Cheng yun Ning

List of Publications by Citations

123 papers	3,028 citations	29 h-index	49 g-index
129 ext. papers	3,987 ext. citations	7.3 avg, IF	5.42 L-index

#	Paper	IF	Citations
123	Nanomaterials as photothermal therapeutic agents. *Progress in Materials Science*, **2019**, 99, 1-26	42.2	234
122	Soft Conducting Polymer Hydrogels Cross-Linked and Doped by Tannic Acid for Spinal Cord Injury Repair. *ACS Nano*, **2018**, 12, 10957-10967	16.7	146
121	Electroactive polymers for tissue regeneration: Developments and perspectives. *Progress in Polymer Science*, **2018**, 81, 144-162	29.6	132
120	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, 1815-22	4	127
119	Corrosion mechanism and model of pulsed DC microarc oxidation treated AZ31 alloy in simulated body fluid. *Applied Surface Science*, **2012**, 258, 6116-6126	6.7	106
118	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	5.7	93
117	Polymeric nanoarchitectures on Ti-based implants for antibacterial applications. *ACS Applied Materials & Interfaces*, **2014**, 6, 17323-45	9.5	71
116	Directing Stem Cell Differentiation via Electrochemical Reversible Switching between Nanotubes and Nanotips of Polypyrrole Array. *ACS Nano*, **2017**, 11, 5915-5924	16.7	69
115	Long-term corrosion inhibition mechanism of microarc oxidation coated AZ31 Mg alloys for biomedical applications. *Materials & Design*, **2013**, 46, 66-75		65
114	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	16.7	60
113	Biomimetic mineralization of anionic gelatin hydrogels: effect of degree of methacrylation. *RSC Advances*, **2014**, 4, 21997-22008	3.7	59
112	A Tough and Self-Powered Hydrogel for Artificial Skin. *Chemistry of Materials*, **2019**, 31, 9850-9860	9.6	56
111	Cell-laden photocrosslinked GelMA-DexMA copolymer hydrogels with tunable mechanical properties for tissue engineering. *Journal of Materials Science: Materials in Medicine*, **2014**, 25, 2173-83	4.5	55
110	Injectable Self-Healing Natural Biopolymer-Based Hydrogel Adhesive with Thermoresponsive Reversible Adhesion for Minimally Invasive Surgery. *Advanced Functional Materials*, **2021**, 31, 2007457	15.6	54
109	Biomimetically-mineralized composite coatings on titanium functionalized with gelatin methacrylate hydrogels. *Applied Surface Science*, **2013**, 279, 293-299	6.7	50
108	Preparation and characterization of APTES films on modification titanium by SAMs. *Thin Solid Films*, **2011**, 519, 4997-5001	2.2	50
107	Fourth-generation biomedical materials. *Materials Today*, **2016**, 19, 2-3	21.8	49

