On Ratios of B(E2)’s CHARLES LOELIUS, LARRY ZAMICK, YITZHAK SHARON, Rutgers University — We have conducted a wide survey of the ratio \( \frac{B(E2; 4+ \to 2+)}{B(E2; 2+ \to 0+)} \) throughout the periodic table. In the rotational model this ratio is \( \frac{10}{7} \) and in the vibrational model it is \( \frac{2}{1} \). There are considerable deviations from this for magic or semi-magic nuclei e.g. for \(^{86}\text{Kr} \) (\( N=50 \)) the ratio is close to zero. But what is more surprising is that there are large deviations for other nuclei as well, which will be systematically shown. Theoretical discussions for some of these deviations will be given.