Xin Dong Guo

List of Publications by Year
in descending order

67 papers	2,522 citations	201674 27 h-index	206112 48 g-index
70 all docs	70 docs citations	70 times ranked	2372 citing authors

#	Article	IF	Citations
1	Insulin delivery systems combined with microneedle technology. Advanced Drug Delivery Reviews, 2018, 127, 119-137.	13.7	197
2	Fabrication of coated polymer microneedles for transdermal drug delivery. Journal of Controlled Release, 2017, 265, 14-21.	9.9	131
3	pH-sensitive micelles self-assembled from multi-arm star triblock co-polymers poly(Îµ-caprolactone)-b-poly(2-(diethylamino)ethyl methacrylate)-b-poly(poly(ethylene glycol) methyl) Tj ETQq1 1 0.784314 rg BT /Overlay	[illegible]	[illegible]
4	pH-Sensitive Micelles Self-Assembled from Amphiphilic Copolymer Brush for Delivery of Poorly Water-Soluble Drugs. Biomacromolecules, 2011, 12, 116-122.	5.4	110
5	Dissipative Particle Dynamics Studies on Microstructure of pH-Sensitive Micelles for Sustained Drug Delivery. Macromolecules, 2010, 43, 7839-7844.	4.8	100
6	A basal-bolus insulin regimen integrated microneedle patch for intraday postprandial glucose control. Science Advances, 2020, 6, eaba7260.	10.3	99
7	A solid polymer microneedle patch pretreatment enhances the permeation of drug molecules into the skin. RSC Advances, 2017, 7, 15408-15415.	3.6	98
8	Rapidly separating microneedles for transdermal drug delivery. Acta Biomaterialia, 2016, 41, 312-319.	8.3	91
9	Amphiphilic copolymer brush with random pH-sensitive/hydrophobic structure: synthesis and self-assembled micelles for sustained drug delivery. Soft Matter, 2012, 8, 454-464.	2.7	78
10	A fabrication method of microneedle molds with controlled microstructures. Materials Science and Engineering C, 2016, 65, 135-142.	7.3	71
11	Dissipative Particle Dynamics Studies of Doxorubicin-Loaded Micelles Assembled from Four-Arm Star Triblock Polymers 4AS-PCL-<i>b</i>-PDEAEMA-<i>b</i>-PPEGMA and their pH-Release Mechanism. Journal of Physical Chemistry B, 2013, 117, 13688-13697.	2.6	67
12	<i>In vitro</i> and <i>in vivo</i> assessment of polymer microneedles for controlled transdermal drug delivery. Journal of Drug Targeting, 2018, 26, 720-729.	4.4	62
13	Drug Release from pH-Sensitive Polymeric Micelles with Different Drug Distributions: Insight from Coarse-Grained Simulations. ACS Applied Materials & Interfaces, 2014, 6, 17668-17678.	8.0	59
14	Controlled Delivery of Insulin Using Rapidly Separating Microneedles Fabricated from Genipinâ€Crosslinked Gelatin. Macromolecular Rapid Communications, 2018, 39, e1800075.	3.9	53
15	A gold nanoparticles deposited polymer microneedle enzymatic biosensor for glucose sensing. Electrochimica Acta, 2020, 358, 136917.	5.2	53
16	Selfâ€Powered Controllable Transdermal Drug Delivery System. Advanced Functional Materials, 2021, 31, 2104092.	14.9	52
17	Dissipative Particle Dynamics Aided Design of Drug Delivery Systems: A Review. Molecular Pharmaceutics, 2020, 17, 1778-1799.	4.6	50
18	Microneedles with Controlled Bubble Sizes and Drug Distributions for Efficient Transdermal Drug Delivery. Scientific Reports, 2016, 6, 38755.	3.3	48