106	Bone-Inspired Spatially Specific Piezoelectricity Induces Bone Regeneration. *Theranostics*, **2017**, 7, 3387-3397	12.1	44
105	Effect of thermal treatment on carbonated hydroxyapatite: Morphology, composition, crystal characteristics and solubility. *Ceramics International*, **2015**, 41, 6149-6157	5.1	41
104	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	6.7	40
103	The synergistic antibacterial activity and mechanism of multicomponent metal ions-containing aqueous solutions against Staphylococcus aureus. *Journal of Inorganic Biochemistry*, **2016**, 163, 214-220	4.2	40
102	Synthesis of radial mesoporous bioactive glass particles to deliver osteoactivin gene. *Journal of Materials Chemistry B*, **2014**, 2, 7045-7054	7.3	39
101	Surface-Selective Preferential Production of Reactive Oxygen Species on Piezoelectric Ceramics for Bacterial Killing. *ACS Applied Materials & Interfaces*, **2016**, 8, 24306-9	9.5	38
100	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	9.5	35
99	Reversibly controlling preferential protein adsorption on bone implants by using an applied weak potential as a switch. *Angewandte Chemie - International Edition*, **2014**, 53, 13068-72	16.4	35
98	Facile synthesis of hollow mesoporous bioactive glass sub-micron spheres with a tunable cavity size. *Materials Letters*, **2014**, 134, 130-133	3.3	33
97	Spiral Donor Design Strategy for Blue Thermally Activated Delayed Fluorescence Emitters. *ACS Applied Materials & Interfaces*, **2021**, 13, 5302-5311	9.5	32
96	Fabrication of Biocompatible Potassium Sodium Niobate Piezoelectric Ceramic as an Electroactive Implant. *Materials*, **2017**, 10,	3.5	29
95	The structure, surface topography and mechanical properties of SiCN films fabricated by RF and DC magnetron sputtering. *Applied Surface Science*, **2011**, 258, 1328-1336	6.7	29
94	Corrosion behavior and mechanism of MAO coated Ti6Al4V with a grain-fined surface layer. *Journal of Alloys and Compounds*, **2016**, 664, 770-776	5.7	28
93	Electrochemical behavior of biocompatible AZ31 magnesium alloy in simulated body fluid. *Journal of Materials Science*, **2012**, 47, 5197-5204	4.3	28
92	Hydroxyapatite coatings produced on commercially pure titanium by micro-arc oxidation. *Biomedical Materials (Bristol)*, **2007**, 2, 196-201	3.5	28
91	Effect of crystalline phase changes in titania (TiO) nanotube coatings on platelet adhesion and activation. *Materials Science and Engineering C*, **2018**, 82, 91-101	8.3	28
90	Palladium nanoparticles entrapped in a self-supporting nanoporous gold wire as sensitive dopamine biosensor. *Scientific Reports*, **2017**, 7, 7941	4.9	27
89	Elastomeric conductive hybrid hydrogels with continuous conductive networks. *Journal of Materials Chemistry B*, **2019**, 7, 2389-2397	7.3	26

88	Surface Wettability Switched Cell Adhesion and Detachment on Conducting Polymer Nanoarray. *Advanced Materials Interfaces*, **2016**, 3, 1600598	4.6	26
87	Built-in microscale electrostatic fields induced by anatase-rutile-phase transition in selective areas promote osteogenesis. *NPG Asia Materials*, **2016**, 8,	10.3	26
86	Exosome-functionalized polyetheretherketone-based implant with immunomodulatory property for enhancing osseointegration. *Bioactive Materials*, **2021**, 6, 2754-2766	16.7	26
85	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	9.1	24
84	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	4.1	24
83	Micropatterned TiO nanotubes: fabrication, characterization and in vitro protein/cell responses. *Journal of Materials Chemistry B*, **2013**, 1, 3506-3512	7.3	23
82	Polarization of an electroactive functional film on titanium for inducing osteogenic differentiation. *Scientific Reports*, **2016**, 6, 35512	4.9	23
81	The antibacterial effect of potassium-sodium niobate ceramics based on controlling piezoelectric properties. *Colloids and Surfaces B: Biointerfaces*, **2019**, 175, 463-468	6	23
80	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	7.4	22
79	Facile synthesis of mesoporous bioactive glasses with controlled shapes. *Materials Letters*, **2015**, 161, 605-608	3.3	22
78	Surface-dependent self-assembly of conducting polypyrrole nanotube arrays in template-free electrochemical polymerization. *ACS Applied Materials & Interfaces*, **2014**, 6, 10946-51	9.5	22
77	Residual Stresses in Microarc Oxidation Ceramic Coatings on Biocompatible AZ31 Magnesium Alloys. *Journal of Materials Engineering and Performance*, **2012**, 21, 1085-1090	1.6	22
76	An injectable, self-healing, electroconductive extracellular matrix-based hydrogel for enhancing tissue repair after traumatic spinal cord injury. *Bioactive Materials*, **2022**, 7, 98-111	16.7	21
75	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	3.8	20
74	Polydopamine-Assisted Electrochemical Fabrication of Polypyrrole Nanofibers on Bone Implants to Improve Bioactivity. *Macromolecular Materials and Engineering*, **2016**, 301, 1288-1294	3.9	20
73	Nanostructured PPy coating on titanium fabricated via template-free electrochemical polymerization in PBS. *Surface and Coatings Technology*, **2013**, 228, S41-S43	4.4	19
72	Preparation and properties of a cerium-containing hydroxyapatite coating on commercially pure titanium by micro-arc oxidation. *Rare Metals*, **2008**, 27, 257-260	5.5	19
71	Effect of applied voltage on phase components of composite coatings prepared by micro-arc oxidation. *Thin Solid Films*, **2013**, 544, 79-82	2.2	18

