TABLE VII. Results of measurements on BeO. Density = 3.01 g/cc.

	C_{11}	C_{12}	C_{13}	C_{33}	C_{44}	C_{66}
	(in units of 10^{12} dyn/cm^2)					
Present work	4.606	1.265	0.8848	4.916	1.477	1.670
Bentle (Ref. 3)	4.70	1.68	1.19	4.94	1.53	1.52(1.63)[a]

[a] Reported but considered in error. Estimated errors in C_{ij} ±1%; C_{ii} ±0.2%.

for the choice of the positive value, although a plausibility agreement has been discussed in the literature.[17]

There is very little anisotropy in these compounds as evidenced from the ratios of C_{66}/C_{44} and $C_{33}/_{11}$; however, the value of Bentle for $C_{66}/C_{44}=1.00$ is not reasonable for a hexagonal crystal.

Figure 6 is a log–log plot of bulk modulus vs bond distance for the compounds of interest and a slope of −4 fits the data. Gilman[18] has related the slope of −4 to the relationship of electrostatic forces between atomic particles and bond distance, which should reflect in the same way for the elastic moduli and bond distance.

[17] E. S. Fisher and H. J. McSkimin, J. Appl. Phys. **29**, 1473 (1958).

[18] J. J. Gilman, *Mechanical Behavior of Crystalline Solids* (NBS Monograph 59, 1963), p. 79.

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