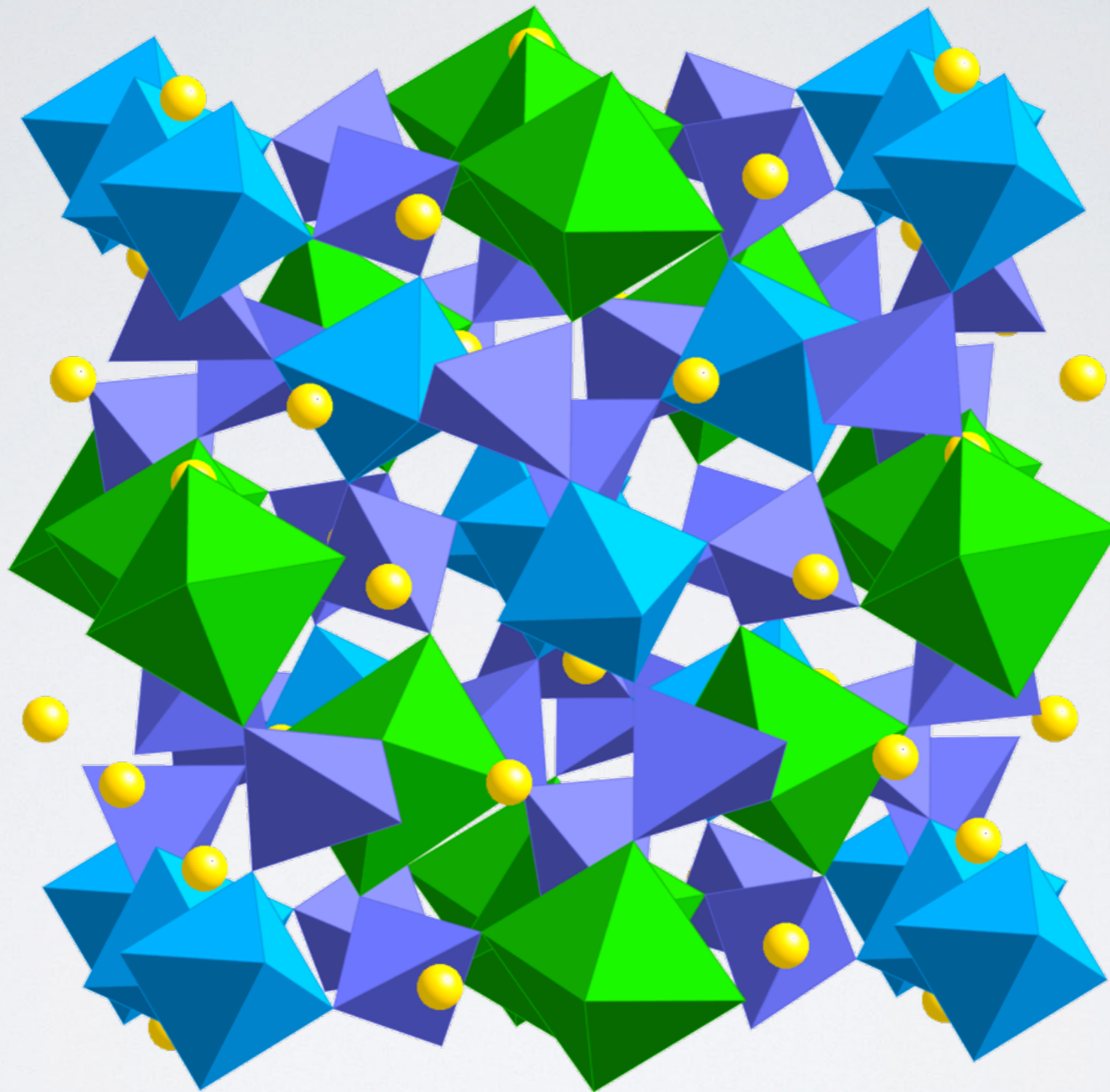


Majorite garnet $(\text{Ca}_{0.49} \text{Mg}_{2.51})(\text{MgSi})\text{Si}_3\text{O}_{12}$



Samples synthesized at 18.2 GPa and 2050°C. The first silicate garnet to display ordering on both octahedral and dodecahedral sites.

Site Occupancies:- D1: Mg=0.917; Ca=0.083 <- Ca-poor site. D2: Mg=0.677; Ca=0.323 <- Ca-rich site.

Oct1: Mg Oct2: Si. Hazen et al. (1994) American Mineralogist 79:581–584