#	Article	IF	Citations
19	Mesoscopic simulations on the aggregation behavior of pH-responsive polymeric micelles for drug delivery. Journal of Colloid and Interface Science, 2011, 363, 114-121.	9.4	42
20	Mesoscale Simulations and Experimental Studies of pH-Sensitive Micelles for Controlled Drug Delivery. ACS Applied Materials & Interfaces, 2015, 7, 25592-25600.	8.0	41
21	Can drug molecules diffuse into the core of micelles?. Soft Matter, 2012, 8, 9989.	2.7	38
22	Hyaluronic acid modified MPEG-<i>b</i>-PAE block copolymer aqueous micelles for efficient ophthalmic drug delivery of hydrophobic genistein. Drug Delivery, 2018, 25, 1258-1265.	5.7	37
23	Dissolvable layered microneedles with core-shell structures for transdermal drug delivery. Materials Science and Engineering C, 2018, 83, 143-147.	7.3	37
24	Structural optimization of rapidly separating microneedles for efficient drug delivery. Journal of Industrial and Engineering Chemistry, 2017, 51, 178-184.	5.8	34
25	Safety Evaluation of Solid Polymer Microneedles in Human Volunteers at Different Application Sites. ACS Applied Bio Materials, 2019, 2, 5616-5625.	4.6	32
26	Phase behavior study of paclitaxel loaded amphiphilic copolymer in two solvents by dissipative particle dynamics simulations. Chemical Physics Letters, 2009, 473, 336-342.	2.6	31
27	Synthesis and evaluation of cholesterol-grafted PEGylated peptides with pH-triggered property as novel drug carriers for cancer chemotherapy. Colloids and Surfaces B: Biointerfaces, 2016, 142, 55-64.	5.0	30
28	Development of a BDDE-crosslinked hyaluronic acid based microneedles patch as a dermal filler for anti-ageing treatment. Journal of Industrial and Engineering Chemistry, 2018, 65, 363-369.	5.8	29
29	Conductive Microneedle Patch with Electricity-Triggered Drug Release Performance for Atopic Dermatitis Treatment. ACS Applied Materials & Interfaces, 2022, 14, 31645-31654.	8.0	29
30	Self-implanted tiny needles as alternative to traditional parenteral administrations for controlled transdermal drug delivery. International Journal of Pharmaceutics, 2019, 556, 338-348.	5.2	27
31	Systematic Multiscale Method for Studying the Structureâ€“Performance Relationship of Drug-Delivery Systems. Industrial & Engineering Chemistry Research, 2012, 51, 4719-4730.	3.7	26
32	Microneedle-assisted technology for minimally invasive medical sensing. Microchemical Journal, 2021, 162, 105830.	4.5	26
33	Optimization of dip-coating methods for the fabrication of coated microneedles for drug delivery. Journal of Drug Delivery Science and Technology, 2020, 55, 101464.	3.0	25
34	In vivo safety assessment, biodistribution and toxicology of polyvinyl alcohol microneedles with 160-day uninterruptedly applications in mice. European Journal of Pharmaceutics and Biopharmaceutics, 2021, 160, 1-8.	4.3	24
35	A high-dosage microneedle for programmable lidocaine delivery and enhanced local long-lasting analgesia. Materials Science and Engineering C, 2022, 133, 112620.	7.3	22
36	Microneedle-based technology for cell therapy: current status and future directions. Nanoscale Horizons, 2022, 7, 715-728.	8.0	22