70	Nanostructured conducting polymers as intelligent implant surface: fabricated on biomedical titanium with a potential-induced reversible switch in wettability. *ChemPhysChem*, **2013**, 14, 3891-4	3.2	18
69	Bio-inspired citrate functionalized apatite coating on rapid prototyped titanium scaffold. *Applied Surface Science*, **2014**, 313, 947-953	6.7	17
68	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	9.1	17
67	Electrically Reversible Redox-Switchable Polydopamine Films for Regulating Cell Behavior. *Electrochimica Acta*, **2017**, 228, 343-350	6.7	16
66	Conducting photopolymers on orthopeadic implants having a switch of priority between promoting osteogenic and antibacterial activity. *Materials Horizons*, **2018**, 5, 545-552	14.4	16
65	Ultrafast and On-Demand Oil/Water Separation Membrane System Based on Conducting Polymer Nanotip Arrays. *Nano Letters*, **2020**, 20, 4895-4900	11.5	15
64	Polypyrrole Nanocones and Dynamic Piezoelectric Stimulation-Induced Stem Cell Osteogenic Differentiation. *ACS Biomaterials Science and Engineering*, **2019**, 5, 4386-4392	5.5	15
63	Anodic formation of Ti nanorods with periodic length. *Electrochemistry Communications*, **2012**, 17, 14-17	5.1	15
62	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	3.6	15
61	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**, 2014, 7872-7876	7.3	14
60	Taurine-induced fabrication of nano-architectured conducting polypyrrole on biomedical titanium. *Macromolecular Rapid Communications*, **2014**, 35, 574-8	4.8	14
59	Controlled oxidative nanopatterning of microrough titanium surfaces for improving osteogenic activity. *Journal of Materials Science: Materials in Medicine*, **2014**, 25, 1875-84	4.5	14
58	Periodic Nanoneedle and Buffer Zones Constructed on a Titanium Surface Promote Osteogenic Differentiation and Bone Calcification In Vivo. *Advanced Healthcare Materials*, **2016**, 5, 364-72	10.1	14
57	Biomimetic Ti-6Al-4V alloy/gelatin methacrylate hybrid scaffold with enhanced osteogenic and angiogenic capabilities for large bone defect restoration. *Bioactive Materials*, **2021**, 6, 3437-3448	16.7	13
56	Ti nanorod arrays with a medium density significantly promote osteogenesis and osteointegration. *Scientific Reports*, **2016**, 6, 19047	4.9	12
55	Wireless Electrochemotherapy by Selenium-Doped Piezoelectric Biomaterials to Enhance Cancer Cell Apoptosis. *ACS Applied Materials & Interfaces*, **2020**, 12, 34505-34513	9.5	11
54	Construction of high surface potential polypyrrole nanorods with enhanced antibacterial properties. *Journal of Materials Chemistry B*, **2018**, 6, 3128-3135	7.3	11
53	Modification of biomaterials surface by mimetic cell membrane to improve biocompatibility. *Frontiers of Materials Science*, **2014**, 8, 325-331	2.5	11

