Synergy of the alternating magnetic field and NIR light in heat generation on ferrite nanostructures

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The lecture aims to present recent advances in the synthesis of ferrite heterostructures, including core-shell, multi-shell, and hybrid materials, with particular emphasis on energy conversion mechanisms in coherently engineered nanostructures under alternating magnetic field (AMF) and near-infrared (NIR) laser stimulation. Special attention will be given to the interplay between magnetic and optical energy dissipation pathways and their relevance for emerging bio-related applications.

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