Kai Li

List of Publications by Year
in descending order

55 papers	1,329 citations	279487 23 h-index	377514 34 g-index
55 all docs	55 docs citations	55 times ranked	1832 citing authors

#	Article	IF	Citations
1	Unveiling the Mechanism of Surface Hydrophilicityâ€Modulated Macrophage Polarization. Advanced Healthcare Materials, 2018, 7, e1800675.	3.9	120
2	Microstructure and wear behavior of graphene nanosheets-reinforced zirconia coating. Ceramics International, 2014, 40, 12821-12829.	2.3	83
3	YAP-mediated mechanotransduction regulates osteogenic and adipogenic differentiation of BMSCs on hierarchical structure. Colloids and Surfaces B: Biointerfaces, 2017, 152, 344-353.	2.5	59
4	Zinc-modified Calcium Silicate Coatings Promote Osteogenic Differentiation through TGF-Î²/Smad Pathway and Osseointegration in Osteopenic Rabbits. Scientific Reports, 2017, 7, 3440.	1.6	56
5	Enhanced osteogenic activity of anatase TiO 2 film: Surface hydroxyl groups induce conformational changes in fibronectin. Materials Science and Engineering C, 2017, 78, 96-104.	3.8	52
6	Incorporation of cerium oxide into hydroxyapatite coating regulates osteogenic activity of mesenchymal stem cell and macrophage polarization. Journal of Biomaterials Applications, 2017, 31, 1062-1076.	1.2	49
7	Covalently immobilised type I collagen facilitates osteoconduction and osseointegration of titanium coated implants. Journal of Orthopaedic Translation, 2016, 5, 16-25.	1.9	44
8	A hydrogenated black TiO2 coating with excellent effects for photothermal therapy of bone tumor and bone regeneration. Materials Science and Engineering C, 2019, 102, 458-470.	3.8	43
9	Optimized Nanointerface Engineering of Micro/Nanostructured Titanium Implants to Enhance Cellâ€“Nanotopography Interactions and Osseointegration. ACS Biomaterials Science and Engineering, 2020, 6, 969-983.	2.6	42
10	Plasma sprayed cerium oxide coating inhibits H2O2-induced oxidative stress and supports cell viability. Journal of Materials Science: Materials in Medicine, 2016, 27, 100.	1.7	38
11	Fabrication and in vitro evaluation of stable collagen/hyaluronic acid biomimetic multilayer on titanium coatings. Journal of the Royal Society Interface, 2013, 10, 20130070.	1.5	37
12	Different response of osteoblastic cells to Mg2+, Zn2+ and Sr2+ doped calcium silicate coatings. Journal of Materials Science: Materials in Medicine, 2016, 27, 56.	1.7	35
13	Chemical stability and antimicrobial activity of plasma sprayed bioactive Ca2ZnSi2O7 coating. Journal of Materials Science: Materials in Medicine, 2011, 22, 2781-2789.	1.7	34
14	Cerium Oxide Nanoparticles Regulate Osteoclast Differentiation Bidirectionally by Modulating the Cellular Production of Reactive Oxygen Species . International Journal of Nanomedicine, 2020, Volume 15, 6355-6372.	3.3	32
15	In Vitro and In Vivo Evaluation of Zinc-Modified Caâ€“Si-Based Ceramic Coating for Bone Implants. PLoS ONE, 2013, 8, e57564.	1.1	31
16	Immunomodulation effect of a hierarchical macropore/nanosurface on osteogenesis and angiogenesis. Biomedical Materials (Bristol), 2017, 12, 045006.	1.7	29
17	Sr-doped nanowire modification of Caâ€“Si-based coatings for improved osteogenic activities and reduced inflammatory reactions. Nanotechnology, 2018, 29, 084001.	1.3	29
18	The combined effects of nanotopography and Sr ion for enhanced osteogenic activity of bone marrow mesenchymal stem cells (BMSCs). Journal of Biomaterials Applications, 2017, 31, 1135-1147.	1.2	28

