Cheng yun Ning

List of Publications by Year
in descending order

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124	5,036	94269	106150
papers	citations	37 h-index	65 g-index

129	129	129	6148
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Nanomaterials as photothermal therapeutic agents. Progress in Materials Science, 2019, 99, 1-26.	16.0	442
2	Soft Conducting Polymer Hydrogels Cross-Linked and Doped by Tannic Acid for Spinal Cord Injury Repair. ACS Nano, 2018, 12, 10957-10967.	7.3	246
3	Electroactive polymers for tissue regeneration: Developments and perspectives. Progress in Polymer Science, 2018, 81, 144-162.	11.8	225
4	Concentration Ranges of Antibacterial Cations for Showing the Highest Antibacterial Efficacy but the Least Cytotoxicity against Mammalian Cells: Implications for a New Antibacterial Mechanism. Chemical Research in Toxicology, 2015, 28, 1815-1822.	1.7	217
5	Injectable Selfâ€Healing Natural Biopolymerâ€Based Hydrogel Adhesive with Thermoresponsive Reversible Adhesion for Minimally Invasive Surgery. Advanced Functional Materials, 2021, 31, 2007457.	7.8	160
6	A Tough and Self-Powered Hydrogel for Artificial Skin. Chemistry of Materials, 2019, 31, 9850-9860.	3.2	151
7	Latest research progress of marine microbiological corrosion and bio-fouling, and new approaches of marine anti-corrosion and anti-fouling. Bioactive Materials, 2019, 4, 189-195.	8.6	134
8	Corrosion mechanism and model of pulsed DC microarc oxidation treated AZ31 alloy in simulated body fluid. Applied Surface Science, 2012, 258, 6116-6126.	3.1	130
9	Exosomesâ€Loaded Electroconductive Hydrogel Synergistically Promotes Tissue Repair after Spinal Cord Injury via Immunoregulation and Enhancement of Myelinated Axon Growth. Advanced Science, 2022, 9, e2105586.	5.6	117
10	Effect of oxidation time on the corrosion behavior of micro-arc oxidation produced AZ31 magnesium alloys in simulated body fluid. Journal of Alloys and Compounds, 2012, 543, 109-117.	2.8	116
11	Directing Stem Cell Differentiation via Electrochemical Reversible Switching between Nanotubes and Nanotips of Polypyrrole Array. ACS Nano, 2017, 11, 5915-5924.	7.3	89
12	Polymeric Nanoarchitectures on Ti-Based Implants for Antibacterial Applications. ACS Applied Materials & Interfaces, 2014, 6, 17323-17345.	4.0	84
13	Long-term corrosion inhibition mechanism of microarc oxidation coated AZ31 Mg alloys for biomedical applications. Materials & Design, 2013, 46, 66-75.	5.1	79
14	Spiral Donor Design Strategy for Blue Thermally Activated Delayed Fluorescence Emitters. ACS Applied Materials & Interfaces, 2021, 13, 5302-5311.	4.0	78
15	Biomimetic mineralization of anionic gelatin hydrogels: effect of degree of methacrylation. RSC Advances, 2014, 4, 21997-22008.	1.7	77
16	Cell-laden photocrosslinked GelMAâ€“DexMA copolymer hydrogels with tunable mechanical properties for tissue engineering. Journal of Materials Science: Materials in Medicine, 2014, 25, 2173-2183.	1.7	76
17	Fourth-generation biomedical materials. Materials Today, 2016, 19, 2-3.	8.3	75
18	Exosome-functionalized polyetheretherketone-based implant with immunomodulatory property for enhancing osseointegration. Bioactive Materials, 2021, 6, 2754-2766.	8.6	75

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19	An injectable, self-healing, electroconductive extracellular matrix-based hydrogel for enhancing tissue repair after traumatic spinal cord injury. Bioactive Materials, 2022, 7, 98-111.	8.6	73
20	The synergistic antibacterial activity and mechanism of multicomponent metal ions-containing aqueous solutions against Staphylococcus aureus. Journal of Inorganic Biochemistry, 2016, 163, 214-220.	1.5	68
