

**Abstract:**

In this work, we study the gluon polarization inside the nucleon within the valon model. We show that the small extracted value for  $\Delta G(x, Q^2)/G(x, Q^2)$  has good agreement with the available experimental data, But it doesn't mean that the polarized gluon inside the nucleon is small. So, to measure the polarized gluon inside the nucleon more precisely, we really need to find the ways that directly related to this value.