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Title:	Trend of Gaunt interaction contributions to the electric dipole polarizabilities of noble gas, alkaline-earth, and a few group-12 atoms
Authors:	Dutta, N.N. (/jspui/browse?type=author&value=Dutta%2C+N.N.)
Keywords:	Breit interaction Electric dipole polarizability Perturbation theory
Issue Date:	2020
Publisher:	Elsevier B.V.
Citation:	Chemical Physics Letters, 758
Abstract:	In this work, we calculate unretarded Breit or Gaunt interaction contributions to the electric dipole or E1 polarizabilities of the noble gas, alkaline-earth, and a few group-12 atoms. The dipole polarizabilities of these atoms are calculated using third-order many-body perturbation theory. The strength of the Gaunt interaction contribution increases rapidly in moving down the periodic group toward heavier atoms. However, our work reveals that the trend of this increasing strength is different between the noble gas and alkaline-earth groups
URI:	https://www.sciencedirect.com/science/article/pii/S0009261420308265 (https://www.sciencedirect.com/science/article/pii/S0009261420308265)
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