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Nota di contenuto	About the Editor -- Applications and Properties of Magnetic Nanoparticles -- Comparative Modeling of Frequency Mixing Measurements of Magnetic Nanoparticles Using Micromagnetic Simulations and Langevin Theory -- Highly Sensitive Fluorescent Detection of Acetylcholine Based on the Enhanced Peroxidase-Like Activity of Histidine Coated Magnetic Nanoparticles -- Boosting Magnetoelectric Effect in Polymer-Based Nanocomposites -- The Heating Efficiency and Imaging Performance of Magnesium Iron Oxide@tetramethyl Ammonium Hydroxide Nanoparticles for Biomedical Applications -- Evaluation of Physicochemical Properties of Amphiphilic 1,4-Dihydropyridines and Preparation of Magnetoliposomes -- Inactivation of Bacteria Using Bioactive Nanoparticles and Alternating Magnetic Fields -- Deviation of Trypsin Activity Using Peptide Conformational Imprints -- Determination of Cobalt Spin-Diffusion Length in Co/Cu Multilayered Heterojunction Nanocylinders Based on Valet-Fert Model -- Magnetic Imaging of Encapsulated Superparamagnetic Nanoparticles by Data Fusion of Magnetic Force Microscopy and Atomic Force Microscopy Signals for Correction of Topographic Crosstalk -- Coating Effect on the 1H-NMR Relaxation Properties of Iron Oxide Magnetic Nanoparticles -- Application of Magnetosomes in Magnetic Hyperthermia -- Room Temperature

Magnetic Memory Effect in Cluster-Glassy Fe-Doped NiO Nanoparticles
-- Magnetocrystalline and Surface Anisotropy in CoFe₂O₄
Nanoparticles -- Biocompatible Magnetic Fluids of Co-Doped Iron
Oxide Nanoparticles with Tunable Magnetic Properties -- Influence of
Experimental Parameters of a Continuous Flow Process on the
Properties of Very Small Iron Oxide Nanoparticles (VSION) Designed for
T1-Weighted Magnetic Resonance Imaging (MRI) -- Synthesis of
Magnetic Ferrite Nanoparticles with High Hyperthermia Performance via
a Controlled Co-Precipitation Method -- Magnetic Nanoparticles
Functionalized Few-Mode-Fiber-Based Plasmonic Vector
Magnetometer.

Sommario/riassunto

This Special Issue aimed to cover the new developments in the synthesis and characterization of magnetic nanoconstructs ranging from conventional metal oxide nanoparticles to novel molecule-based or hybrid multifunctional nano-objects. At the same time, the focus was on the potential of these novel magnetic nanoconstructs in several possible applications, e.g. sensing, energy storage, and nanomedicine.
