Record Nr. UNINA9910728939003321 Engineered ferrites and their applications // edited by Pankaj Sharma, **Titolo** Gagan Kumar Bhargava, Sumit Bhardwaj, Indu Sharma Pubbl/distr/stampa Singapore:,: Springer Nature Singapore:,: Imprint: Springer,, 2023 **ISBN** 981-9925-83-5 Edizione [1st ed. 2023.] 1 online resource (x, 256 pages): illustrations (some color) Descrizione fisica Materials Horizons: From Nature to Nanomaterials, , 2524-5392 Collana Altri autori (Persone) SharmaPankaj (Engineer) BhargavaGagan Kumar **BhardwaiSumit** SharmaIndu Disciplina 621.34 Ferrites (Magnetic materials) Soggetti Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Basic Physics and Chemistry of Ferrites -- Tuning of Structural, Nota di contenuto Electrical and Magnetic Properties of Ferrites -- Advances in the Processing of Ferrite Nanoparticles -- Ferrite Nanoparticles for Water Decontamination Applications -- Ferrite Nanoparticles for Hyperthermia Treatment Application -- Ferrite Nanoparticles for Telecommunication Application -- Role of Ferrite Materials in Renewable Energy Harvesting -- Ferrite Nano Composites for EMI Shielding Applications -- Ferrite Nanoparticles for Sensing Applications -- Ferrite Nanoparticles for Energy Storage Applications -- Ferrite Nanoparticles for Antimicrobial Applications -- Ferrite Nanoparticles for Corrosion Protection Applications -- Biomedical Applications of Ferrites. Sommario/riassunto This book edited by leading experts focuses on the foundation of ferrite materials since inception to its contemporary scenario including their vast applications. The contents range from the basic physics and chemistry of ferrites to its applications in telecommunication. SAR reduction, EMI shielding, hyperthermia treatment, and water decontamination. It also focuses on ferrite nanoparticles for sensing application, energy-storage applications, antimicrobial applications,

corrosion protection applications, among others. This book is a useful

reference to those in academia and industry.