21	Bone-Inspired Spatially Specific Piezoelectricity Induces Bone Regeneration. Theranostics, 2017, 7, 3387-3397.	4.6	67
22	Preparation and characterization of APTES films on modification titanium by SAMs. Thin Solid Films, 2011, 519, 4997-5001.	0.8	66
23	Biomimetically-mineralized composite coatings on titanium functionalized with gelatin methacrylate hydrogels. Applied Surface Science, 2013, 279, 293-299.	3.1	64
24	Tunable Mechanical, Antibacterial, and Cytocompatible Hydrogels Based on a Functionalized Dual Network of Metal Coordination Bonds and Covalent Crosslinking. ACS Applied Materials & Interfaces, 2018, 10, 6190-6198.	4.0	61
25	Surface-Selective Preferential Production of Reactive Oxygen Species on Piezoelectric Ceramics for Bacterial Killing. ACS Applied Materials & Interfaces, 2016, 8, 24306-24309.	4.0	60
26	Effect of thermal treatment on carbonated hydroxyapatite: Morphology, composition, crystal characteristics and solubility. Ceramics International, 2015, 41, 6149-6157.	2.3	55
27	Extracellular Matrixâ€Based Conductive Interpenetrating Network Hydrogels with Enhanced Neurovascular Regeneration Properties for Diabetic Wounds Repair. Advanced Healthcare Materials, 2022, 11, e2101556.	3.9	53
28	Fabrication of Biocompatible Potassium Sodium Niobate Piezoelectric Ceramic as an Electroactive Implant. Materials, 2017, 10, 345.	1.3	52
29	The antibacterial effect of potassium-sodium niobate ceramics based on controlling piezoelectric properties. Colloids and Surfaces B: Biointerfaces, 2019, 175, 463-468.	2.5	52
30	Wearable sensors and devices for real-time cardiovascular disease monitoring. Cell Reports Physical Science, 2021, 2, 100541.	2.8	51
31	Corrosion performance of MAO coatings on AZ31 Mg alloy in simulated body fluid vs. Earle's Balance Salt Solution. Applied Surface Science, 2016, 363, 328-337.	3.1	49
32	Corrosion behavior and mechanism of MAO coated Ti6Al4V with a grain-fined surface layer. Journal of Alloys and Compounds, 2016, 664, 770-776.	2.8	47
33	Facile synthesis of hollow mesoporous bioactive glass sub-micron spheres with a tunable cavity size. Materials Letters, 2014, 134, 130-133.	1.3	46
34	Elastomeric conductive hybrid hydrogels with continuous conductive networks. Journal of Materials Chemistry B, 2019, 7, 2389-2397.	2.9	46
35	Synthesis of radial mesoporous bioactive glass particles to deliver osteoactivin gene. Journal of Materials Chemistry B, 2014, 2, 7045-7054.	2.9	44
36	Biomimetic Tiâ€“6Alâ€“4V alloy/gelatin methacrylate hybrid scaffold with enhanced osteogenic and angiogenic capabilities for large bone defect restoration. Bioactive Materials, 2021, 6, 3437-3448.	8.6	43

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37	Built-in microscale electrostatic fields induced by anataseâ€“rutile-phase transition in selective areas promote osteogenesis. NPG Asia Materials, 2016, 8, e243-e243.	3.8	41
38	Reversibly Controlling Preferential Protein Adsorption on Bone Implants by Using an Applied Weak Potential as a Switch. Angewandte Chemie - International Edition, 2014, 53, 13068-13072.	7.2	40
39	Inhibition of astrocytic differentiation of transplanted neural stem cells by chondroitin sulfate methacrylate hydrogels for the repair of injured spinal cord. Biomaterials Science, 2019, 7, 1995-2008.	2.6	39
40	Polarization of an electroactive functional film on titanium for inducing osteogenic differentiation. Scientific Reports, 2016, 6, 35512.	1.6	38
