

# Shui-Lin Wu

## List of Publications by Year in descending order

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Version: 2024-02-01

219  
papers

17,542  
citations

9264

74  
h-index

17592

121  
g-index

222  
all docs

222  
docs citations

222  
times ranked

14315  
citing authors

#	ARTICLE	IF	CITATIONS
1	Biomimetic porous scaffolds for bone tissue engineering. <i>Materials Science and Engineering Reports</i> , 2014, 80, 1-36.	31.8	854
2	Photo-Inspired Antibacterial Activity and Wound Healing Acceleration by Hydrogel Embedded with Ag/Ag@AgCl/ZnO Nanostructures. <i>ACS Nano</i> , 2017, 11, 9010-9021.	14.6	591
3	Rapid Biofilm Eradication on Bone Implants Using Red Phosphorus and Near-Infrared Light. <i>Advanced Materials</i> , 2018, 30, e1801808.	21.0	364
4	Design of magnesium alloys with controllable degradation for biomedical implants: From bulk to surface. <i>Acta Biomaterialia</i> , 2016, 45, 2-30.	8.3	306
5	Zinc-doped Prussian blue enhances photothermal clearance of <i>Staphylococcus aureus</i> and promotes tissue repair in infected wounds. <i>Nature Communications</i> , 2019, 10, 4490.	12.8	306
6	Repeatable Photodynamic Therapy with Triggered Signaling Pathways of Fibroblast Cell Proliferation and Differentiation To Promote Bacteria-Accompanied Wound Healing. <i>ACS Nano</i> , 2018, 12, 1747-1759.	14.6	303
7	Interfacial engineering of Bi <sub>2</sub> S <sub>3</sub> /Ti <sub>3</sub> C <sub>2</sub> T <sub>x</sub> MXene based on work function for rapid photo-excited bacteria-killing. <i>Nature Communications</i> , 2021, 12, 1224.	12.8	283
8	The recent progress on metal-organic frameworks for phototherapy. <i>Chemical Society Reviews</i> , 2021, 50, 5086-5125.	38.1	262
9	Enhanced photocatalytic activity and photothermal effects of Cu-doped metal-organic frameworks for rapid treatment of bacteria-infected wounds. <i>Applied Catalysis B: Environmental</i> , 2020, 261, 118248.	20.2	255
10	Rapid Sterilization and Accelerated Wound Healing Using Zn <sup>2+</sup> and Graphene Oxide Modified g-C <sub>3</sub> N <sub>4</sub> under Dual Light Irradiation. <i>Advanced Functional Materials</i> , 2018, 28, 1800299.	14.9	246
11	Hollow chitosan-silica nanospheres as pH-sensitive targeted delivery carriers in breast cancer therapy. <i>Biomaterials</i> , 2011, 32, 4976-4986.	11.4	245
12	Balancing Bacteria-Osteoblast Competition through Selective Physical Puncture and Biofunctionalization of ZnO/Polydopamine/Arginine-Glycine-Aspartic Acid-Cysteine Nanorods. <i>ACS Nano</i> , 2017, 11, 11250-11263.	14.6	230
13	Tuning the Bandgap of Photo-Sensitive Polydopamine/Ag <sub>3</sub> PO <sub>4</sub> /Graphene Oxide Coating for Rapid, Noninvasive Disinfection of Implants. <i>ACS Central Science</i> , 2018, 4, 724-738.	11.3	227
14	Fundamental Theory of Biodegradable Metals-Definition, Criteria, and Design. <i>Advanced Functional Materials</i> , 2019, 29, 1805402.	14.9	226
15	Synergistic Bacteria Killing through Photodynamic and Physical Actions of Graphene Oxide/Ag/Collagen Coating. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 26417-26428.	8.0	223
16	Highly Effective and Noninvasive Near-Infrared Eradication of a <i>Staphylococcus aureus</i> Biofilm on Implants by a Photoresponsive Coating within 20 Min. <i>Advanced Science</i> , 2019, 6, 1900599.	11.2	212
17	Functionalized TiO <sub>2</sub> Based Nanomaterials for Biomedical Applications. <i>Advanced Functional Materials</i> , 2014, 24, 5464-5481.	14.9	208
18	Rapid Photo-Sonotherapy for Clinical Treatment of Bacterial Infected Bone Implants by Creating Oxygen Deficiency Using Sulfur Doping. <i>ACS Nano</i> , 2020, 14, 2077-2089.	14.6	182

