# Special Issue

# Magnetic Fluids

### Message from the Guest Editor

Magnetic fluids have been at the focus of rigorous scientific studies for over half a century. Being complex systems with a set of unique physical properties controlled by a magnetic field, they attract the attention of researchers both from a fundamental and applied point of view. Recent trends in magnetic fluid research include interdisciplinary studies at the edge between biotechnology, medical applications, engineering and fundamental physics. At present, increasing attention is being paid to hybrid systems in which simple Newtonian carrier liquids are replaced by polymers, including biological media, liquid crystals, etc. Simple single-domain magnetic nanoparticles serving as the dispersed phase in classical magnetic fluids are replaced by complex clusters coated with various surfactants. Multidisperse mixtures of nano- and microparticles are also used. All this allows obtaining magnetic composites with advanced properties. New trends require novel approaches in theoretical and experimental studies of magnetic fluids. For this Special Issue, we would like to welcome original research manuscripts as well as methodological and review articles on the magnetic fluids

### Guest Editor

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### Deadline for manuscript submissions

closed (20 November 2021)

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### Message from the Editor-in-Chief

*Materials* (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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