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Magneto-electronic properties of GaN codoped with (V, Mn) impurities:
Ab-initio and Monte-Carlo studies

I. Bouziani, Y. Benhouria, I. Essaoudi, A. Ainane, R. Ahuja

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Highlights

- First-principles calculations and Monte Carlo simulations were performed to study GaN codoped with V and Mn impurities.
- Ferromagnetic behavior is induced in Mn codoped (Ga, V)N system.
- (V, Mn) codoped GaN with halfmetallic behaviour and high Curie temperature is a strong candidate for spintronic devices.

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