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37	Mesoscopic simulation studies on the formation mechanism of drug loaded polymeric micelles. Colloids and Surfaces B: Biointerfaces, 2015, 136, 536-544.	5.0	20
38	Application of mesoscale simulation to explore the aggregate morphology of pH-sensitive nanoparticles used as the oral drug delivery carriers under different conditions. Colloids and Surfaces B: Biointerfaces, 2017, 151, 280-286.	5.0	20
39	Assessment of mechanical stability of rapidly separating microneedles for transdermal drug delivery. Drug Delivery and Translational Research, 2018, 8, 1034-1042.	5.8	20
40	Kinetic stability studies of HBV vaccine in a microneedle patch. International Journal of Pharmaceutics, 2019, 567, 118489.	5.2	19
41	Simulation study of the pH sensitive directed self-assembly of rheins for sustained drug release hydrogel. Colloids and Surfaces B: Biointerfaces, 2020, 195, 111260.	5.0	19
42	Multiscale simulations of drug distributions in polymer dissolvable microneedles. Colloids and Surfaces B: Biointerfaces, 2020, 189, 110844.	5.0	18
43	Improved imiquimod-induced psoriasis like dermatitis using microneedles in mice. European Journal of Pharmaceutics and Biopharmaceutics, 2021, 164, 20-27.	4.3	18
44	A novel method for fabrication of coated microneedles with homogeneous and controllable drug dosage for transdermal drug delivery. Drug Delivery and Translational Research, 2022, 12, 2730-2739.	5.8	18
45	Synthesis, characterization and pH-Responsive self-assembly behavior of amphiphilic multiarm star triblock copolymers based on PCL, PDEAEMA, and PEG. Macromolecular Research, 2013, 21, 1011-1020.	2.4	17
46	How is a micelle formed from amphiphilic polymers in a dialysis process: Insight from mesoscopic studies. Chemical Physics Letters, 2020, 754, 137711.	2.6	17
47	Safety Assessment of Microneedle Technology for Transdermal Drug Delivery: A Review. Advanced Therapeutics, 2020, 3, 2000033.	3.2	17
48	Compatibility studies between an amphiphilic pH-sensitive polymer and hydrophobic drug using multiscale simulations. RSC Advances, 2016, 6, 101323-101333.	3.6	16
49	The maximum possible amount of drug in rapidly separating microneedles. Drug Delivery and Translational Research, 2019, 9, 1133-1142.	5.8	14
50	Codelivery of hydrophilic and hydrophobic drugs in a microneedle patch for the treatment of skin pigmentation. Journal of Industrial and Engineering Chemistry, 2020, 88, 241-250.	5.8	14
51	Effect of polymer microneedle pre-treatment on drug distributions in the skin <i>inÂvivo</i>. Journal of Drug Targeting, 2020, 28, 811-817.	4.4	13
52	An Update on the Routes for the Delivery of Donepezil. Molecular Pharmaceutics, 2021, 18, 2482-2494.	4.6	13
53	Dissolving microneedle rollers for rapid transdermal drug delivery. Drug Delivery and Translational Research, 2022, 12, 459-471.	5.8	13
54	Solvent mediated microstructures and release behavior of insulin from pH-sensitive nanoparticles. Colloids and Surfaces B: Biointerfaces, 2012, 94, 206-212.	5.0	10

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55	Experimental and theoretical studies of drug-polymer interactions to control the drug distributions in dissolving microneedles. Journal of Industrial and Engineering Chemistry, 2020, 84, 280-289.	5.8	10
56	An update on microneedle-based systems for diabetes. Drug Delivery and Translational Research, 2022, 12, 2275-2286.	5.8	10
57	A Dissolvable Microneedle Formulation of <i>Bordetella pertussis</i> Subunit Vaccine: Translational Development and Immunological Evaluation in Mice. ACS Applied Bio Materials, 2019, 2, 5053-5061.	4.6	9
58	Advances in self-assembling of pH-sensitive polymers: A mini review on dissipative particle dynamics. Colloids and Surfaces B: Biointerfaces, 2022, 210, 112202.	5.0	8
59	Stability and Diffusion Properties of Insulin in Dissolvable Microneedles: A Multiscale Simulation Study. Langmuir, 2021, 37, 9244-9252.	3.5	7
60	Mesoscopic Simulation for the Effect of Cross-Linking Reactions on the Drug Diffusion Properties in Microneedles. Journal of Chemical Information and Modeling, 2021, 61, 4000-4010.	5.4	6
61	Safety evaluation of 3-month effects of microneedle patches prepared from hyaluronic acid in mice. Biochemical Engineering Journal, 2021, 176, 108157.	3.6	6
62	Mechanism studies on the cellular internalization of nanoparticles using computer simulations: A review. AICHE Journal, 2022, 68, e17507.	3.6	6
63	Advances in porous microneedle systems for drug delivery and biomarker detection: A mini review. Journal of Drug Delivery Science and Technology, 2022, 74, 103518.	3.0	5
64	Some attempts to increase the amount of drug coated onto the microneedles. Journal of Drug Delivery Science and Technology, 2022, 67, 102986.	3.0	4
65	Mechanical evaluation of polymer microneedles for transdermal drug delivery: In vitro and in vivo. Journal of Industrial and Engineering Chemistry, 2022, 114, 181-189.	5.8	4
66	Studies on pH-sensitive micellar structures for sustained drug delivery: Experiments and computer simulations. Journal of Controlled Release, 2011, 152, e26-e28.	9.9	2
67	Macromol. Rapid Commun. 20/2018. Macromolecular Rapid Communications, 2018, 39, 1870048.	3.9	0