

## Special Issue

# Magnetic Nanoparticles and Special Alloys for Biosensors

### Message from the Guest Editor

Recently, a new bottom-up preparation method for magnetic nanoparticles and complex structures has attracted attention because it is based on focused electron beam induced deposition. In contrast to the alternative, the bottom-up approach, in which nanoparticles are synthesized by chemical bonding of atoms, the top-down approach has the charm of integrating complex magnetic interactions into the multilayer systems and, thus, also into the resulting nanostructures. On the other hand, especially in ternary or quaternary alloy systems, starting from multilayer systems, the composition responsible for the physical properties can be transferred very precisely into the resulting micro- or nanostructures. Consequently, this Special Issue will cover a wide range of topics ranging from the simulation-based design, fabrication, and characterization of magnetic nanoparticles or beads, their interaction with magnetoresistive sensors, and the prediction of new applications. For more information, please click: [mdpi.com/si/54274](https://mdpi.com/si/54274).

### Guest Editor

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### Deadline for manuscript submissions

closed (20 November 2022)



## Sensors

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### Message from the Editor-in-Chief

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