41	Palladium nanoparticles entrapped in a self-supporting nanoporous gold wire as sensitive dopamine biosensor. Scientific Reports, 2017, 7, 7941.	1.6	38
42	Effect of crystalline phase changes in titania (TiO2) nanotube coatings on platelet adhesion and activation. Materials Science and Engineering C, 2018, 82, 91-101.	3.8	36
43	Effect of Amino-, Methyl- and Epoxy-Silane Coupling as a Molecular Bridge for Formatting a Biomimetic Hydroxyapatite Coating on Titanium by Electrochemical Deposition. Journal of Materials Science and Technology, 2016, 32, 956-965.	5.6	34
44	Corrosion mechanism of micro-arc oxidation treated biocompatible AZ31 magnesium alloy in simulated body fluid. Progress in Natural Science: Materials International, 2014, 24, 516-522.	1.8	33
45	Hydroxyapatite coatings produced on commercially pure titanium by micro-arc oxidation. Biomedical Materials (Bristol), 2007, 2, 196-201.	1.7	32
46	The structure, surface topography and mechanical properties of Siâ€“Câ€“N films fabricated by RF and DC magnetron sputtering. Applied Surface Science, 2011, 258, 1328-1336.	3.1	32
47	Surface Wettability Switched Cell Adhesion and Detachment on Conducting Polymer Nanoarray. Advanced Materials Interfaces, 2016, 3, 1600598.	1.9	32
48	Self-curling electroconductive nerve dressing for enhancing peripheral nerve regeneration in diabetic rats. Bioactive Materials, 2021, 6, 3892-3903.	8.6	32
49	Facile synthesis of mesoporous bioactive glasses with controlled shapes. Materials Letters, 2015, 161, 605-608.	1.3	31
50	Electrochemical behavior of biocompatible AZ31 magnesium alloy in simulated body fluid. Journal of Materials Science, 2012, 47, 5197-5204.	1.7	30
51	Surface-Dependent Self-Assembly of Conducting Polypyrrole Nanotube Arrays in Template-Free Electrochemical Polymerization. ACS Applied Materials & Interfaces, 2014, 6, 10946-10951.	4.0	30
52	Polydopamineâ€Assisted Electrochemical Fabrication of Polypyrrole Nanofibers on Bone Implants to Improve Bioactivity. Macromolecular Materials and Engineering, 2016, 301, 1288-1294.	1.7	30
53	Polypyrrole Nanocones and Dynamic Piezoelectric Stimulation-Induced Stem Cell Osteogenic Differentiation. ACS Biomaterials Science and Engineering, 2019, 5, 4386-4392.	2.6	29
54	Ultrafast and On-Demand Oil/Water Separation Membrane System Based on Conducting Polymer Nanotip Arrays. Nano Letters, 2020, 20, 4895-4900.	4.5	28

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55	Silicon nitride films for the protective functional coating: Blood compatibility and biomechanical property study. Journal of the Mechanical Behavior of Biomedical Materials, 2012, 16, 9-20.	1.5	27
56	Electrically Reversible Redox-Switchable Polydopamine Films for Regulating Cell Behavior. Electrochimica Acta, 2017, 228, 343-350.	2.6	27
57	0D/1D Heterojunction Implant with Electroâ€Mechanobiological Coupling Cues Promotes Osteogenesis. Advanced Functional Materials, 2021, 31, 2106249.	7.8	26
58	Tough and Highly Efficient Underwater Selfâ€Repairing Hydrogels for Soft Electronics. Small Methods, 2022, 6, e2101513.	4.6	26
59	Residual Stresses in Microarc Oxidation Ceramic Coatings on Biocompatible AZ31 Magnesium Alloys. Journal of Materials Engineering and Performance, 2012, 21, 1085-1090.	1.2	25
60	Effect of applied voltage on phase components of composite coatings prepared by micro-arc oxidation. Thin Solid Films, 2013, 544, 79-82.	0.8	25
61	Micropatterned TiO2 nanotubes: fabrication, characterization and in vitro protein/cell responses. Journal of Materials Chemistry B, 2013, 1, 3506.	2.9	25
62	Construction of high surface potential polypyrrole nanorods with enhanced antibacterial properties. Journal of Materials Chemistry B, 2018, 6, 3128-3135.	2.9	24
