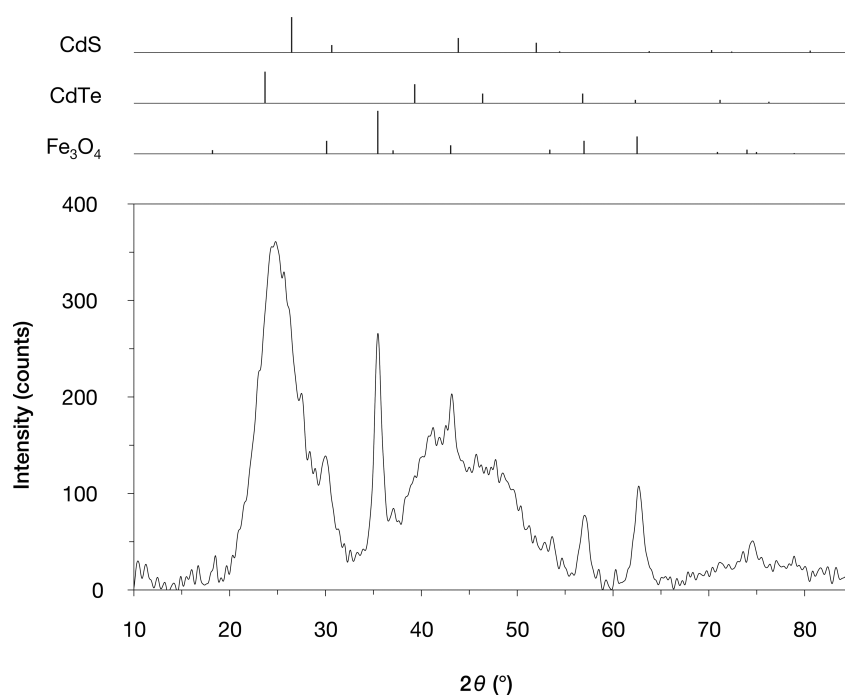
Electronic Supplementary Information for
Nanosized Luminescent Superparamagnetic Hybrids

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PXRD and reference data

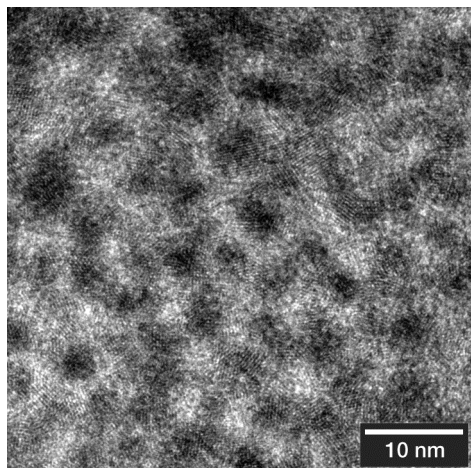


JCPDF cards 15-0770 (CdTe), 89-0440 (CdS), and 19-0629 (magnetite).

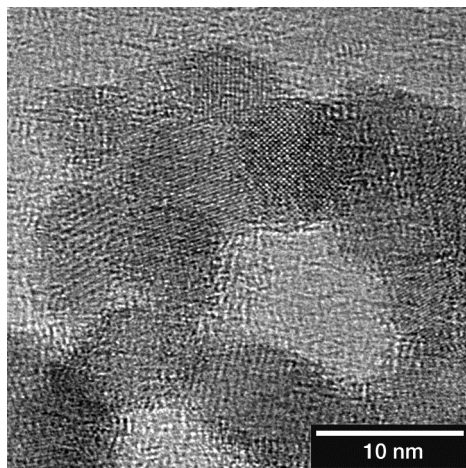
CdTe			CdS			Fe ₃ O ₄		
$d / \text{\AA}$	$2\theta (^{\circ})$	hkl	$d / \text{\AA}$	$2\theta (^{\circ})$	hkl	$d / \text{\AA}$	$2\theta (^{\circ})$	hkl
3.742	23.76	1 1 1	3.366	26.46	1 1 1	4.852	18.27	1 1 1
2.290	39.31	2 2 0	2.915	30.64	2 0 0	2.967	30.09	2 2 0
1.954	46.43	3 1 1	2.061	43.89	2 2 0	2.532	35.42	3 1 1
1.619	56.82	4 0 0	1.757	52.00	3 1 1	2.424	37.06	2 2 2
1.488	62.35	3 3 1	1.683	54.48	2 2 2	2.099	43.06	4 0 0
1.323	71.21	4 2 2	1.458	63.78	4 0 0	1.715	53.38	4 2 2
1.247	76.30	5 1 1	1.338	70.30	3 3 1	1.616	56.93	5 1 1
1.146	84.47	4 4 0	1.304	72.41	4 2 0	1.485	62.49	4 4 0
1.095	89.41	5 3 1	1.190	80.68	4 2 2	1.419	65.75	5 3 1
1.025	97.44	6 2 0	1.122	86.71	5 1 1	1.328	70.91	6 2 0
0.988	102.5	5 3 3				1.281	73.93	5 3 3
0.936	110.8	4 4 4				1.266	74.95	6 2 2
0.908	116.1	5 5 1				1.212	78.92	4 4 4
0.866	125.6	6 4 2				1.122	86.71	6 4 2
0.844	131.8	7 3 1				1.093	89.62	7 3 1
						1.050	94.38	8 0 0
						0.990	102.2	6 6 0
						0.970	105.1	7 5 1
						0.963	106.2	6 6 2
						0.939	110.2	8 4 0
						0.895	118.8	6 6 4
						0.880	122.2	9 3 1
						0.857	128.0	8 4 4
						0.823	138.8	10 2 0
						0.812	143.1	9 5 1
						0.808	144.9	10 2 2

