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Magnetic Cell Separation

Guest Editor:

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Message from the Guest Editor

Magnetic cell separation has become a key methodology for the isolation of target cell populations from biological suspensions, covering a wide spectrum of applications from diagnosis and therapy in biomedicine to environmental applications or fundamental research in biology. This Special Issue aims to create a forum of discussion to share advances and address current challenges in magnetic cell separation. The topics listed below are meant as a guideline for possible contributions:

- 1. Cell separation devices:
 - a) Batch-type magnetic separators;
 - b) Optimized magnetic field sources for cell separation;
 - c) Microfluidic separation platforms based on magnetism.
- 2. Cell targeting and sorting strategies:
 - a) Cell labeling strategies;
 - b) Label-free separation methods based on magnetism;
 - c) Multifunctional nanoparticles for magnetic cell separation and detection.
- 3. Applications:
 - a) Translation into clinical and industrial practice;
 - b) Rare cell isolation;
 - c) Single cell isolation;
 - d) Environmental applications;
 - c) Other applications.



