

Crystallite size of ZnO/MO composites

Nano-composite	phase	2 θ ($^{\circ}$)	β ($^{\circ}$)	D (nm)	D_{moy} (nm)
ZnO/Mn₃O₄	ZnO	31.6	0.39987	20.6472748	18.9391
		34.4	0.40125	20.7257402	
		36.2	0.54116	15.4443643	
	Mn₃O₄	29.1	0.56979	14.4044544	13.1409
		32.8	0.6113	13.5468982	
		58.7	0.7945	11.471575	
ZnO/Fe₃O₄	ZnO	31.6	0.47029	17.5556057	21.529
		34.4	0.39125	21.2554715	
		36.2	0.32424	25.7768079	
	Fe₃O₄	29.8	0.4342	18.932983	17.2027
		35.01	0.5078	16.4041899	
		62.1	0.5699	16.2711681	
ZnO/CuO	ZnO	31.6	0.6779	12.17912	16.8256
		34.4	0.6272	13.25925	
		36.2	0.3338	25.03856	
	CuO	35.6	0.6106	13.66476	13.1593
		38.7	0.6654	12.65390	
ZnO/NiO	ZnO	31.6	1.0461	7.892386	10.6315
		34.4	1.0224	8.134001	
		36.2	0.5267	15.86837	
	NiO	37.2	0.5397	15.53103	13.0316
		43.2	0.737	11.59335	
		62.7	0.7771	11.97064	