52	A Dual-Bonded Approach for Improving Hydrogel Implant Stability in Cartilage Defects. *Materials*, **2017**, 10,	3.5	11
51	Wearable sensors and devices for real-time cardiovascular disease monitoring. *Cell Reports Physical Science*, **2021**, 2, 100541	6.1	11
50	Self-curling electroconductive nerve dressing for enhancing peripheral nerve regeneration in diabetic rats. *Bioactive Materials*, **2021**, 6, 3892-3903	16.7	11
49	Chondroitin sulphate-guided construction of polypyrrole nanoarchitectures. *Materials Science and Engineering C*, **2015**, 48, 172-8	8.3	10
48	A Multifunctional Metallohydrogel with Injectability, Self-Healing, and Multistimulus-Responsiveness for Bioadhesives. *Macromolecular Materials and Engineering*, **2018**, 303, 1800305	3.9	10
47	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	8.3	10
46	Potential-induced reversible switching in the tubular structure of conducting polypyrrole nanotube arrays. *RSC Advances*, **2013**, 3, 14946	3.7	10
45	Highly Water-Dispersible, Highly Conductive, and Biocompatible Polypyrrole-Coated Silica Particles Stabilized and Doped by Chondroitin Sulfate. *Particle and Particle Systems Characterization*, **2015**, 32, 1068-1077	3.1	10
44	In vitro study on the osteogenesis enhancement effect of BMP-2 incorporated biomimetic apatite coating on titanium surfaces. *Dental Materials Journal*, **2017**, 36, 677-685	2.5	9
43	A spatially varying charge model for regulating site-selective protein adsorption and cell behaviors. *Biomaterials Science*, **2019**, 7, 876-888	7.4	9
42	Influence of Surrounding Cations on the Surface Degradation of Magnesium Alloy Implants under a Compressive Pressure. *Langmuir*, **2015**, 31, 13561-70	4	9
41	Preparation, characterization, and drug-release properties of PEG-DA-based copolymer hydrogel microspheres. *Journal of Applied Polymer Science*, **2012**, 125, 3509-3516	2.9	9
40	Extracellular Matrix-Based Conductive Interpenetrating Network Hydrogels with Enhanced Neurovascular Regeneration Properties for Diabetic Wounds Repair. *Advanced Healthcare Materials* , **2021**, e2101556	10.1	9
39	Corrosion behaviour of microarc-oxidised magnesium alloy in Earle□ balanced salt solution. *Surface Innovations*, **2017**, 5, 43-53	1.9	8
38	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	4.5	8
37	Incorporating catechol into electroactive polypyrrole nanowires on titanium to promote hydroxyapatite formation. *Bioactive Materials*, **2018**, 3, 74-79	16.7	8
36	Effects of argon plasma treatment on surface characteristic of photopolymerization PEGDA□HEMA hydrogels. *Journal of Applied Polymer Science*, **2012**, 124, 459-465	2.9	8
35	Controllable Protein Adsorption and Bacterial Adhesion on Polypyrrole Nanocone Arrays. *Journal of Materials Science and Technology*, **2016**, 32, 950-955	9.1	8

34	Antimicrobial Peptide Functionalized Conductive Nanowire Array Electrode as a Promising Candidate for Bacterial Environment Application. *Advanced Functional Materials*, **2019**, 29, 1806353	15.6	8
33	Reversibly Controlling Preferential Protein Adsorption on Bone Implants by Using an Applied Weak Potential as a Switch. *Angewandte Chemie*, **2014**, 126, 13284-13288	3.6	7
32	In vitro mineralization of surface-modified porous polycaprolactone scaffolds in simulated body fluid. *Applied Surface Science*, **2008**, 255, 429-431	6.7	7
31	Covalent Bonding of an Electroconductive Hydrogel to Gold-Coated Titanium Surfaces via Thiol-ene Click Chemistry. *Macromolecular Materials and Engineering*, **2016**, 301, 1423-1429	3.9	7
30	Large-scale functionalization of biomedical porous titanium scaffolds surface with TiO2 nanostructures. *Science China Materials*, **2018**, 61, 557-564	7.1	7
29	0D/1D Heterojunction Implant with Electro-Mechanobiological Coupling Cues Promotes Osteogenesis. *Advanced Functional Materials*,2106249	15.6	7
28	Spatial charge manipulated set-selective apatite deposition on micropatterned piezoceramic. *RSC Advances*, **2017**, 7, 32974-32981	3.7	6
27	Conducting Polypyrrole Nanotube Arrays as an Implant Surface: Fabricated on Biomedical Titanium with Fine-Tunability by Means of Template-Free Electrochemical Polymerization. *ChemPlusChem*, **2014**, 79, 524-530	2.8	6
26	Investigation of Radial Mesoporous Bioactive Glass Particles as Drug Carriers for Inhibition of Tumor Cells. *Science of Advanced Materials*, **2017**, 9, 562-570	2.3	6
25	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	14.7	6
24	hMSCs bridging across micro-patterned grooves. *RSC Advances*, **2015**, 5, 47975-47982	3.7	5
23	Polydopamine-Assisted Immobilization of Copper Ions onto Hemodialysis Membranes for Antimicrobial.. *ACS Applied Bio Materials*, **2018**, 1, 1236-1243	4.1	5
22	Tough and Highly Efficient Underwater Self-Repairing Hydrogels for Soft Electronics.. *Small Methods*, **2022**, e2101513	12.8	5
21	Exosomes-Loaded Electroconductive Hydrogel Synergistically Promotes Tissue Repair after Spinal Cord Injury via Immunoregulation and Enhancement of Myelinated Axon Growth.. *Advanced Science*, **2022**, e2105586	13.6	5
20	Wireless electrical stimulation at the nanoscale interface induces tumor vascular normalization.. *Bioactive Materials*, **2022**, 18, 399-408	16.7	5
19	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	4.4	4
18	Endogenous electric field as a bridge for antibacterial ion transport from implant to bacteria. *Science China Materials*, **2020**, 63, 1831-1841	7.1	3
17	A built-in electric field with nanoscale distinction for cell behavior regulation. *Journal of Materials Chemistry B*, **2018**, 6, 2723-2727	7.3	3

