Huiliang Cao

List of Publications by Citations

55 papers	2,602 citations	27 h-index	50 g-index
58 ext. papers	3,075 ext. citations	7.6 avg, IF	5.07 L-index

#	Paper	IF	Citations
55	Synergistic effects of dual Zn/Ag ion implantation in osteogenic activity and antibacterial ability of titanium. *Biomaterials*, **2014**, 35, 7699-713	15.6	276
54	Biological actions of silver nanoparticles embedded in titanium controlled by micro-galvanic effects. *Biomaterials*, **2011**, 32, 693-705	15.6	271
53	In vitro and in vivo anti-biofilm effects of silver nanoparticles immobilized on titanium. *Biomaterials*, **2014**, 35, 9114-25	15.6	173
52	Osteogenic activity and antibacterial effect of zinc ion implanted titanium. *Colloids and Surfaces B: Biointerfaces*, **2014**, 117, 158-65	6	161
51	Enhanced osteointegration on tantalum-implanted polyetheretherketone surface with bone-like elastic modulus. *Biomaterials*, **2015**, 51, 173-183	15.6	152
50	Electron storage mediated dark antibacterial action of bound silver nanoparticles: smaller is not always better. *Acta Biomaterialia*, **2013**, 9, 5100-10	10.8	102
49	A strontium-incorporated nanoporous titanium implant surface for rapid osseointegration. *Nanoscale*, **2016**, 8, 5291-301	7.7	100
48	Enhanced Osseointegration of Hierarchical Micro/Nanotopographic Titanium Fabricated by Microarc Oxidation and Electrochemical Treatment. *ACS Applied Materials & Interfaces*, **2016**, 8, 3840-52	9.5	99
47	On the issue of transparency and reproducibility in nanomedicine. *Nature Nanotechnology*, **2019**, 14, 629-635	28.7	92
46	Zn/Ag micro-galvanic couples formed on titanium and osseointegration effects in the presence of S. aureus. *Biomaterials*, **2015**, 65, 22-31	15.6	76
45	Multilevel surface engineering of nanostructured TiO2 on carbon-fiber-reinforced polyetheretherketone. *Biomaterials*, **2014**, 35, 5731-40	15.6	64
44	Silver nanoparticles-modified films versus biomedical device-associated infections. *Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology*, **2010**, 2, 670-84	9.2	64
43	Balancing the Osteogenic and Antibacterial Properties of Titanium by Codoping of Mg and Ag: An in Vitro and in Vivo Study. *ACS Applied Materials & Interfaces*, **2015**, 7, 17826-36	9.5	58
42	Antimicrobial and osteogenic properties of silver-ion-implanted stainless steel. *ACS Applied Materials & Interfaces*, **2015**, 7, 10785-94	9.5	58
41	Effect of Local Alkaline Microenvironment on the Behaviors of Bacteria and Osteogenic Cells. *ACS Applied Materials & Interfaces*, **2018**, 10, 42018-42029	9.5	54
40	In vitro and in vivo responses of macrophages to magnesium-doped titanium. *Scientific Reports*, **2017**, 7, 42707	4.9	52
39	Sealing the Pores of PEO Coating with Mg-Al Layered Double Hydroxide: Enhanced Corrosion Resistance, Cytocompatibility and Drug Delivery Ability. *Scientific Reports*, **2017**, 7, 8167	4.9	49

38	Antibacterial activity and cytocompatibility of titanium oxide coating modified by iron ion implantation. *Acta Biomaterialia*, **2014**, 10, 4505-17	10.8	48
37	Immunomodulatory Effects of Calcium and Strontium Co-Doped Titanium Oxides on Osteogenesis. *Frontiers in Immunology*, **2017**, 8, 1196	8.4	46
36	PEO/Mg-Zn-Al LDH Composite Coating on Mg Alloy as a Zn/Mg Ion-Release Platform with Multifunctions: Enhanced Corrosion Resistance, Osteogenic, and Antibacterial Activities. *ACS Biomaterials Science and Engineering*, **2018**, 4, 4112-4121	5.5	46
35	Osteogenesis Catalyzed by Titanium-Supported Silver Nanoparticles. *ACS Applied Materials & Interfaces*, **2017**, 9, 5149-5157	9.5	45
34	Hierarchical micro/nanostructured titanium with balanced actions to bacterial and mammalian cells for dental implants. *International Journal of Nanomedicine*, **2015**, 10, 6659-74	7.3	45
33	Activating titanium oxide coatings for orthopedic implants. *Surface and Coatings Technology*, **2013**, 233, 57-64	4.4	39
32	Bifunctional galvanics mediated selective toxicity on titanium. *Materials Horizons*, **2018**, 5, 264-267	14.4	33
31	Vacuum extraction enhances rhPDGF-BB immobilization on nanotubes to improve implant osseointegration in ovariectomized rats. *Nanomedicine: Nanotechnology, Biology, and Medicine*, **2014**, 10, 1809-18	6	32
30	A comparison of micro-CT and histomorphometry for evaluation of osseointegration of PEO-coated titanium implants in a rat model. *Scientific Reports*, **2017**, 7, 16270	4.9	30
29	Plasma-Sprayed Ceramic Coatings for Osseointegration. *International Journal of Applied Ceramic Technology*, **2013**, 10, 1-10	2	27
28	Ag-plasma modification enhances bone apposition around titanium dental implants: an animal study in Labrador dogs. *International Journal of Nanomedicine*, **2015**, 10, 653-64	7.3	24
27	Loading 5-Fluorouracil into calcined Mg/Al layered double hydroxide on AZ31 via memory effect. *Materials Letters*, **2018**, 213, 383-386	3.3	24
26	Phase transformations in low-temperature chromized 0.45 wt.% C plain carbon steel. *Surface and Coatings Technology*, **2007**, 201, 7970-7977	4.4	23
25	Spacing-Dependent Antimicrobial Efficacy of Immobilized Silver Nanoparticles. *Journal of Physical Chemistry Letters*, **2014**, 5, 743-8	6.4	22
24	Antibacterial ability, cytocompatibility and hemocompatibility of fluorinated graphene. *Colloids and Surfaces B: Biointerfaces*, **2019**, 173, 681-688	6	20
23	Molybdenum disulfide (MoS2) nanosheets vertically coated on titanium for disinfection in the dark. *Arabian Journal of Chemistry*, **2020**, 13, 1612-1623	5.9	18
22	The prospect of layered double hydroxide as bone implants: A study of mechanical properties, cytocompatibility and antibacterial activity. *Applied Clay Science*, **2018**, 165, 179-187	5.2	17
21	Influence of biomimetic boundary structure on the antifouling performances of siloxane modified resin coatings. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2017**, 528, 57-64	5.1	15