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19	Controlled-temperature photothermal and oxidative bacteria killing and acceleration of wound healing by polydopamine-assisted Au-hydroxyapatite nanorods. <i>Acta Biomaterialia</i> , 2018, 77, 352-364.	8.3	180
20	Rapid and Superior Bacteria Killing of Carbon Quantum Dots/ZnO Decorated Injectable Folic Acid- $\epsilon$ -Conjugated PDA Hydrogel through Dual-Light Triggered ROS and Membrane Permeability. <i>Small</i> , 2019, 15, e1900322.	10.0	180
21	Regulation of macrophage polarization through surface topography design to facilitate implant-to-bone osteointegration. <i>Science Advances</i> , 2021, 7, .	10.3	176
22	Electrophoretic Deposited Stable Chitosan@MoS <sub>2</sub> Coating with Rapid In Situ Bacteria-Killing Ability under Dual-Light Irradiation. <i>Small</i> , 2018, 14, e1704347.	10.0	171
23	Noninvasive rapid bacteria-killing and acceleration of wound healing through photothermal/photodynamic/copper ion synergistic action of a hybrid hydrogel. <i>Biomaterials Science</i> , 2018, 6, 2110-2121.	5.4	168
24	Treatment of MRSA-infected osteomyelitis using bacterial capturing, magnetically targeted composites with microwave-assisted bacterial killing. <i>Nature Communications</i> , 2020, 11, 4446.	12.8	165
25	2D MOF Periodontitis Photodynamic Ion Therapy. <i>Journal of the American Chemical Society</i> , 2021, 143, 15427-15439.	13.7	161
26	Photo-responsive chitosan/Ag/MoS <sub>2</sub> for rapid bacteria-killing. <i>Journal of Hazardous Materials</i> , 2020, 383, 121122.	12.4	153
27	Local Photothermal/Photodynamic Synergistic Therapy by Disrupting Bacterial Membrane To Accelerate Reactive Oxygen Species Permeation and Protein Leakage. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 17902-17914.	8.0	149
28	Graphitic carbon nitride-based materials for photocatalytic antibacterial application. <i>Materials Science and Engineering Reports</i> , 2021, 145, 100610.	31.8	145
29	Single-Atom Catalysis for Efficient Sonodynamic Therapy of Methicillin-Resistant <i>Staphylococcus aureus</i> -Infected Osteomyelitis. <i>ACS Nano</i> , 2021, 15, 10628-10639.	14.6	144
30	Rapid bacteria trapping and killing of metal-organic frameworks strengthened photo-responsive hydrogel for rapid tissue repair of bacterial infected wounds. <i>Chemical Engineering Journal</i> , 2020, 396, 125194.	12.7	142
31	Dopamine Modified Organic-Inorganic Hybrid Coating for Antimicrobial and Osteogenesis. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 33972-33981.	8.0	141
32	Precisely controlled delivery of magnesium ions thru sponge-like monodisperse PLGA/nano-MgO-alginate core-shell microsphere device to enable in-situ bone regeneration. <i>Biomaterials</i> , 2018, 174, 1-16.	11.4	140
33	Biomedical Applications of Functionalized ZnO Nanomaterials: from Biosensors to Bioimaging. <i>Advanced Materials Interfaces</i> , 2016, 3, 1500494.	3.7	138
34	Magnetite-loaded fluorine-containing polymeric micelles for magnetic resonance imaging and drug delivery. <i>Biomaterials</i> , 2012, 33, 3013-3024.	11.4	136
35	Eradicating Multidrug-Resistant Bacteria Rapidly Using a Multi Functional $\text{g-C}_3\text{N}_4$ @Bi <sub>2</sub> S <sub>3</sub> Nanorod Heterojunction with or without Antibiotics. <i>Advanced Functional Materials</i> , 2019, 29, 1900946.	14.9	136
36	Near-Infrared Light Triggered Phototherapy and Immunotherapy for Elimination of Methicillin-Resistant <i>Staphylococcus aureus</i> Biofilm Infection on Bone Implant. <i>ACS Nano</i> , 2020, 14, 8157-8170.	14.6	133

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37	In Situ Disinfection through Photoinspired Radical Oxygen Species Storage and Thermal-Triggered Release from Black Phosphorous with Strengthened Chemical Stability. <i>Small</i> , 2018, 14, 1703-1717.	10.0	127
38	Nano Ag/ZnO-Incorporated Hydroxyapatite Composite Coatings: Highly Effective Infection Prevention and Excellent Osteointegration. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 1266-1277.	8.0	127
39	A Biomimetic Hierarchical Scaffold: Natural Growth of Nanotitanates on Three-Dimensional Microporous Ti-Based Metals. <i>Nano Letters</i> , 2008, 8, 3803-3808.	9.1	124
40	Porous Iron-Carboxylate Metal-Organic Framework: A Novel Bioplatfrom with Sustained Antibacterial Efficacy and Nontoxicity. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 19248-19257.	8.0	123
41	A novel photothermally controlled multifunctional scaffold for clinical treatment of osteosarcoma and tissue regeneration. <i>Materials Today</i> , 2020, 36, 48-62.	14.2	123
42	The enhanced photocatalytic properties of MnO <sub>2</sub> /g-C <sub>3</sub> N <sub>4</sub> heterostructure for rapid sterilization under visible light. <i>Journal of Hazardous Materials</i> , 2019, 377, 227-236.	12.4	122
43	Surface functionalization of biomaterials by radical polymerization. <i>Progress in Materials Science</i> , 2016, 83, 191-235.	32.8	120
44	TRPM7 kinase-mediated immunomodulation in macrophage plays a central role in magnesium ion-induced bone regeneration. <i>Nature Communications</i> , 2021, 12, 2885.	12.8	118
45	Visible light responsive CuS/protonated g-C <sub>3</sub> N <sub>4</sub> heterostructure for rapid sterilization. <i>Journal of Hazardous Materials</i> , 2020, 393, 122423.	12.4	116
46	Low-modulus Mg/PCL hybrid bone substitute for osteoporotic fracture fixation. <i>Biomaterials</i> , 2013, 34, 7016-7032.	11.4	112
47	Dual Metal-Organic Framework Heterointerface. <i>ACS Central Science</i> , 2019, 5, 1591-1601.	11.3	108
48	A facile fabrication of novel stuff with antibacterial property and osteogenic promotion utilizing red phosphorus and near-infrared light. <i>Bioactive Materials</i> , 2019, 4, 17-21.	15.6	108
49	Nanostructured TiO <sub>2</sub> for energy conversion and storage. <i>RSC Advances</i> , 2013, 3, 24758.	3.6	105
50	Antibacterial Hybrid Hydrogels. <i>Macromolecular Bioscience</i> , 2021, 21, e2000252.	4.1	105
51	Enhanced photocatalytic and photothermal properties of ecofriendly metal-organic framework heterojunction for rapid sterilization. <i>Chemical Engineering Journal</i> , 2021, 405, 126730.	12.7	104
52	Electronic Structure Modulation of Nanoporous Cobalt Phosphide by Carbon Doping for Alkaline Hydrogen Evolution Reaction. <i>Advanced Functional Materials</i> , 2021, 31, 2107333.	14.9	104
53	Relationship between osseointegration and superelastic biomechanics in porous NiTi scaffolds. <i>Biomaterials</i> , 2011, 32, 330-338.	11.4	103
54	Antibacterial Activity of Silver Doped Titanate Nanowires on Ti Implants. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 16584-16594.	8.0	102