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19	The Effects of Cerium Oxide Incorporation in Calcium Silicate Coating on Bone Mesenchymal Stem Cell and Macrophage Responses. Biological Trace Element Research, 2017, 177, 148-158.	1.9	27
20	Improved osteogenesis of boron incorporated calcium silicate coatings via immunomodulatory effects. Journal of Biomedical Materials Research - Part A, 2019, 107, 12-24.	2.1	27
21	Antimicrobial Peptide-Loaded Pectolite Nanorods for Enhancing Wound-Healing and Biocidal Activity of Titanium. ACS Applied Materials & Interfaces, 2021, 13, 28764-28773.	4.0	27
22	Effects of graphene plates’ adoption on the microstructure, mechanical properties, and in vivo biocompatibility of calcium silicate coating. International Journal of Nanomedicine, 2015, 10, 3855.	3.3	25
23	Effects of Zn Content on Crystal Structure, Cytocompatibility, Antibacterial Activity, and Chemical Stability in Zn-Modified Calcium Silicate Coatings. Journal of Thermal Spray Technology, 2013, 22, 965-973.	1.6	23
24	The Effects of Cerium Valence States at Cerium Oxide Coatings on the Responses of Bone Mesenchymal Stem Cells and Macrophages. Biological Trace Element Research, 2017, 179, 259-270.	1.9	23
25	Dual enzyme-like activities of transition metal-doped MnO2 nanocoatings and their dependence on the electronic band structure and ionic dissolution. Applied Surface Science, 2020, 534, 147649.	3.1	23
26	Cerium Oxide-Incorporated Calcium Silicate Coating Protects MC3T3-E1 Osteoblastic Cells from H2O2-Induced Oxidative Stress. Biological Trace Element Research, 2016, 174, 198-207.	1.9	22
27	Incorporation of Cerium Oxide into Hydroxyapatite Coating Protects Bone Marrow Stromal Cells Against H2O2-Induced Inhibition of Osteogenic Differentiation. Biological Trace Element Research, 2018, 182, 91-104.	1.9	21
28	Micro/Nano Structural Tantalum Coating for Enhanced Osteogenic Differentiation of Human Bone Marrow Stem Cells. Materials, 2018, 11, 546.	1.3	21
29	The enhanced angiogenic responses to ionic dissolution products from a boron-incorporated calcium silicate coating. Materials Science and Engineering C, 2019, 101, 513-520.	3.8	21
30	Macrophage polarization by plasma sprayed ceria coatings on titanium-based implants: Cerium valence state matters. Applied Surface Science, 2020, 504, 144070.	3.1	21
31	Zn-doped MnO2 nanocoating with enhanced catalase-mimetic activity and cytocompatibility protects pre-osteoblasts against H2O2-induced oxidative stress. Colloids and Surfaces B: Biointerfaces, 2021, 202, 111666.	2.5	18
32	The enhanced bactericidal effect of plasma sprayed zinc-modified calcium silicate coating by the addition of silver. Ceramics International, 2013, 39, 7895-7902.	2.3	17
33	ROCK-regulated synergistic effect of macropore/nanowire topography on cytoskeletal distribution and cell differentiation. RSC Advances, 2015, 5, 101834-101842.	1.7	17
34	Silanized NaCa₂HSi₃O₉ nanorods with a reduced pH increase on Ti for improving osteogenesis and angiogenesis in vitro. Journal of Materials Chemistry B, 2020, 8, 691-702.	2.9	17
35	Chemical stability and osteogenic activity of plasma-sprayed boron-modified calcium silicate-based coatings. Journal of Materials Science: Materials in Medicine, 2016, 27, 166.	1.7	15
36	Titania nanotube array supported nanoceria with redox cycling stability ameliorates oxidative stress-inhibited osteogenesis. Chemical Engineering Journal, 2021, 415, 128913.	6.6	15

