# Abstract

This work investigates the effect of interfacial Dzyaloshinskii-Moriya interaction (IDMI) on the spin dynamics of a two-sublattice ferromagnet using the Landau-Lifshitz-Gilbert (LLG) equation, extended with tensorial damping and chiral contributions. Starting from a generalized Heisenberg Hamiltonian including exchange, anisotropy, and DMI terms, the linear response theory is used to derive magnon dispersion relations of a rectangular lattice. The analysis reveals how DMI breaks the spin wave reciprocity, introduces asymmetry in the band structure. Dispersion relations are obtained for different directions in momentum space. It shows symmetric behavior along the X-direction and nonreciprocal features along the Z-direction due to DMI.