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55	Photoresponsive Materials for Antibacterial Applications. <i>Cell Reports Physical Science</i> , 2020, 1, 100245.	5.6	102
56	Recent Progress in Photocatalytic Antibacterial. <i>ACS Applied Bio Materials</i> , 2021, 4, 3909-3936.	4.6	100
57	InÂvivo stimulation of bone formation by aluminum and oxygen plasma surface-modified magnesium implants. <i>Biomaterials</i> , 2013, 34, 9863-9876.	11.4	99
58	Biofunctionalization of carbon nanotubes/chitosan hybrids on Ti implants by atom layer deposited ZnO nanostructures. <i>Applied Surface Science</i> , 2017, 400, 14-23.	6.1	96
59	Ultrasonic Interfacial Engineering of Red Phosphorousâ€Metal for Eradicating MRSA Infection Effectively. <i>Advanced Materials</i> , 2021, 33, e2006047.	21.0	93
60	Photothermy-strengthened photocatalytic activity of polydopamine-modified metal-organic frameworks for rapid therapy of bacteria-infected wounds. <i>Journal of Materials Science and Technology</i> , 2021, 62, 83-95.	10.7	91
61	Self-supported Ni <sub>3</sub> Se <sub>2</sub> @NiFe layered double hydroxide bifunctional electrocatalyst for overall water splitting. <i>Journal of Colloid and Interface Science</i> , 2021, 587, 79-89.	9.4	89
62	An Engineered Pseudoâ€Macrophage for Rapid Treatment of Bacteriaâ€Infected Osteomyelitis via Microwaveâ€Excited Antiâ€Infection and Immunoregulation. <i>Advanced Materials</i> , 2021, 33, e2102926.	21.0	87
63	Pore formation mechanism and characterization of porous NiTi shape memory alloys synthesized by capsule-free hot isostatic pressing. <i>Acta Materialia</i> , 2007, 55, 3437-3451.	7.9	86
64	Corrosion resistance of dicalcium phosphate dihydrate/poly(lactic-co-glycolic acid) hybrid coating on AZ31 magnesium alloy. <i>Corrosion Science</i> , 2016, 102, 209-221.	6.6	86
65	Rapid and Highly Effective Noninvasive Disinfection by Hybrid Ag/CS@MnO <sub>2</sub> Nanosheets Using Near-Infrared Light. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 15014-15027.	8.0	86
66	Magnetic, fluorescent, and thermo-responsive Fe <sub>3</sub> O <sub>4</sub> /rare earth incorporated poly(St-NIPAM) coreâ€shell colloidal nanoparticles in multimodal optical/magnetic resonance imaging probes. <i>Biomaterials</i> , 2013, 34, 2296-2306.	11.4	85
67	Superimposed surface plasma resonance effect enhanced the near-infrared photocatalytic activity of Au@Bi <sub>2</sub> WO <sub>6</sub> coating for rapid bacterial killing. <i>Journal of Hazardous Materials</i> , 2019, 380, 120818.	12.4	85
68	Ag <sub>3</sub> PO <sub>4</sub> decorated black urchin-like defective TiO <sub>2</sub> for rapid and long-term bacteria-killing under visible light. <i>Bioactive Materials</i> , 2021, 6, 1575-1587.	15.6	85
69	Polymeric Nanoarchitectures on Ti-Based Implants for Antibacterial Applications. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 17323-17345.	8.0	84
70	A functionalized TiO <sub>2</sub> /Mg <sub>2</sub> TiO <sub>4</sub> nano-layer on biodegradable magnesium implant enables superior bone-implant integration and bacterial disinfection. <i>Biomaterials</i> , 2019, 219, 119372.	11.4	84
71	Construction of poly(lactic-co-glycolic acid)/ZnO nanorods/Ag nanoparticles hybrid coating on Ti implants for enhanced antibacterial activity and biocompatibility. <i>Materials Science and Engineering C</i> , 2017, 79, 629-637.	7.3	82
72	Engineered probiotics biofilm enhances osseointegration via immunoregulation and anti-infection. <i>Science Advances</i> , 2020, 6, .	10.3	82

