## **Supplementary Material**

## The effect of growing time and Mn concentration on the defect structure of ZnO nanocrystals: X-ray Diffraction, Infrared and EPR Spectroscopy

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Table S1. The concentration of Mn (mol) used, concentration of Mn detected by EDX (%), and ICP-MS (ppm)

	Concentration of Mn used (mol)	Concentration of Mn (%) (EDX)	Concentration of Mn (ppm) (ICP- MS)
X2	5×10 <sup>-4</sup>	0.13	665
<b>X3</b>	$10 \times 10^{-4}$	0.14	1072
<b>X4</b>	25×10 <sup>-4</sup>	0.24	2632
<b>X5</b>	75×10 <sup>-4</sup>	0.29	5384
<b>X6</b>	$100 \times 10^{-4}$	0.79	6473
X7	250×10 <sup>-4</sup>	2.00	15300

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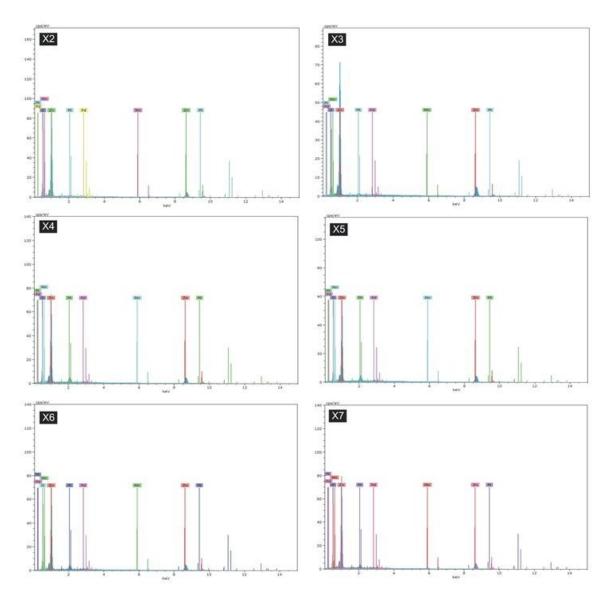
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**Figure S1.** EDX spectra of Mn doped ZnO nanopowders.