

Zn/Mg	phase fractions (%)	a, b, c (Å)	V (Å <sup>3</sup> )	ρ (nm <sup>-2</sup> )	Crystallite size (nm)	Micro-strain (%)	χ <sup>2</sup>
ZnO	ZnO 100%	a=b=3.2562(3) c=5.2122(5)	47.8(3)	0.00277	19(3)	0.186(4)	1.64
MgO:ZnO 1:10	MgO 5.4 %	a=b=c=4.209(3)	74.58(7)	0.00592	13(5)	0.813(6)	1.84
	ZnO 94.6 %	a=b=3.2510(17) c=5.206(3)	47.65(3)	0.00082	35(5)	0.087(12)	
MgO:ZnO 1:5	MgO 16.0 %	a=b=c=4.2200(8)	75.15(6)	0.00174	24(4)	1.07(3)	1.28
	ZnO 82.2 %	a=b=3.248(13) c=5.1979(3)	47.48(5)	0.00148	26(3)	~0	
MgO:ZnO 1:3	MgO 26.9 %	a=b=c=4.2167(8)	75.03(4)	0.00510	14(3)	0.0020(3)	1.55
	ZnO 73.1 %	a=b=3.2497(2) c=5.1996(4)	47.55(5)	0.00826	11(3)	0.0050(10)	
MgO:ZnO 1:1	MgO 51.4 %	a=b=c=4.2206(3)	75.18(5)	0.00309	18(7)	0.130(13)	1.31
	ZnO 48.6 %	a=b=3.2529(3) c=5.2046(4)	47.70(4)	0.00082	35(2)	0.224(15)	
MgO:ZnO 3:1	MgO 66.5 %	a=b=c=4.2212(3)	75.22(3)	0.00510	14(3)	0.223(4)	1.39
	ZnO 33.5 %	a=b=3.2534(3) c=5.2079(5)	47.74(9)	0.00073	37(3)	0.1160(8)	
MgO:ZnO 5:1	MgO 78.2 %	a=b=c=4.2193(3)	75.11(6)	0.00826	11(3)	0.0200(3 )	1.4
	ZnO 20.8 %	a=b=3.2516(4) c=5.2069(5)	47.68(3)	0.00346	17(3)	0.0002(3)	
MgO:ZnO 10:1	MgO 87.4 %	a=b=c=4.2167(3)	74.95(4)	0.01235	9(5)	0.368(7)	2.11
	ZnO 12.6 %	a=b=3.25278(13) c=5.2056(3)	47.67(5)	0.00309	18(7)	0.0340(10)	
MgO	MgO 100%	a=b=c=4.2269(8)	75.52(5)	0.02778	6.0(8)	0.54(3)	1.2