

We report on the magnetic properties of $\text{Fe}_{1-x}\text{Co}_x$ monolayers separated by Ir films of variable thickness, investigated using the full-potential linearized augmented plane-wave method based on the density functional theory. The interlayer exchange coupling can be used to mediate an exchange field between the layers, showing strong oscillations between antiferromagnetic and ferromagnetic coupling in terms of the Ir spacer thickness. For thin films (less than four Ir layers) a strong dependence on the chemical composition of the magnetic layers can be observed. We study also the magnetic anisotropy and the sensitivity of the in-plane exchange parameters of the magnetic layers to exchange coupling through the Ir spacer