63	Conducting photopolymers on orthopeadic implants having a switch of priority between promoting osteogenic and antibacterial activity. Materials Horizons, 2018, 5, 545-552.	6.4	22
64	Wireless Electrochemotherapy by Selenium-Doped Piezoelectric Biomaterials to Enhance Cancer Cell Apoptosis. ACS Applied Materials & Interfaces, 2020, 12, 34505-34513.	4.0	22
65	Nanostructure Transition on Anodic Titanium: Structure Control via a Competition Strategy between Electrochemical Oxidation and Chemical Etching. Journal of Physical Chemistry C, 2012, 116, 22359-22364.	1.5	21
66	Nanostructured PPy coating on titanium fabricated via template-free electrochemical polymerization in PBS. Surface and Coatings Technology, 2013, 228, S41-S43.	2.2	21
67	Bio-inspired citrate functionalized apatite coating on rapid prototyped titanium scaffold. Applied Surface Science, 2014, 313, 947-953.	3.1	21
68	Preparation and properties of a cerium-containing hydroxyapatite coating on commercially pure titanium by micro-arc oxidation. Rare Metals, 2008, 27, 257-260.	3.6	20
69	Nanostructured Conducting Polymers as Intelligent Implant Surface: Fabricated on Biomedical Titanium with a Potentialâ€Induced Reversible Switch in Wettability. ChemPhysChem, 2013, 14, 3891-3894.	1.0	19
70	Promoting Bone Mesenchymal Stem Cells and Inhibiting Bacterial Adhesion of Acid-Etched Nanostructured Titanium by Ultraviolet Functionalization. Journal of Materials Science and Technology, 2015, 31, 182-190.	5.6	19
71	Wireless electrical stimulation at the nanoscale interface induces tumor vascular normalization. Bioactive Materials, 2022, 18, 399-408.	8.6	19
72	Anodic formation of Ti nanorods with periodic length. Electrochemistry Communications, 2012, 17, 14-17.	2.3	17

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73	Tuning nano-architectures and improving bioactivity of conducting polypyrrole coating on bone implants by incorporating bone-borne small molecules. Journal of Materials Chemistry B, 2014, 2, 7872-7876.	2.9	17
74	Controlled oxidative nanopatterning of microrough titanium surfaces for improving osteogenic activity. Journal of Materials Science: Materials in Medicine, 2014, 25, 1875-1884.	1.7	17
75	Periodic Nanoneedle and Buffer Zones Constructed on a Titanium Surface Promote Osteogenic Differentiation and Bone Calcification In Vivo. Advanced Healthcare Materials, 2016, 5, 364-372.	3.9	15
76	Ti nanorod arrays with a medium density significantly promote osteogenesis and osteointegration. Scientific Reports, 2016, 6, 19047.	1.6	15
77	Incorporating catechol into electroactive polypyrrole nanowires on titanium to promote hydroxyapatite formation. Bioactive Materials, 2018, 3, 74-79.	8.6	15
78	A Multifunctional Metallohydrogel with Injectability, Selfâ€Healing, and Multistimulusâ€Responsiveness for Bioadhesives. Macromolecular Materials and Engineering, 2018, 303, 1800305.	1.7	15
79	Effects of argon plasma treatment on surface characteristic of photopolymerization PEGDAâ€“HEMA hydrogels. Journal of Applied Polymer Science, 2012, 124, 459-465.	1.3	14
80	Taurineâ€Induced Fabrication of Nanoâ€Architectured Conducting Polypyrrole on Biomedical Titanium. Macromolecular Rapid Communications, 2014, 35, 574-578.	2.0	14
81	Influence of Surrounding Cations on the Surface Degradation of Magnesium Alloy Implants under a Compressive Pressure. Langmuir, 2015, 31, 13561-13570.	1.6	14
82	A Dual-Bonded Approach for Improving Hydrogel Implant Stability in Cartilage Defects. Materials, 2017, 10, 191.	1.3	14
