

Dysprosium site occupancy in SrZnO₂ nanophosphors probed through XANES

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Table S1: Coordination number (N), interatomic distance (R), Debye-Waller factor (σ^2) obtained by EXAFS analysis at the Zn K -edge, Sr K -edge and Dy L_3 -edge of the Ce doped SrZnO₂ system. The numbers in parentheses indicate the uncertainty in the last digit.

Edge	Sample	Path	R (Å)	σ^2 (Å ²)	N
Zn K -edge	Dy1	Zn-O	1.947 (5)	0.0056 (3)	3.3 (1)
		Zn-Sr/Dy	3.133 (3)	0.0139 (4)	3.0 (3)
		Zn-Zn/Dy	3.185 (2)	0.0083 (4)	4.2 (2)
	Dy3	Zn-O	1.932 (3)	0.0063 (2)	3.6 (1)
		Zn-Sr/Dy	3.133 (3)	0.0129 (2)	3.8 (3)
		Zn-Zn/Dy	3.192 (2)	0.0086 (2)	4.6 (2)
	Dy5	Zn-O	1.932 (2)	0.0059 (4)	3.5 (1)
		Zn-Sr/Dy	3.126 (3)	0.0127 (4)	4.4 (3)
		Zn-Zn/Dy	3.193 (2)	0.0082 (2)	4.8 (2)
Sr K -edge	Dy1	Sr-O	2.513 (4)	0.0065 (3)	4.3 (1)
		Sr-Zn/Dy	3.142 (3)	0.0074 (4)	2.9 (1)
		Sr-Sr/Dy	3.223 (3)	0.0091 (3)	4.4 (2)
	Dy3	Sr-O	2.521 (2)	0.0067 (4)	4.5 (1)
		Sr-Zn/Dy	3.142 (2)	0.0071 (4)	3.2 (1)
		Sr-Sr/Dy	3.232 (1)	0.0090 (2)	5.1 (2)
	Dy5	Sr-O	2.513 (3)	0.0069 (2)	4.4 (1)
		Sr-Zn/Dy	3.142 (2)	0.0071 (2)	3.1 (1)
		Sr-Sr/Dy	3.232 (2)	0.0089 (4)	5.1 (2)
Dy L_3 -edge	Dy1	Dy-O	2.323 (2)	0.0067 (3)	4.0 (1)
		Dy-Sr/Dy	3.475 (2)	0.0082 (2)	1.0 (2)
		Dy-Zn/Dy	3.158 (3)	0.0075 (4)	0.4 (2)
	Dy3	Dy-O	2.313 (1)	0.0064 (3)	4.6 (1)
		Dy-Sr/Dy	3.444 (2)	0.0073 (4)	3.0 (3)
		Dy-Zn/Dy	3.170 (4)	0.0069 (4)	0.8 (2)
	Dy5	Dy-O	2.181 (1)	0.0071 (2)	5.4 (1)
		Dy-Sr/Dy	3.260 (3)	0.0077 (4)	5.0 (3)
		Dy-Zn/Dy	3.090 (3)	0.0060 (4)	1.6 (3)