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73	Effects of Carbon and Nitrogen Plasma Immersion Ion Implantation on In vitro and In vivo Biocompatibility of Titanium Alloy. <i>ACS Applied Materials &amp; Interfaces</i> , 2013, 5, 1510-1516.	8.0	81
74	Atomic layer deposited ZrO <sub>2</sub> nanofilm on Mg-Sr alloy for enhanced corrosion resistance and biocompatibility. <i>Acta Biomaterialia</i> , 2017, 58, 515-526.	8.3	80
75	Engineering <i>Bacillus licheniformis</i> for the production of meso-2,3-butanediol. <i>Biotechnology for Biofuels</i> , 2016, 9, 117.	6.2	79
76	Synthesis of silver-incorporated hydroxyapatite nanocomposites for antimicrobial implant coatings. <i>Applied Surface Science</i> , 2013, 273, 748-757.	6.1	77
77	Na <sup>+</sup> inserted metal-organic framework for rapid therapy of bacteria-infected osteomyelitis through microwave strengthened Fenton reaction and thermal effects. <i>Nano Today</i> , 2021, 37, 101090.	11.9	77
78	Self-activating anti-infection implant. <i>Nature Communications</i> , 2021, 12, 6907.	12.8	77
79	Tannic Acid/Fe <sup>3+</sup> /Ag Nanofilm Exhibiting Superior Photodynamic and Physical Antibacterial Activity. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 39657-39671.	8.0	76
80	An amorphous nanoporous PdCuNi-S hybrid electrocatalyst for highly efficient hydrogen production. <i>Applied Catalysis B: Environmental</i> , 2019, 246, 156-165.	20.2	75
81	Metal Ion Coordination Polymer-Capped pH-Triggered Drug Release System on Titania Nanotubes for Enhancing Self-antibacterial Capability of Ti Implants. <i>ACS Biomaterials Science and Engineering</i> , 2017, 3, 816-825.	5.2	74
82	Lysozyme-Assisted Photothermal Eradication of Methicillin-Resistant <i>Staphylococcus aureus</i> Infection and Accelerated Tissue Repair with Natural Melanosome Nanostructures. <i>ACS Nano</i> , 2019, 13, 11153-11167.	14.6	74
83	A Z-scheme heterojunction of ZnO/CDots/C <sub>3</sub> N <sub>4</sub> for strengthened photoresponsive bacteria-killing and acceleration of wound healing. <i>Journal of Materials Science and Technology</i> , 2020, 57, 1-11.	10.7	74
84	Construction of poly (vinyl alcohol)/poly (lactide-glycolide acid)/vancomycin nanoparticles on titanium for enhancing the surface self-antibacterial activity and cytocompatibility. <i>Colloids and Surfaces B: Biointerfaces</i> , 2017, 151, 165-177.	5.0	73
85	Accelerated Bone Regeneration by Gold-Nanoparticle-Loaded Mesoporous Silica through Stimulating Immunomodulation. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 41758-41769.	8.0	73
86	Synergistic antibacterial activity of multi components in lysozyme/chitosan/silver/hydroxyapatite hybrid coating. <i>Materials and Design</i> , 2018, 139, 351-362.	7.0	72
87	In-situ sulfuration of Cu-based metal-organic framework for rapid near-infrared light sterilization. <i>Journal of Hazardous Materials</i> , 2020, 390, 122126.	12.4	72
88	A review on current research status of the surface modification of Zn-based biodegradable metals. <i>Bioactive Materials</i> , 2022, 7, 192-216.	15.6	72
89	Rapid Biofilm Elimination on Bone Implants Using Near-Infrared-Activated Inorganic Semiconductor Heterostructures. <i>Advanced Healthcare Materials</i> , 2019, 8, e1900835.	7.6	71
90	Regulation of extracellular bioactive cations in bone tissue microenvironment induces favorable osteoimmune conditions to accelerate in situ bone regeneration. <i>Bioactive Materials</i> , 2021, 6, 2315-2330.	15.6	69