83	Polydopamine-Assisted Immobilization of Copper Ions onto Hemodialysis Membranes for Antimicrobial. ACS Applied Bio Materials, 2018, 1, 1236-1243.	2.3	14
84	Chondroitin sulphate-guided construction of polypyrrole nanoarchitectures. Materials Science and Engineering C, 2015, 48, 172-178.	3.8	13
85	Antimicrobial Peptide Functionalized Conductive Nanowire Array Electrode as a Promising Candidate for Bacterial Environment Application. Advanced Functional Materials, 2019, 29, 1806353.	7.8	13
86	Efficient and toxicity-free surface immobilization of nano-hydroxyapatite for bone-regenerative composite scaffolds by grafting polyvinyl pyrrolidone. Materials Science and Engineering C, 2012, 32, 1032-1036.	3.8	12
87	Potential-induced reversible switching in the tubular structure of conducting polypyrrole nanotube arrays. RSC Advances, 2013, 3, 14946.	1.7	12
88	Modification of biomaterials surface by mimetic cell membrane to improve biocompatibility. Frontiers of Materials Science, 2014, 8, 325-331.	1.1	12
89	A spatially varying charge model for regulating site-selective protein adsorption and cell behaviors. Biomaterials Science, 2019, 7, 876-888.	2.6	12
90	Piezoelectric Hydrogel for Prophylaxis and Early Treatment of Pressure Injuries/Pressure Ulcers. ACS Biomaterials Science and Engineering, 2022, 8, 3078-3086.	2.6	12

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91	Preparation, characterization, and drugâ€release properties of PEGâ€DAâ€based copolymer hydrogel microspheres. Journal of Applied Polymer Science, 2012, 125, 3509-3516.	1.3	11
92	Highly Waterâ€Dispersible, Highly Conductive, and Biocompatible Polypyrroleâ€Coated Silica Particles Stabilized and Doped by Chondroitin Sulfate. Particle and Particle Systems Characterization, 2015, 32, 1068-1077.	1.2	11
93	Magnesium with micro-arc oxidation coating and polymeric membrane: an in vitro study on microenvironment. Journal of Materials Science: Materials in Medicine, 2015, 26, 147.	1.7	10
94	<i>In vitro</i> study on the osteogenesis enhancement effect of BMP-2 incorporated biomimetic apatite coating on titanium surfaces. Dental Materials Journal, 2017, 36, 677-685.	0.8	10
95	Dynamically modulated gating process of nanoporous membrane at sub-2-nm speed. Matter, 2022, 5, 281-290.	5.0	10
96	Nearâ€Infrared Lightâ€Activatable Bismuthâ€Based Nanomaterials for Antibacterial and Antitumor Treatment. Advanced Therapeutics, 2022, 5, .	1.6	10
97	Controllable Protein Adsorption and Bacterial Adhesion on Polypyrrole Nanocone Arrays. Journal of Materials Science and Technology, 2016, 32, 950-955.	5.6	9
98	Covalent Bonding of an Electroconductive Hydrogel to Goldâ€Coated Titanium Surfaces via Thiolâ€ene Click Chemistry. Macromolecular Materials and Engineering, 2016, 301, 1423-1429.	1.7	9
99	Corrosion behaviour of microarc-oxidised magnesium alloy in Earleâ€™s balanced salt solution. Surface Innovations, 2017, 5, 43-53.	1.4	9
100	A built-in electric field with nanoscale distinction for cell behavior regulation. Journal of Materials Chemistry B, 2018, 6, 2723-2727.	2.9	8
101	Investigation of Radial Mesoporous Bioactive Glass Particles as Drug Carriers for Inhibition of Tumor Cells. Science of Advanced Materials, 2017, 9, 562-570.	0.1	8
102	In vitro mineralization of surface-modified porous polycaprolactone scaffolds in simulated body fluid. Applied Surface Science, 2008, 255, 429-431.	3.1	7
103	Conducting Polypyrrole Nanotube Arrays as an Implant Surface: Fabricated on Biomedical Titanium with Fineâ€Tunability by Means of Templateâ€Free Electrochemical Polymerization. ChemPlusChem, 2014, 79, 524-530.	1.3	7