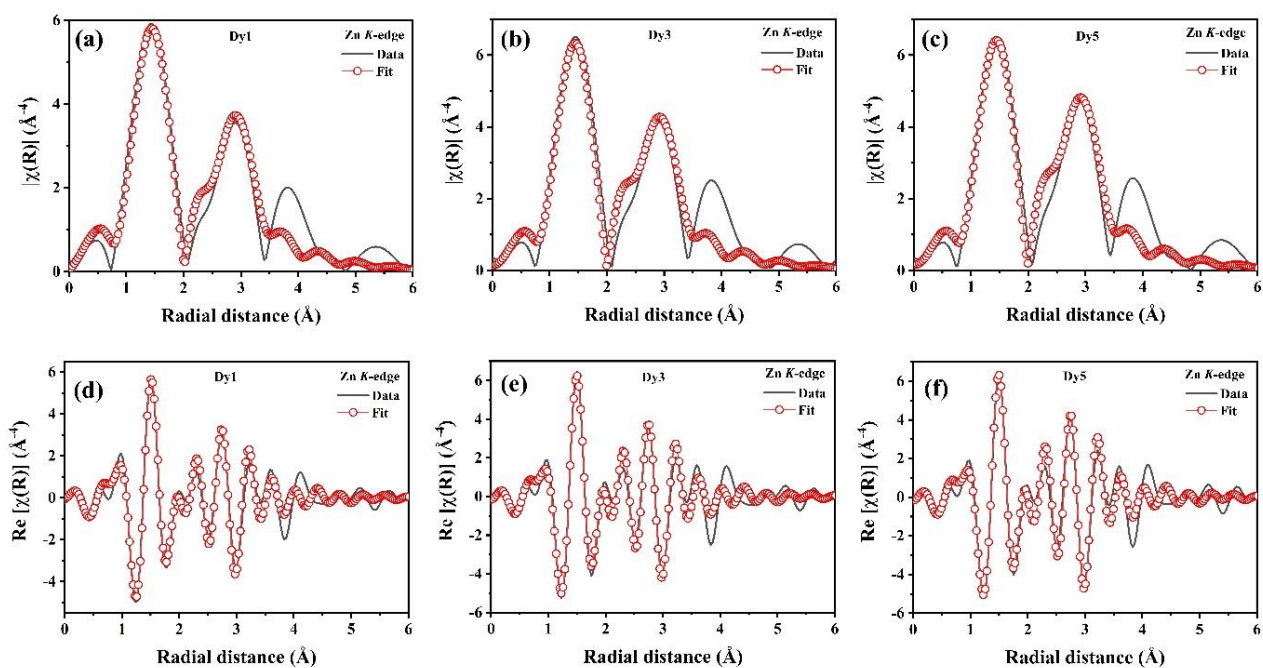


Figure 1: (a,d), (b,e) and (c,f) represent the magnitude and real part of fitted Fourier transformed EXAFS function at Zn *K*-edge of Dy1, Dy3 and Dy5 samples. The curves shown here are phase un-corrected.