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91	Infection-prevention on Ti implants by controlled drug release from folic acid/ZnO quantum dots sealed titania nanotubes. <i>Materials Science and Engineering C</i> , 2018, 85, 214-224.	7.3	68
92	The enhanced near-infrared photocatalytic and photothermal effects of MXene-based heterojunction for rapid bacteria-killing. <i>Applied Catalysis B: Environmental</i> , 2021, 297, 120500.	20.2	68
93	Self-assembled magnetic fluorescent polymeric micelles for magnetic resonance and optical imaging. <i>Biomaterials</i> , 2014, 35, 344-355.	11.4	67
94	Ag <sub>2</sub> S@WS <sub>2</sub> Heterostructure for Rapid Bacteria-Killing Using Near-Infrared Light. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 14982-14990.	6.7	67
95	Surface nano-architectures and their effects on the mechanical properties and corrosion behavior of Ti-based orthopedic implants. <i>Surface and Coatings Technology</i> , 2013, 233, 13-26.	4.8	65
96	A combined coating strategy based on atomic layer deposition for enhancement of corrosion resistance of AZ31 magnesium alloy. <i>Applied Surface Science</i> , 2018, 434, 1101-1111.	6.1	65
97	Ag/AgBr-loaded mesoporous silica for rapid sterilization and promotion of wound healing. <i>Biomaterials Science</i> , 2018, 6, 1735-1744.	5.4	65
98	Plasma Surface Functionalized Polyetheretherketone for Enhanced Osseo-Integration at Bone-Implant Interface. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 3901-3911.	8.0	64
99	Light-Activated Rapid Disinfection by Accelerated Charge Transfer in Red Phosphorus/ZnO Heterointerface. <i>Small Methods</i> , 2019, 3, 1900048.	8.6	64
100	ROS induced bactericidal activity of amorphous Zn-doped titanium oxide coatings and enhanced osseointegration in bacteria-infected rat tibias. <i>Acta Biomaterialia</i> , 2020, 107, 313-324.	8.3	64
101	Polydopamine modified CuS@HKUST for rapid sterilization through enhanced photothermal property and photocatalytic ability. <i>Rare Metals</i> , 2022, 41, 663-672.	7.1	64
102	Cationic fluorine-containing amphiphilic graft copolymers as DNA carriers. <i>Biomaterials</i> , 2010, 31, 2673-2685.	11.4	63
103	Plasma-Modified Biomaterials for Self-Antimicrobial Applications. <i>ACS Applied Materials &amp; Interfaces</i> , 2011, 3, 2851-2860.	8.0	61
104	Ce and Er Co-doped TiO <sub>2</sub> for rapid bacteria-killing using visible light. <i>Bioactive Materials</i> , 2020, 5, 201-209.	15.6	61
105	Flower-like CuS/graphene oxide with photothermal and enhanced photocatalytic effect for rapid bacteria-killing using visible light. <i>Rare Metals</i> , 2022, 41, 639-649.	7.1	61
106	Photo-Sono Interfacial Engineering Exciting the Intrinsic Property of Herbal Nanomedicine for Rapid Broad-Spectrum Bacteria Killing. <i>ACS Nano</i> , 2021, 15, 18505-18519.	14.6	61
107	Sequential activation of heterogeneous macrophage phenotypes is essential for biomaterials-induced bone regeneration. <i>Biomaterials</i> , 2021, 276, 121038.	11.4	60
108	Retardation of surface corrosion of biodegradable magnesium-based materials by aluminum ion implantation. <i>Applied Surface Science</i> , 2012, 258, 7651-7657.	6.1	59



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109	AgBr Nanoparticles in Situ Growth on 2D MoS <sub>2</sub> Nanosheets for Rapid Bacteria-Killing and Photodisinfection. ACS Applied Materials & Interfaces, 2019, 11, 34364-34375.	8.0	58
110	The rapid photoresponsive bacteria-killing of Cu-doped MoS <sub>2</sub> . Biomaterials Science, 2020, 8, 4216-4224.	5.4	57
111	Enhancing the antibacterial efficacy of low-dose gentamicin with 5 minute assistance of phototherapy at 50 °C. Biomaterials Science, 2019, 7, 1437-1447.	5.4	56
112	Noble metal-based nanomaterials as antibacterial agents. Journal of Alloys and Compounds, 2022, 904, 164091.	5.5	56
113	Near-infrared light photocatalysis and phototherapy of carbon quantum dots and Au nanoparticles loaded titania nanotube array. Materials and Design, 2019, 177, 107845.	7.0	55
114	Near-infrared light controlled fast self-healing protective coating on magnesium alloy. Corrosion Science, 2020, 163, 108257.	6.6	55
115	Sulfur-regulated defect engineering for enhanced ultrasonic piezocatalytic therapy of bacteria-infected bone defects. Chemical Engineering Journal, 2022, 435, 134624.	12.7	55
116	Controlled release and biocompatibility of polymer/titania nanotube array system on titanium implants. Bioactive Materials, 2017, 2, 44-50.	15.6	54
117	Corrosion products and mechanism on NiTi shape memory alloy in physiological environment. Journal of Materials Research, 2010, 25, 350-358.	2.6	53
118	Long-term Prevention of Bacterial Infection and Enhanced Osteoinductivity of a Hybrid Coating with Selective Silver Toxicity. Advanced Healthcare Materials, 2019, 8, e1801465.	7.6	53
119	Eco-friendly Hybrids of Carbon Quantum Dots Modified MoS <sub>2</sub> for Rapid Microbial Inactivation by Strengthened Photocatalysis. ACS Sustainable Chemistry and Engineering, 2020, 8, 534-542.	6.7	53
120	Rapid Sterilization by Photocatalytic Ag <sub>3</sub> PO <sub>4</sub> /Fe <sub>2</sub> O <sub>3</sub> Composites Using Visible Light. ACS Sustainable Chemistry and Engineering, 2020, 8, 2577-2585.	6.7	53
121	An UV to NIR-driven platform based on red phosphorus/graphene oxide film for rapid microbial inactivation. Chemical Engineering Journal, 2020, 383, 123088.	12.7	52
122	In situ synthesis of a novel Mn <sub>3</sub> O <sub>4</sub> /g-C <sub>3</sub> N <sub>4</sub> p-n heterostructure photocatalyst for water splitting. Journal of Colloid and Interface Science, 2021, 586, 778-784.	9.4	52
123	Photothermal therapy with regulated Nrf2/NF- $\kappa$ B signaling pathway for treating bacteria-induced periodontitis. Bioactive Materials, 2022, 9, 428-445.	15.6	52
124	Photoelectric-Responsive Extracellular Matrix for Bone Engineering. ACS Nano, 2019, 13, 13581-13594.	14.6	51
125	Modulation of the mechanosensing of mesenchymal stem cells by laser-induced patterning for the acceleration of tissue reconstruction through the Wnt/ $\beta$ -catenin signaling pathway activation. Acta Biomaterialia, 2020, 101, 152-167.	8.3	51
126	Photoelectrons Mediating Angiogenesis and Immunotherapy through Heterojunction Film for Noninvasive Disinfection. Advanced Science, 2020, 7, 2000023.	11.2	51



