



Microneedles

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Message from the Guest Editors

The microneedles field is entering an exciting period. Almost 50 years since the first patents were filed, the first commercially available drug product seems to finally be within reach. It based on systems microengineered from polymers, elemental silicon, metals, glass, or ceramic. The most common applications have been in vaccine delivery, cosmetic administration, drug delivery, etc. A plethora of strategies has been employed and, as manufacturing tools become ever more sophisticated, the technology has only been limited by researchers' imaginations. Alignment of thinking on critical quality attributes and standards of manufacture is bringing profound patient and commercial benefits. Microneedle research is truly interdisciplinary, harnessing expertise in engineering, computer science, pharmaceutical formulation, immunology, and pharmacology. Accordingly, this Special Issue seeks to showcase research papers, short communications, and review articles that focus on novel developments in microneedle technology and its use for various drug and vaccine delivery applications, cosmeceutical administration, as well as patient therapeutic drug monitoring and diagnosis.





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