

## Topical Collection

# Nanoparticles for Therapeutic and Diagnostic Applications

### Message from the Collection Editor

Nanoparticles have garnered intense interest as a therapeutic platform to treat a broad range of diseases, including cancer, metabolic, cardiovascular, skin, renal, inflammatory, and infectious disease. Well-designed nanoparticles can enhance the efficacy of traditional therapeutics through enhanced solubility, prolonged circulation or drug release, targeted delivery to disease sites, and reduced toxicity. Nanoparticles can be formulated for systemic, dermal, oral, and inhalation applications and optimized to overcome the delivery barriers of emerging therapeutics such as oligonucleotides, mRNA, and DNA with the potential to be safer than viral vector counterparts. The Issue will focus on nanoparticle development and applications in broad ranges of diseases and delivery routes. Research toward increased understanding of pharmacokinetics, pharmacodynamics, toxicity, stability, and manufacturability of nanoparticles is also highly relevant. We look forward to receiving your contributions to this Issue of *Bioengineering*.

### Collection Editor

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## Bioengineering

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### Editor-in-Chief

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