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127	Metal-Organic Frameworks Incorporated Polycaprolactone Film for Enhanced Corrosion Resistance and Biocompatibility of Mg Alloy. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 18114-18124.	6.7	50
128	Overcoming Multidrug-Resistant MRSA Using Conventional Aminoglycoside Antibiotics. <i>Advanced Science</i> , 2020, 7, 1902070.	11.2	49
129	Microwave assisted antibacterial action of Garcinia nanoparticles on Gram-negative bacteria. <i>Nature Communications</i> , 2022, 13, 2461.	12.8	49
130	Rapid degradation of biomedical magnesium induced by zinc ion implantation. <i>Materials Letters</i> , 2011, 65, 661-663.	2.6	47
131	Controllable biodegradation and enhanced osseointegration of ZrO <sub>2</sub> -nanofilm coated Zn-Li alloy: In vitro and in vivo studies. <i>Acta Biomaterialia</i> , 2020, 105, 290-303.	8.3	47
132	The enhanced photocatalytic sterilization of MOF-Based nanohybrid for rapid and portable therapy of bacteria-infected open wounds. <i>Bioactive Materials</i> , 2022, 13, 200-211.	15.6	47
133	Functionalized Polymeric Membrane with Enhanced Mechanical and Biological Properties to Control the Degradation of Magnesium Alloy. <i>Advanced Healthcare Materials</i> , 2017, 6, 1601269.	7.6	46
134	Two-dimensional antibacterial materials. <i>Progress in Materials Science</i> , 2022, 130, 100976.	32.8	46
135	The controlled drug release by pH-sensitive molecularly imprinted nanospheres for enhanced antibacterial activity. <i>Materials Science and Engineering C</i> , 2017, 77, 84-91.	7.3	45
136	&lt;p&gt;Gold nanoparticles-loaded hydroxyapatite composites guide osteogenic differentiation of human mesenchymal stem cells through Wnt/ $\beta$ -catenin signaling pathway&lt;/p&gt;. <i>International Journal of Nanomedicine</i> , 2019, Volume 14, 6151-6163.	6.7	44
137	Ag <sub>2</sub> S decorated nanocubes with enhanced near-infrared photothermal and photodynamic properties for rapid sterilization. <i>Colloids and Interface Science Communications</i> , 2019, 33, 100201.	4.1	44
138	Rapid bacteria capturing and killing by AgNPs/N-CD@ZnO hybrids strengthened photo-responsive xerogel for rapid healing of bacteria-infected wounds. <i>Chemical Engineering Journal</i> , 2021, 414, 128805.	12.7	44
139	Highly efficient nanoporous CoBP electrocatalyst for hydrogen evolution reaction. <i>Rare Metals</i> , 2021, 40, 1031-1039.	7.1	42
140	Simultaneously enhancing the photocatalytic and photothermal effect of NH <sub>2</sub> -MIL-125-GO-Pt ternary heterojunction for rapid therapy of bacteria-infected wounds. <i>Bioactive Materials</i> , 2022, 18, 421-432.	15.6	42
141	Nickel release behavior, cytocompatibility, and superelasticity of oxidized porous single-phase NiTi. <i>Journal of Biomedical Materials Research - Part A</i> , 2007, 81A, 948-955.	4.0	41
142	Zn <sup>2+</sup> -assisted photothermal therapy for rapid bacteria-killing using biodegradable humic acid encapsulated MOFs. <i>Colloids and Surfaces B: Biointerfaces</i> , 2020, 188, 110781.	5.0	41
143	Sr/ZnO doped titania nanotube array: An effective surface system with excellent osteoinductivity and self-antibacterial activity. <i>Materials and Design</i> , 2017, 130, 403-412.	7.0	40
144	A self-healing coating containing curcumin for osteoimmunomodulation to ameliorate osseointegration. <i>Chemical Engineering Journal</i> , 2021, 403, 126323.	12.7	40