20	Nano-thick calcium oxide armed titanium: boosts bone cells against methicillin-resistant Staphylococcus aureus. *Scientific Reports*, **2016**, 6, 21761	4.9	15
19	ZnO@ZnS nanorod-array coated titanium: Good to fibroblasts but bad to bacteria. *Journal of Colloid and Interface Science*, **2020**, 579, 50-60	9.3	14
18	Graphene oxide as a dual Zn/Mg ion carrier and release platform: enhanced osteogenic activity and antibacterial properties. *Journal of Materials Chemistry B*, **2018**, 6, 2004-2012	7.3	14
17	Antimicrobial activity of tantalum oxide coatings decorated with Ag nanoparticles. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2016**, 34, 04C102	2.9	13
16	Dose-Dependent Effects of CeO2 on Microstructure and Antibacterial Property of Plasma-Sprayed TiO2 Coatings for Orthopedic Application. *Journal of Thermal Spray Technology*, **2015**, 24, 401-409	2.5	12
15	Cytocompatible tantalum films on Ti6Al4V substrate by filtered cathodic vacuum arc deposition. *Bioelectrochemistry*, **2018**, 122, 32-39	5.6	11
14	Cellular responses to titanium successively treated by magnesium and silver PIII&D. *Surface and Coatings Technology*, **2014**, 256, 9-14	4.4	11
13	Enhanced osteogenic and selective antibacterial activities on micro-/nano-structured carbon fiber reinforced polyetheretherketone. *Journal of Materials Chemistry B*, **2016**, 4, 2944-2953	7.3	9
12	Formation of a nanostructured CrN layer on nitrided tool steel by low-temperature chromizing. *Scripta Materialia*, **2008**, 58, 786-789	5.6	8
11	Nanotube array controlled carbon plasma deposition. *Applied Physics Letters*, **2013**, 102, 243109	3.4	7
10	Schottky barrier dependent antimicrobial efficacy of silver nanoparticles. *Materials Letters*, **2016**, 179, 1-4	3.3	7
9	Antimicrobial and osteogenic properties of iron-doped titanium. *RSC Advances*, **2016**, 6, 46495-46507	3.7	6
8	Nanoporous SiO2/TiO2 composite coating for orthopedic application. *Materials Letters*, **2015**, 152, 53-56	3.3	5
7	Influence of implantation voltage on the biological properties of zinc-implanted titanium. *Surface and Coatings Technology*, **2017**, 312, 75-80	4.4	5
6	Regulating the Behavior of Human Gingival Fibroblasts by sp Domains in Reduced Graphene Oxide. *ACS Biomaterials Science and Engineering*, **2019**, 5, 6414-6424	5.5	3
5	Nanoporous SiO2/TiO2 coating with enhanced interfacial compatibility for orthopedic applications. *Applied Surface Science*, **2015**, 355, 999-1006	6.7	2
4	Restoring the osteogenic activity of bacterial debris contaminated titanium by doping with magnesium. *RSC Advances*, **2016**, 6, 113395-113404	3.7	1
3	Cell-selective titanium oxide coatings mediated by coupling hafnium-doping and UV pre-illumination. *Arabian Journal of Chemistry*, **2020**, 13, 4210-4217	5.9	1

2	Controllable deposition of MoS2 nanosheets on titanium by the vapor-phase hydrothermal technique and comparison with the conventional liquid-phase hydrothermal method. *Surface and Coatings Technology*, **2020**, 404, 126497	4.4	0
1	The Action-Networks of Nanosilver: Bridging the Gap between Material and Biology. *Advanced Healthcare Materials*, **2021**, 10, e2100619	10.1	0