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37	Chemical Stability and Antimicrobial Activity of Plasma-Sprayed Cerium Oxideâ€“Incorporated Calcium Silicate Coating in Dental Implants. Implant Dentistry, 2019, Publish Ahead of Print, 564-570.	1.7	11
38	Black plasma-sprayed Ta2O5 coatings with photothermal effect for bone tumor therapy. Ceramics International, 2018, 44, 12002-12006.	2.3	10
39	Engineering Nanopatterned Structures to Orchestrate Macrophage Phenotype by Cell Shape. Journal of Functional Biomaterials, 2022, 13, 31.	1.8	10
40	Antibacterial mechanism of plasma sprayed Ca2ZnSi2O7 coating against Escherichia coli. Journal of Materials Science: Materials in Medicine, 2013, 24, 171-178.	1.7	9
41	Electroactive MnO2-poly(3,4-ethylenedioxythiophene) composite nanocoatings enhance osteoblastic electrical stimulation. Applied Surface Science, 2021, 545, 148827.	3.1	8
42	Hierarchical macropore/nano surface regulates stem cell fate through a ROCK-related signaling pathway. RSC Advances, 2017, 7, 8521-8532.	1.7	7
43	Room-temperature facile synthesis of MnO2 on carbon film via UV-photolysis for supercapacitor. Progress in Natural Science: Materials International, 2019, 29, 16-19.	1.8	7
44	Boron-incorporated micro/nano-topographical calcium silicate coating dictates osteo/angio-genesis and inflammatory response toward enhanced osseointegration. Biological Trace Element Research, 2021, 199, 3801-3816.	1.9	7
45	Controlling Preosteoblast Behavior through Manganese Vacancyâ€Rich Birnessite with Enhanced Divalent Cation Modulation of Fibronectinâ€“Integrin Interactions. Advanced Materials Interfaces, 2020, 7, 1902127.	1.9	6
46	Visible-light-responsive reduced graphene oxide/g-C₃N₄/TiO₂ composite nanocoating for photoelectric stimulation of neuronal and osteoblastic differentiation. RSC Advances, 2022, 12, 8878-8888.	1.7	6
47	Optimal Zn-Modified Caâ€“Si-Based Ceramic Nanocoating with Zn Ion Release for Osteoblast Promotion and Osteoclast Inhibition in Bone Tissue Engineering. Journal of Nanomaterials, 2017, 2017, 1-9.	1.5	5
48	Synthesis of carbon coated-ceria with improved cytocompatibility. Ceramics International, 2019, 45, 19981-19990.	2.3	5
49	Adhesion Behavior of Escherichia coli on Plasma-Sprayed Zn and Ag Co-incorporated Calcium Silicate Coatings with Varying Surface Roughness. Journal of Thermal Spray Technology, 2018, 27, 1428-1435.	1.6	4
50	Zanthoxylum nitidum extract attenuates BMP-2-induced inflammation and hyperpermeability. Bioscience Reports, 2020, 40, .	1.1	4
51	Improved Mechanical Compatibility and Cytocompatibility of Ta/Ti Double-Layered Composite Coating. Journal of Thermal Spray Technology, 2017, 26, 1292-1300.	1.6	3
52	Plasma-Sprayed Titanium Patterns for Enhancing Early Cell Responses. Journal of Thermal Spray Technology, 2016, 25, 946-958.	1.6	2
53	A COMPARATIVE STUDY ON VACUUM AND ATMOSPHERIC PLASMA SPRAYED TANTALUM COATINGS FOR THE MODIFICATION OF TITANIUM IMPLANTS. Surface Review and Letters, 2019, 26, 1950048.	0.5	2
54	Preparation and Characterization of Calcium-Magnesium Phosphate Cements. Advanced Materials Research, 0, 1058, 83-86.	0.3	1

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55	Preparation and characteristics of a novel oxygenâ€releasing coating for improved cell responses in hypoxic environment. Journal of Biomedical Materials Research - Part A, 2021, 109, 248-261.	2.1	1