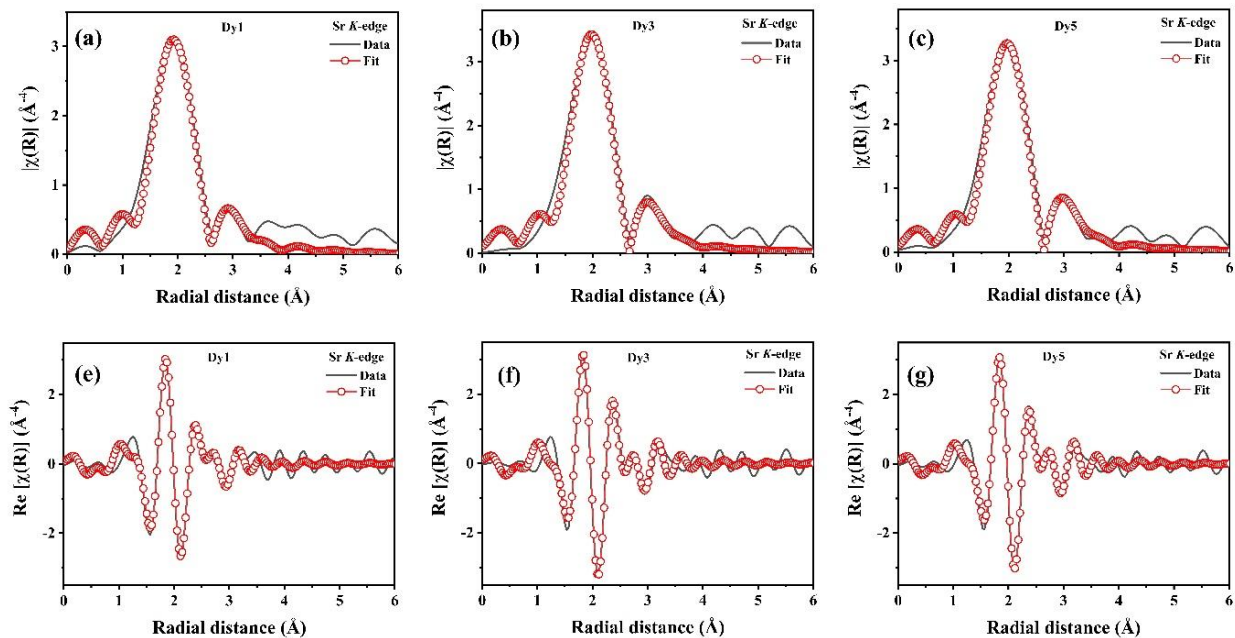


Figure 2: (a,d), (b,e) and (c,f) represent the magnitude and real part of fitted Fourier transformed EXAFS function at Sr *K*-edge of Dy1, Dy3 and Dy5 samples. The curves shown here are phase un-corrected.

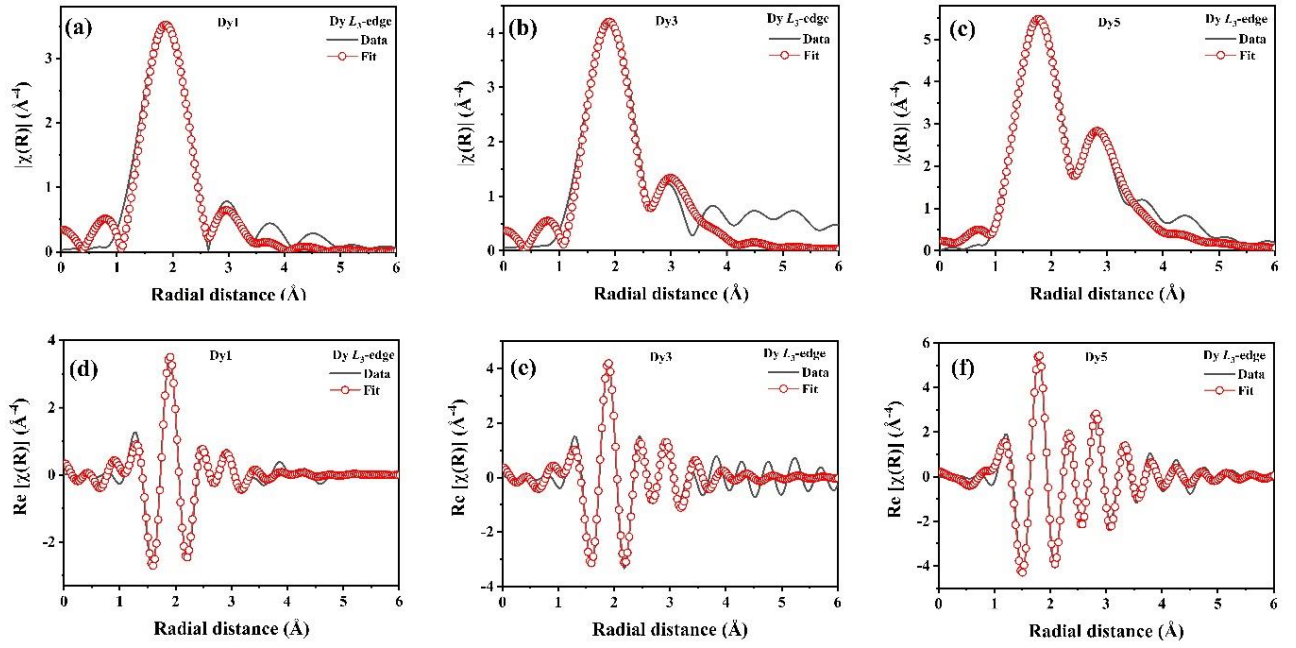


Figure 3: (a,d), (b,e) and (c,f) represent the magnitude and real part of fitted Fourier transformed EXAFS function at Dy L_3 -edge of Dy1, Dy3 and Dy5 samples. The curves shown here are phase un-corrected.