#	ARTICLE	IF	CITATIONS
145	Highly Efficient and Self-Standing Nanoporous NiO/Al <sub>3</sub> Ni <sub>2</sub> Electro catalyst for Hydrogen Evolution Reaction. ACS Applied Energy Materials, 2019, 2, 7913-7922.	5.1	38
146	A surface-engineered multifunctional TiO <sub>2</sub> based nano-layer simultaneously elevates the corrosion resistance, osteoconductivity and antimicrobial property of a magnesium alloy. Acta Biomaterialia, 2019, 99, 495-513.	8.3	38
147	Rapid bacterial elimination achieved by sonodynamic Au@Cu <sub>2</sub> O hybrid nanocubes. Nanoscale, 2021, 13, 15699-15710.	5.6	38
148	Construction of N-halamine labeled silica/zinc oxide hybrid nanoparticles for enhancing antibacterial ability of Ti implants. Materials Science and Engineering C, 2017, 76, 50-58.	7.3	37
149	The effects of a phytic acid/calcium ion conversion coating on the corrosion behavior and osteoinductivity of a magnesium-strontium alloy. Applied Surface Science, 2019, 484, 511-523.	6.1	35
150	Nanoporous Nickel-Molybdenum Oxide with an Oxygen Vacancy for Electrocatalytic Nitrogen Fixation under Ambient Conditions. ACS Applied Materials & Interfaces, 2021, 13, 30722-30730.	8.0	34
151	Enhanced Near-Infrared Photocatalytic Eradication of MRSA Biofilms and Osseointegration Using Oxide Perovskite-Based N Heterojunction. Advanced Science, 2021, 8, e2002211.	11.2	33
152	Divalent metal cations stimulate skeleton interoception for new bone formation in mouse injury models. Nature Communications, 2022, 13, 535.	12.8	33
153	Hydrogen release from titanium hydride in foaming of orthopedic NiTi scaffolds. Acta Biomaterialia, 2011, 7, 1387-1397.	8.3	31
154	Controlled chondrogenesis from adipose-derived stem cells by recombinant transforming growth factor- $\beta$ 3 fusion protein in peptide scaffolds. Acta Biomaterialia, 2015, 11, 191-203.	8.3	31
155	Eco-friendly and degradable red phosphorus nanoparticles for rapid microbial sterilization under visible light. Journal of Materials Science and Technology, 2021, 67, 70-79.	10.7	31
156	Theory-screened MOF-based single-atom catalysts for facile and effective therapy of biofilm-induced periodontitis. Chemical Engineering Journal, 2022, 431, 133279.	12.7	31
157	Oxygen Vacancies-Rich Heterojunction of Ti <sub>3</sub> C <sub>2</sub> /BiOBr for Photo-Excited Antibacterial Textiles. Small, 2022, 18, e2104448.	10.0	31
158	Surface-Dependent Self-Assembly of Conducting Polypyrrole Nanotube Arrays in Template-Free Electrochemical Polymerization. ACS Applied Materials & Interfaces, 2014, 6, 10946-10951.	8.0	30
159	A near infrared-activated photocatalyst based on elemental phosphorus by chemical vapor deposition. Applied Catalysis B: Environmental, 2019, 258, 117980.	20.2	30
160	Photo-controlled degradation of PLGA/Ti <sub>3</sub> C <sub>2</sub> hybrid coating on Mg-Sr alloy using near infrared light. Bioactive Materials, 2021, 6, 568-578.	15.6	30
161	Electrodeposition of self-supported NiMo amorphous coating as an efficient and stable catalyst for hydrogen evolution reaction. Rare Metals, 2022, 41, 2624-2632.	7.1	29
162	Construction of perfluorohexane/IR780@liposome coating on Ti for rapid bacteria killing under permeable near infrared light. Biomaterials Science, 2018, 6, 2460-2471.	5.4	28

#	ARTICLE	IF	CITATIONS
163	Stepwise 3D-spatio-temporal magnesium cationic niche: Nanocomposite scaffold mediated microenvironment for modulating intramembranous ossification. <i>Bioactive Materials</i> , 2021, 6, 503-519.	15.6	27
164	The highly effective therapy of ovarian cancer by Bismuth-doped oxygen-deficient BaTiO <sub>3</sub> with enhanced sono-piezocatalytic effects. <i>Chemical Engineering Journal</i> , 2022, 442, 136380.	12.7	27
165	Interface Polarization Strengthened Microwave Catalysis of MoS <sub>2</sub> /FeS/Rhein for the Therapy of Bacteria-Infected Osteomyelitis. <i>Advanced Functional Materials</i> , 2022, 32, .	14.9	26
166	The modulation of stem cell behaviors by functionalized nanoceramic coatings on Ti-based implants. <i>Bioactive Materials</i> , 2016, 1, 65-76.	15.6	25
167	Spin State Tuning of the Octahedral Sites in Ni-Co-Based Spinel toward Highly Efficient Urea Oxidation Reaction. <i>Journal of Physical Chemistry C</i> , 2021, 125, 9190-9199.	3.1	25
168	Synthesis and properties of fluorine-containing amphiphilic graft copolymer P(HFMA)-g-P(SPEG). <i>Journal of Polymer Science Part A</i> , 2009, 47, 4895-4907.	2.3	24
169	2D Molybdenum Sulfide-Based Materials for Photo-Excited Antibacterial Application. <i>Advanced Healthcare Materials</i> , 2022, 11, e2200360.	7.6	24
170	Development of novel implants with self-antibacterial performance through in-situ growth of 1D ZnO nanowire. <i>Colloids and Surfaces B: Biointerfaces</i> , 2016, 141, 623-633.	5.0	23
171	Wear mechanism and tribological characteristics of porous NiTi shape memory alloy for bone scaffold. <i>Journal of Biomedical Materials Research - Part A</i> , 2013, 101A, 2586-2601.	4.0	22
172	A tailored positively-charged hydrophobic surface reduces the risk of implant associated infections. <i>Acta Biomaterialia</i> , 2020, 114, 421-430.	8.3	22
173	Atomic-layer Fe <sub>2</sub> O <sub>3</sub> -modified 2D porphyrinic metal-organic framework for enhanced photocatalytic disinfection through electron-withdrawing effect. <i>Applied Catalysis B: Environmental</i> , 2022, 317, 121701.	20.2	22
174	Structure and wear properties of NiTi modified by nitrogen plasma immersion ion implantation. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2007, 444, 192-197.	5.6	21
175	ZIF-67 derived Co@NC/g-C <sub>3</sub> N <sub>4</sub> as a photocatalyst for enhanced water splitting H <sub>2</sub> evolution. <i>Environmental Research</i> , 2021, 197, 111002.	7.5	21
176	A lithium-doped surface inspires immunomodulatory functions for enhanced osteointegration through PI3K/AKT signaling axis regulation. <i>Biomaterials Science</i> , 2021, 9, 8202-8220.	5.4	21
177	Material-herbology: An effective and safe strategy to eradicate lethal viral-bacterial pneumonia. <i>Matter</i> , 2021, 4, 3030-3048.	10.0	20
178	Fluorine-containing pH-responsive core/shell microgel particles: preparation, characterization, and their applications in controlled drug release. <i>Colloid and Polymer Science</i> , 2012, 290, 349-357.	2.1	19
179	Rutile-Coated B-Phase TiO <sub>2</sub> Heterojunction Nanobelts for Photocatalytic H <sub>2</sub> Evolution. <i>ACS Applied Nano Materials</i> , 2020, 3, 10349-10359.	5.0	18
180	Formation of a ZnO nanorods-patterned coating with strong bactericidal capability and quantitative evaluation of the contribution of nanorods-derived puncture and ROS-derived killing. <i>Bioactive Materials</i> , 2022, 11, 181-191.	15.6	18

