

Dissolvable microneedle fabrication using piezoelectric

International Journal of Pharmaceutics

500, 1-10

DOI: [10.1016/j.ijpharm.2015.12.052](https://doi.org/10.1016/j.ijpharm.2015.12.052)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Accuracy and feasibility of piezoelectric inkjet coating technology for applications in microneedle-based transdermal delivery. <i>Microelectronic Engineering</i> , 2017, 172, 19-25.	2.4	18
2	Microneedle, bio-microneedle and bio-inspired microneedle: A review. <i>Journal of Controlled Release</i> , 2017, 251, 11-23.	9.9	285
3	Fabrication of coated polymer microneedles for transdermal drug delivery. <i>Journal of Controlled Release</i> , 2017, 265, 14-21.	9.9	131
4	Engineering Microneedle Patches for Vaccination and Drug Delivery to Skin. <i>Annual Review of Chemical and Biomolecular Engineering</i> , 2017, 8, 177-200.	6.8	284
5	Dissolving Microneedle Patches for Dermal Vaccination. <i>Pharmaceutical Research</i> , 2017, 34, 2223-2240.	3.5	139
6	The numerical and experimental research on injection performance of piezoelectric micro-jet. <i>Ceramics International</i> , 2017, 43, S27-S35.	4.8	3
7	Influences of Excitation on Dynamic Characteristics of Piezoelectric Micro-Jets. <i>Micromachines</i> , 2017, 8, 213.	2.9	7
8	3D printing applications for transdermal drug delivery. <i>International Journal of Pharmaceutics</i> , 2018, 544, 415-424.	5.2	165
9	An update on coating/manufacturing techniques of microneedles. <i>Drug Delivery and Translational Research</i> , 2018, 8, 1828-1843.	5.8	63
10	Controllable printing droplets on demand by piezoelectric inkjet: applications and methods. <i>Microsystem Technologies</i> , 2018, 24, 879-889.	2.0	25
11	A Trace Redundant Lubrication Piezoelectric Microjet for Bearing System. <i>IEEE/ASME Transactions on Mechatronics</i> , 2018, 23, 2263-2272.	5.8	24
12	Individually coated microneedles for co-delivery of multiple compounds with different properties. <i>Drug Delivery and Translational Research</i> , 2018, 8, 1043-1052.	5.8	32
13	Piezoelectric micro-jet devices: A review. <i>Sensors and Actuators A: Physical</i> , 2019, 297, 111552.	4.1	56
14	Application of Micro-Scale 3D Printing in Pharmaceutics. <i>Pharmaceutics</i> , 2019, 11, 390.	4.5	47
15	Piezoelectric inkjet coating of injection moulded, reservoir-tipped microneedle arrays for transdermal delivery. <i>Journal of Micromechanics and Microengineering</i> , 2019, 29, 085004.	2.6	9
16	Kinetics of collagen microneedle drug delivery system. <i>Journal of Drug Delivery Science and Technology</i> , 2019, 52, 618-623.	3.0	21
17	3D Printing of Pharmaceuticals and Transdermal Drug Delivery – An Overview. <i>Minerals, Metals and Materials Series</i> , 2019, , 1563-1573.	0.4	5
18	3D PRINTING IN PHARMACEUTICAL TECHNOLOGY: A REVIEW. <i>International Research Journal of Pharmacy</i> , 2019, 10, 8-17.	0.2	5

