







A novel method for the modification of magnetite nanoparticles for the enhancement of its dispersibility in hydrophobic media

J.D. Zuluaga-Parra^a, S. Sánchez-Valdés^a  , L.F. Ramos-deValle^a  , F.I. Beltrán-Ramírez^b, L. da-Silva^a, E. Ramírez-Vargas^a, S. Vázquez-Rodríguez^c, S. Flores-Gallardo^d, J. Méndez-Nonell^{d f}, M. Valera-Zaragoza^e, E.N. Cabrera-Álvarez^a

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<https://doi.org/10.1016/j.jmmm.2020.167169> 

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Highlights

- Modified magnetite formed a cluster, with fatty acid as coating layer of magnetite.
- Fatty acid modification of magnetite improved dispersion - distribution in silicon.
- Modified magnetite improved homogenization of magnetic properties of nanocomposite.

Abstract

Different mixing methods were used for the fatty acid modification of magnetite nanoparticles. The magnetite nanoparticles were dissolved in ethanol with a previously dissolved oleic or stearic acid