Supporting Information

Intense Red Emitting Photoluminescence and Mechanoluminescence from Mn^{2+}-Activated SrZnSO with layered structure

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Table S1. Main refinement parameters and crystallographic data for $SrZn_{1-x}Mn_xSO$ (x = 0, 0.01 and 0.02).

Composition	x = 0	x = 0.01	x = 0.02
Crystal system	Hexagonal	Hexagonal	Hexagonal
Space group	$P6_3mc$ (No.186)	$P6_3mc$ (No.186)	$P6_3mc$ (No.186)
a (Å)	3.9111(2)	3.9123(13)	3.9137(8)
c (Å)	11.6141(6)	11.6147(4)	11.6205(3)
V (Å^3)	153.854(14)	153.961(9)	154.149(6)
$\alpha = \beta$	90°	90°	90°
γ	120°	120°	120°
2θ interval	5°-130°	5°-130°	5°-130°
Density (g/cm^3)	4.288	4.270	4.551
Zn/Mn-S (Å)	2.400	2.423	2.398
Zn/Mn-O (Å)	1.974	1.996	2.083
Sr-S (Å)	3.157	3.182	3.233
Sr-O (Å)	2.400	2.363	2.341
R_p	12.9	9.81	18.5
R_{wp}	11.4	9.98	16.4
R_{exp}	7.66	5.36	7.14
χ^2	2.21	3.46	5.30