

Ab initio study of chromium isotopes

DER-YOU KAO¹² AND SHAWN DOMAGAL-GOLDMAN²

¹Department of Physics, University of Maryland—Baltimore
County

²NASA Goddard Space Flight Center

Density functional theory (DFT) is widely used in solid state physics and chemistry. However, there is no self-interaction error-free functionals available so far. Here, we are going to introduce Fermi-Löwdin-orbital self-interaction corrected DFT and its application on the studies of chromium isotopic system, an important tracer of free oxygen and biostimulated activities.