

A Review: Ferrites Nanoparticles (FNPs) Synthesis via Sol-Gel Auto Combustion Synthesis

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Abstract: Ferrite nanoparticles have a large interest due to their wide range of applications in biomedical, industrial electronic devices, and wastewater treatment. This review is focused on the synthesis of ferrite nanoparticles via sol-gel auto combustion. Ferrites have complex spinel structure. They are magnetic in nature. Their magnetic nature makes them useful for several wide applications in electrical and medical application such as targeted drug delivery, magnetic hyperthermia etc. Sol-gel auto-combustion synthesis is widely used for the synthesis ferrite nanoparticles because sol-gel synthesis is a very versatile route of synthesis. The important feature of the sol-gel auto-combustion technique is that the heat required to trigger the reaction is supplied by the reaction itself instead of coming from external agent or source.

Keywords: Ferrite nanoparticles, Biomedical Applications, Magnetic Hyperthermia etc

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