M.S. Islam

Table I. Interatomic potentials for $CaCuO_2Cl_2$

M.S. Islam + M. Real, Foralay Disc (1997)

(a) Short range: $V(r) = Aexp(-r/\rho) - C/r^6$

Interaction	A(eV)	ρ(Å)	C(eVÅ ⁶)	
Cu ²⁺ O ²⁻	4011.0795	0.239415	0.090	
Cu ²⁺ Cl ⁻	16091.071341	0.22742	0.58	
O ² O ² -	22764.3	0.149	63.08	
Cl Cl-	27017.414822	0.249784	100.0	
O ² CI-	342.87	0.28696	0.0	
Ca ²⁺ O ²⁻	1090.4	0.3437	0.0	-
Ca ²⁺ Cl ⁻	2302.0	0.3402	0.0	

(b) Shell model: $\alpha = Y^2/k$

Species	Y(eV)	k(eVÅ-2)
Ca ²⁺	3.135	110.2
Cu ²⁺	2.0	99999.0
CI-	-2.519	29.38
O ² -	-2.389	- 42.0