16	In vivo evaluation of novel amine-terminated nanopore Ti surfaces. *Journal of Biomedical Materials Research - Part A*, **2012**, 100, 3428-35	5.4	3
15	Effect of Different Acid Treatment on Surface Characteristics of Titanium Alloy. *Materials Science Forum*, **2011**, 694, 490-496	0.4	3
14	Ti nanorod arrays with periodic density fabricated via anodic technology. *Micro and Nano Letters*, **2014**, 9, 168-170	0.9	2
13	Microstructure, mechanical properties and wetting behavior of F: SiCN films as bio-mechanical coating grown by DC unbalanced magnetron sputtering. *Journal of Alloys and Compounds*, **2013**, 552, 111-118	5.7	2
12	The mechanism of pH-induced polydopamine films surface protonation and cell adhesion behavior. *Scientia Sinica Chimica*, **2016**, 46, 373-381	1.6	2
11	Regulation of osteoblast functions on titanium surfaces with different micro/nanotopographies and compositions. *Science China Technological Sciences*, **2019**, 62, 559-568	3.5	2
10	The innovation of biomaterials: From bioactive to bioelectroactive. *Science China Materials*,1	7.1	2
9	Protein Adsorption on Titanium Surface Functionalized with Bioactive Gelatin Methacrylate Hydrogel Coating. *Advanced Materials Research*, **2014**, 936, 663-668	0.5	1
8	Study on Surface Characterization and Properties of Three Dimensional Nano-Porous Titanium Film. *Key Engineering Materials*, **2011**, 492, 146-150	0.4	1
7	Dynamically modulated gating process of nanoporous membrane at sub-2-nm speed. *Matter*, **2022**, 5, 281-290	12.7	1
6	Frequency Effect on Electrochemical Characteristics of MAO Coated Magnesium Alloy in Simulated Body Fluid. *Ceramic Transactions*,81-92	0.1	1
5	Near-Infrared Light-Activatable Bismuth-based Nanomaterials for Antibacterial and Antitumor Treatment. *Advanced Therapeutics*,2200027	4.9	1
4	Programmable biological state-switching photoelectric nanosheets for the treatment of infected wounds. *Materials Today Bio*, **2022**, 100292	9.9	1
3	Characterization of Porous Titanium-Hydroxyapatite Composite Biological Coating on Polyetheretherketone (PEEK) by Vacuum Plasma Spraying. *Coatings*, **2022**, 12, 433	2.9	0
2	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	10.1	
1	One-step construction of a food-grade expression system based on the URA3 gene in Kluyveromyces lactis. *Plasmid*, **2021**, 116, 102577	3.3	