104	Spatial charge manipulated set-selective apatite deposition on micropatterned piezoceramic. RSC Advances, 2017, 7, 32974-32981.	1.7	7
105	Large-scale functionalization of biomedical porous titanium scaffolds surface with TiO2 nanostructures. Science China Materials, 2018, 61, 557-564.	3.5	7
106	Spider silk-inspired universal strategy: Directional patching of one-dimensional nanomaterial-based flexible transparent electrodes for smart flexible electronics. Chemical Engineering Journal, 2020, 389, 123663.	6.6	7
107	In Situ Construction of Black Titanium Oxide with a Multilevel Structure on a Titanium Alloy for Photothermal Antibacterial Therapy. ACS Biomaterials Science and Engineering, 2022, 8, 2419-2427.	2.6	7
108	hMSCs bridging across micro-patterned grooves. RSC Advances, 2015, 5, 47975-47982.	1.7	6

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109	Endogenous electric field as a bridge for antibacterial ion transport from implant to bacteria. Science China Materials, 2020, 63, 1831-1841.	3.5	5
110	Characterization of Porous Titanium-Hydroxyapatite Composite Biological Coating on Polyetheretherketone (PEEK) by Vacuum Plasma Spraying. Coatings, 2022, 12, 433.	1.2	5
111	In vivo evaluation of novel amineâ€terminated nanopore Ti surfaces. Journal of Biomedical Materials Research - Part A, 2012, 100A, 3428-3435.	2.1	4
112	Micropatterned film with nano-porous sodium titanate structure fabricated via template-free direct laser irradiation technology: Characteristics and set-selective apatite deposition ability. Surface and Coatings Technology, 2013, 235, 267-272.	2.2	4
113	The innovation of biomaterials: From bioactive to bioelectroactive. Science China Materials, 2022, 65, 1723-1726.	3.5	4
114	Effect of Different Acid Treatment on Surface Characteristics of Titanium Alloy. Materials Science Forum, 0, 694, 490-496.	0.3	3
115	Microstructure, mechanical properties and wetting behavior of F: Siâ€“Câ€“N films as bio-mechanical coating grown by DC unbalanced magnetron sputtering. Journal of Alloys and Compounds, 2013, 552, 111-118.	2.8	3
116	Regulation of osteoblast functions on titanium surfaces with different micro/nanotopographies and compositions. Science China Technological Sciences, 2019, 62, 559-568.	2.0	3
117	Ti nanorod arrays with periodic density fabricated via anodic technology. Micro and Nano Letters, 2014, 9, 168-170.	0.6	2
118	The mechanism of pH-induced polydopamine films surface protonation and cell adhesion behavior. Scientia Sinica Chimica, 2016, 46, 373-381.	0.2	2
119	Programmable biological state-switching photoelectric nanosheets for the treatment of infected wounds. Materials Today Bio, 2022, 15, 100292.	2.6	2
120	Study on Surface Characterization and Properties of Three Dimensional Nano-Porous Titanium Film. Key Engineering Materials, 2011, 492, 146-150.	0.4	1
121	Protein Adsorption on Titanium Surface Functionalized with Bioactive Gelatin Methacrylate Hydrogel Coating. Advanced Materials Research, 0, 936, 663-668.	0.3	1
122	One-step construction of a food-grade expression system based on the URA3 gene in Kluyveromyces lactis. Plasmid, 2021, 116, 102577.	0.4	1
123	Osteogenic Differentiation: Periodic Nanoneedle and Buffer Zones Constructed on a Titanium Surface Promote Osteogenic Differentiation and Bone Calcification In Vivo (Adv. Healthcare Mater. 3/2016). Advanced Healthcare Materials, 2016, 5, 300-300.	3.9	0
124	Template-free electrochemical controllable fabrication and characterization of conducting polypyrrole nanowires. Scientia Sinica Chimica, 2014, 44, 1570-1575.	0.2	0