**Transmission electron micrographs of QDs,
magnetite nanoparticles, and nanocomposite**

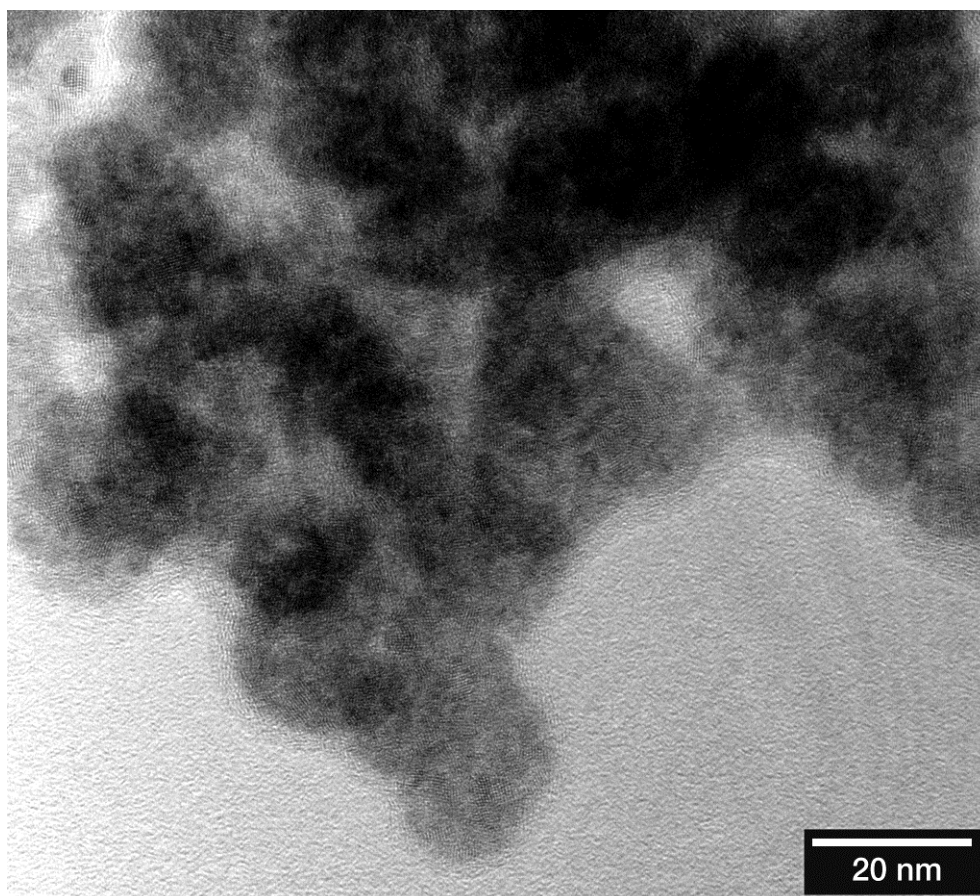
Cadmium telluride



Magnetite



Low resolution micrograph of the nanocomposite (CdTe-Fe₃O₄)



Magnetization curve for as-prepared magnetite

