Hao Chang

List of Publications by Year
in descending order

36 papers	1,998 citations	257450 24 h-index	377865 34 g-index
37 all docs	37 docs citations	37 times ranked	2847 citing authors

#	Article	IF	Citations
1	Cryomicroneedles for transdermal cell delivery. Nature Biomedical Engineering, 2021, 5, 1008-1018.	22.5	97
2	Upconversion Nanoparticle Powered Microneedle Patches for Transdermal Delivery of siRNA. Advanced Healthcare Materials, 2020, 9, e1900635.	7.6	57
3	Surface Enhanced Raman Spectroscopy Based Biosensor with a Microneedle Array for Minimally Invasive In Vivo Glucose Measurements. ACS Sensors, 2020, 5, 1777-1785.	7.8	69
4	Temporal pressure enhanced topical drug delivery through micropore formation. Science Advances, 2020, 6, eaaz6919.	10.3	21
5	A selfâ€adhesive microneedle patch with drug loading capability through swelling effect. Bioengineering and Translational Medicine, 2020, 5, e10157.	7.1	26
6	Advances in the Formulations of Microneedles for Manifold Biomedical Applications. Advanced Materials Technologies, 2020, 5, 1900552.	5.8	47
7	Osmosisâ€Powered Hydrogel Microneedles for Microliters of Skin Interstitial Fluid Extraction within Minutes. Advanced Healthcare Materials, 2020, 9, e1901683.	7.6	111
8	Layer-by-layer assembly as a robust method to construct extracellular matrix mimic surfaces to modulate cell behavior. Progress in Polymer Science, 2019, 92, 1-34.	24.7	54
9	In Situ Generation of Zinc Oxide Nanobushes on Microneedles as Antibacterial Coating. SLAS Technology, 2019, 24, 181-187.	1.9	19
10	Improved Antithrombotic Function of Oriented Endothelial Cell Monolayer on Microgrooves. ACS Biomaterials Science and Engineering, 2018, 4, 1976-1985.	5.2	16
11	Self-implantable double-layered micro-drug-reservoirs for efficient and controlled ocular drug delivery. Nature Communications, 2018, 9, 4433.	12.8	209
12	Oligonucleotide Molecular Sprinkler for Intracellular Detection and Spontaneous Regulation of mRNA for Theranostics of Scar Fibroblasts. Small, 2018, 14, e1802546.	10.0	8
13	Detection of Bacteria in Water with Î²-Galactosidase-Coated Magnetic Nanoparticles. SLAS Technology, 2018, 23, 624-630.	1.9	3
14	Mechanical Adaptability of the MMPâ€Responsive Film Improves the Functionality of Endothelial Cell Monolayer. Advanced Healthcare Materials, 2017, 6, 1601410.	7.6	29
15	Surface-mediated transfection of a pDNA vector encoding short hairpin RNA to downregulate TGF-Î²1 expression for the prevention of in-stent restenosis. Biomaterials, 2017, 116, 95-105.	11.4	40
16	Iron Oxide Nanoparticle-Powered Micro-Optical Coherence Tomography for in Situ Imaging the Penetration and Swelling of Polymeric Microneedles in the Skin. ACS Applied Materials & Interfaces, 2017, 9, 20340-20347.	8.0	24
17	Nanostructured Multilayer Films Assembled from Poly(dopamine)â€Coated Carbon Nanotubes for Controlling Cell Behavior. ChemNanoMat, 2017, 3, 319-327.	2.8	4
18	Endothelial Cells: Mechanical Adaptability of the MMPâ€Responsive Film Improves the Functionality of Endothelial Cell Monolayer (Adv. Healthcare Mater. 14/2017). Advanced Healthcare Materials, 2017, 6, .	7.6	0

#	Article	IF	Citations
19	A Swellable Microneedle Patch to Rapidly Extract Skin Interstitial Fluid for Timely Metabolic Analysis. Advanced Materials, 2017, 29, 1702243.	21.0	303
20	Stiffness of polyelectrolyte multilayer film influences endothelial function of endothelial cell monolayer. Colloids and Surfaces B: Biointerfaces, 2017, 149, 379-387.	5.0	26
21	Substrate-mediated delivery of gene complex nanoparticles via polydopamine coating for enhancing competitiveness of endothelial cells. Colloids and Surfaces B: Biointerfaces, 2016, 147, 172-179.	5.0	15
22	Dynamic spongy films to immobilize hydrophobic antimicrobial peptides for self-healing bactericidal coating. Journal of Materials Chemistry B, 2016, 4, 6358-6365.	5.8	24
23	Polydopamine Nanocoating for Effective Photothermal Killing of Bacteria and Fungus upon Nearâ€Infrared Irradiation. Advanced Materials Interfaces, 2016, 3, 1600767.	3.7	99
24	Substrate Stiffness Combined with Hepatocyte Growth Factor Modulates Endothelial Cell Behavior. Biomacromolecules, 2016, 17, 2767-2776.	5.4	36
25	Improved Endothelial Function of Endothelial Cell Monolayer on the Soft Polyelectrolyte Multilayer Film with Matrix-Bound Vascular Endothelial Growth Factor. ACS Applied Materials & Interfaces, 2016, 8, 14357-14366.	8.0	38
26	Effect of Polyelectrolyte Film Stiffness on Endothelial Cells During Endothelial-to-Mesenchymal Transition. Biomacromolecules, 2015, 16, 3584-3593.	5.4	57
27	Dynamic stiffness of polyelectrolyte multilayer films based on disulfide bonds for in situ control of cell adhesion. Journal of Materials Chemistry B, 2015, 3, 7546-7553.	5.8	31
28	The (PrS/HGFâ€pDNA) multilayer films for geneâ€eluting stent coating: Geneâ€protecting, anticoagulation, antibacterial properties, and in vivo antirestenosis evaluation. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2015, 103, 430-439.	3.4	16
29	Surface modulation of complex stiffness via layer-by-layer assembly as a facile strategy for selective cell adhesion. Biomaterials Science, 2015, 3, 352-360.	5.4	34
30	Electropolymerization of dopamine for surface modification of complex-shaped cardiovascular stents. Biomaterials, 2014, 35, 7679-7689.	11.4	183
31	Facile fabrication of robust superhydrophobic multilayered film based on bioinspired poly(dopamine)-modified carbon nanotubes. Physical Chemistry Chemical Physics, 2014, 16, 2936.	2.8	51
32	Cucurbit[8]uril Supramolecular Assembly for Positively Charged Ultrathin Films as Nanocontainers. Langmuir, 2013, 29, 14101-14107.	3.5	20
33	Surface-mediated functional gene delivery: An effective strategy for enhancing competitiveness of endothelial cells over smooth muscle cells. Biomaterials, 2013, 34, 3345-3354.	11.4	47
34	Direct Adhesion of Endothelial Cells to Bioinspired Poly(dopamine) Coating Through Endogenous Fibronectin and Integrin Î±₅Î²₁. Macromolecular Bioscience, 2013, 13, 483-493.	4.1	67
35	Construction of Degradable Multilayer Films for Enhanced Antibacterial Properties. ACS Applied Materials & Interfaces, 2013, 5, 4136-4143.	8.0	117
36	CONSTRUCTION OF CYCLODEXTRIN-MODIFIED POLYPLEXES <I>via</I> HOST-GUEST ASSEMBLY. Acta Polymerica Sinica, 2013, 012, 1429-1433.	0.0	0