

**TABLE 11.6**  
**Values of Madelung constants for several crystal structures**

Crystal structure	Reduced Madelung constant, $M'$	Conventional Madelung constants	
		$\mathcal{M} = \left(\frac{m+x}{2}\right)M'$	$M = \frac{z_M z_X(m+x)}{2}M'$
NaCl	1.7476	1.7476	1.7476
CsCl	1.7627	1.7627	1.7627
ZnS (zinc blende)	1.6381	1.6381	6.5522
ZnS (wurtzite)	1.6413	1.6413	6.5653
CaF <sub>2</sub> (fluorite)	1.6796	2.5194	5.0388
TiO <sub>2</sub> (rutile)	1.6053	2.4080	19.264
Al <sub>2</sub> O <sub>3</sub> (corundum)	1.6688	4.172	25.031