Special Issue

Advanced Hydrogels in Drug Delivery and Wound Healing

Message from the Guest Editors

Hydrogels have emerged as a promising class of materials for drug delivery and wound-healing applications due to their unique properties, such as high water content, biocompatibility, and ability to mimic the extracellular matrix. In addition, hydrogels have been used as wound dressings to promote healing by providing a moist environment, protecting the wound from infection, and promoting tissue regeneration. The pH-, temperature-, and ion-sensitive in situ and fluidic gels are emerging types of gels in drug delivery for the management of different diseases. This Special Issue highlights the latest advances in hydrogel technology for drug delivery and wound healing, including novel hydrogel formulations, methods for controlling drug release, strategies for improving wound-healing outcomes, and the translation of hydrogel-based technologies from bench to bedside. The articles in this issue cover a wide range of topics, from the design and characterization of hydrogel-based drug delivery systems using natural and synthetic polymers to the development of new hydrogel materials with improved mechanical and biological properties.

Guest Editors

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Deadline for manuscript submissions

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About the Journal

Gels (ISSN 2310-2861) is recently established international, open access journal on physical and chemical gel-based materials. The journal aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. General topics include but not limited to synthesis, characterization and applications of new organogels, hydrogels and ionic gels made either from low molecular weight compounds or polymers, composite and hybrid materials where a metal is by some means incorporated into the gel network, and computational studies of these materials in order to provide a better understanding of gelation mechanism. We cordially invite you to consider publishing with us and contribute with your own grain of sand to the advance in this fascinating field.

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