#	ARTICLE	IF	CITATIONS
19	A fast-dissolving microneedle array loaded with chitosan nanoparticles to evoke systemic immune responses in mice. <i>Journal of Materials Chemistry B</i> , 2020, 8, 216-225.	5.8	45
20	3D printing for drug delivery and biomedical applications. <i>Drug Discovery Today</i> , 2020, 25, 1668-1681.	6.4	119
21	3D Printing Technologies: Recent Development and Emerging Applications in Various Drug Delivery Systems. <i>AAPS PharmSciTech</i> , 2020, 21, 220.	3.3	55
22	Transdermal drug delivery and patches—An overview. <i>Medical Devices & Sensors</i> , 2020, 3, e10069.	2.7	43
23	Biomedical Applications of Polymeric Microneedles for Transdermal Therapeutic Delivery and Diagnosis: Current Status and Future Perspectives. <i>Advanced Therapeutics</i> , 2020, 3, 1900140.	3.2	34
24	Folic acid—modified nonionic surfactant vesicles for gambogic acid targeting: Preparation, characterization, and in vitro and in vivo evaluation. <i>Kaohsiung Journal of Medical Sciences</i> , 2020, 36, 344-353.	1.9	4
25	pH-responsive lipid polymer hybrid nanoparticles (LPHNs) based on poly (β -amino ester) as a promising candidate to resist breast cancers. <i>Journal of Drug Delivery Science and Technology</i> , 2021, 61, 102102.	3.0	10
26	Influence of input signal on injection performance for needle driven piezoelectric micro-jet device. <i>Microsystem Technologies</i> , 2021, 27, 2009-2019.	2.0	2
27	Low Adenovirus Vaccine Doses Administered to Skin Using Microneedle Patches Induce Better Functional Antibody Immunogenicity as Compared to Systemic Injection. <i>Vaccines</i> , 2021, 9, 299.	4.4	10
28	Dissolvable Microneedle Patches to Enable Increased Access to Vaccines against SARS-CoV-2 and Future Pandemic Outbreaks. <i>Vaccines</i> , 2021, 9, 320.	4.4	36
29	2D and 3D inkjet printing of biopharmaceuticals — A review of trends and future perspectives in research and manufacturing. <i>International Journal of Pharmaceutics</i> , 2021, 599, 120443.	5.2	44
30	Advances in Piezoelectric Jet and Atomization Devices. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 5093.	2.5	8
31	Inkjet printing of small molecules, biologics, and nanoparticles. <i>International Journal of Pharmaceutics</i> , 2021, 600, 120462.	5.2	32
32	Engineering of an automated nano-droplet dispensing system for fabrication of antigen-loaded dissolving microneedle arrays. <i>International Journal of Pharmaceutics</i> , 2021, 600, 120473.	5.2	10
33	3D Printing—A “Touch-Button” Approach to Manufacture Microneedles for Transdermal Drug Delivery. <i>Pharmaceutics</i> , 2021, 13, 924.	4.5	16
34	Efficient Drug Delivery into Skin Using a Biphasic Dissolvable Microneedle Patch with Water—insoluble Backing. <i>Advanced Functional Materials</i> , 2021, 31, 2103359.	14.9	21
35	Fabrication, evaluation and applications of dissolving microneedles. <i>International Journal of Pharmaceutics</i> , 2021, 604, 120749.	5.2	57
37	A Review on Solid Microneedles for Biomedical Applications. <i>Journal of Pharmaceutical Innovation</i> , 2022, 17, 1464-1483.	2.4	23

#	ARTICLE	IF	CITATIONS
38	3D Printing in medicine: Technology overview and drug delivery applications. <i>Annals of 3D Printed Medicine</i> , 2021, 4, 100037.	3.1	28
39	Fabrication of microneedles. , 2022, , 21-48.		0
40	Trends in drug- and vaccine-based dissolvable microneedle materials and methods of fabrication. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2022, 173, 54-72.	4.3	38
41	Microneedles in Action: Microneedling and Microneedles-Assisted Transdermal Delivery. <i>Polymers</i> , 2022, 14, 1608.	4.5	16
42	Potential of Microneedle Systems for COVID-19 Vaccination: Current Trends and Challenges. <i>Pharmaceutics</i> , 2022, 14, 1066.	4.5	11
43	Microneedle patch tattoos. <i>IScience</i> , 2022, 25, 105014.	4.1	12
44	Research progress on detachable microneedles for advanced applications. <i>Expert Opinion on Drug Delivery</i> , 2022, 19, 1115-1131.	5.0	3
45	Expanding Quality by Design Principles to Support 3D Printed Medical Device Development Following the Renewed Regulatory Framework in Europe. <i>Biomedicines</i> , 2022, 10, 2947.	3.2	3
46	Recent Advances in Multifunctional Microneedle Patches for Wound Healing and Health Monitoring. <i>Advanced NanoBiomed Research</i> , 2023, 3, .	3.6	12
47	Technical evaluation of precisely manufacturing customized microneedle array patches via inkjet drug printing. <i>International Journal of Pharmaceutics</i> , 2023, 642, 123173.	5.2	3
48	Control strategy and mechanism for satellite droplet reduction. <i>International Journal of Pharmaceutics</i> , 2023, 643, 123228.	5.2	0
49	Dissolving and Swelling Hydrogel-Based Microneedles: An Overview of Their Materials, Fabrication, Characterization Methods, and Challenges. <i>Gels</i> , 2023, 9, 806.	4.5	3
50	The Progress in the Application of Dissolving Microneedles in Biomedicine. <i>Polymers</i> , 2023, 15, 4059.	4.5	1
51	Design and fabrication of customizable microneedles enabled by 3D printing for biomedical applications. <i>Bioactive Materials</i> , 2024, 32, 222-241.	15.6	0
52	3D printing of biologics—what has been accomplished to date?. <i>Drug Discovery Today</i> , 2024, 29, 103823.	6.4	0
53	Inkjet Printing of Pharmaceuticals. <i>Advanced Materials</i> , 0, , .	21.0	2
54	Additive manufacturing methods for pharmaceutical and medical applications. , 2024, , 345-390.		0
55	3D Printing in pharmaceutical manufacturing: Current status and future prospects. <i>Materials Today Communications</i> , 2024, 38, 107987.	1.9	0