Magnetic interactions of Cr-Cr and Co-Co impurity pairs in ZnO within a band-gap corrected density functional approach

 Z_1 Z_2 Z_3 Z_4 Z_5 Z_5

	11	AND	\mathbf{Z}_{Γ} s	
<u>Γ</u> (Γ) ()	0. 3	3.23	3.44	(. 6
: 4 */	0.1	0.4	0.2	(5.)
*/ () ()	5. 4	.43	.40	()
& Z ()	, 4.	, .0	, . 5 , .5	(5.)
f (3)	4.5	45.02	4 . 1	(5.)
4/1	1. 13	1.5 5	1. 02	(5.)
	0.3.	0.3	0.3 3	(5.)

 S_{11} U_{12}^{Z} U_{13}^{Z} U_{14}^{Z} $U_{14}^$ Z Z Z Z Z

2 - 1_y. 2 Z γ Z₅ ε (+

 