#	ARTICLE	IF	CITATIONS
181	Nanotopography Sequentially Mediates Human Mesenchymal Stem Cell-Derived Small Extracellular Vesicles for Enhancing Osteogenesis. <i>ACS Nano</i> , 2022, 16, 415-430.	14.6	18
182	Click chemistry to form a sticking xerogel for the portable therapy of bacteria-infected wounds. <i>Biomaterials Science</i> , 2019, 7, 5383-5387.	5.4	17
183	Micro- and Nanohemispherical 3D Imprints Modulate the Osteogenic Differentiation and Mineralization Tendency of Bone Cells. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 35513-35524.	8.0	16
184	Dual-phase nanostructuring as a route to flexible nanoporous metals with outstanding comprehensive mechanical properties. <i>Science China Materials</i> , 2021, 64, 2289-2304.	6.3	16
185	Amorphous CoMoO <sub>4</sub> with Nanoporous Structures for Electrochemical Ammonia Synthesis under Ambient Conditions. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 19072-19083.	6.7	15
186	Recent progress of photo-excited antibacterial materials via chemical vapor deposition. <i>Chemical Engineering Journal</i> , 2022, 437, 135401.	12.7	15
187	Nickel release behavior and surface characteristics of porous NiTi shape memory alloy modified by different chemical processes. <i>Journal of Biomedical Materials Research - Part A</i> , 2009, 89A, 483-489.	4.0	14
188	Photothermal-controlled sustainable degradation of protective coating modified Mg alloy using near-infrared light. <i>Rare Metals</i> , 2021, 40, 2538-2551.	7.1	14
189	Synthesis and characterization of fluorescent copolymer containing rare earth metal complex and its interaction with DNA. <i>Journal of Polymer Science Part A</i> , 2010, 48, 5961-5967.	2.3	13
190	Amorphous FeNiNbPC nanoporous structure for efficient and stable electrochemical oxygen evolution. <i>Journal of Colloid and Interface Science</i> , 2022, 608, 1973-1982.	9.4	13
191	Photo-excited antibacterial poly( $\epsilon$ -caprolactone)@MoS <sub>2</sub> /ZnS hybrid nanofibers. <i>Chemical Engineering Journal</i> , 2022, 434, 134764.	12.7	13
192	In vitro bioactivity and osteoblast response on chemically modified biomedical porous NiTi synthesized by capsule-free hot isostatic pressing. <i>Surface and Coatings Technology</i> , 2008, 202, 2458-2462.	4.8	12
193	Electrochemical Stability of Orthopedic Porous NiTi Shape Memory Alloys Treated by Different Surface Modification Techniques. <i>Journal of the Electrochemical Society</i> , 2009, 156, C187.	2.9	12
194	Rapid and highly effective bacteria-killing by polydopamine/IR780@MnO <sub>2</sub> @Ti using near-infrared light. <i>Progress in Natural Science: Materials International</i> , 2020, 30, 677-685.	4.4	12
195	Using tea nanoclusters as $\beta$ -lactamase inhibitors to cure multidrug-resistant bacterial pneumonia: A promising therapeutic strategy by Chinese materiaherbology. <i>Fundamental Research</i> , 2022, 2, 496-504.	3.3	11
196	Wear Properties of Porous NiTi Orthopedic Shape Memory Alloy. <i>Journal of Materials Engineering and Performance</i> , 2012, 21, 2622-2627.	2.5	10
197	Controlled and sustained drug release performance of calcium sulfate cement porous TiO <sub>2</sub> /microsphere composites. <i>International Journal of Nanomedicine</i> , 2018, Volume 13, 7491-7501.	6.7	10
198	Magnesium cationic cue enriched interfacial tissue microenvironment nurtures the osseointegration of gamma-irradiated allograft bone. <i>Bioactive Materials</i> , 2022, 10, 32-47.	15.6	10

#	ARTICLE	IF	CITATIONS
199	Surface photodynamic ion sterilization of ITO-Cu <sub>2</sub> O/ZnO preventing touch infection. Journal of Materials Science and Technology, 2022, 122, 10-19.	10.7	10
200	Eco-friendly bacteria-killing by nanorods through mechano-puncture with top selectivity. Bioactive Materials, 2022, 15, 173-184.	15.6	10
201	Superelastic Porous NiTi with Adjustable Porosities Synthesized by Powder Metallurgical Method. Journal of Materials Engineering and Performance, 2012, 21, 2553-2558.	2.5	8
202	A smart strategy of laser-direct-writing to achieve scalable fabrication of self-supported MoNi <sub>4</sub> /Ni catalysts for efficient and durable hydrogen evolution reaction. Journal of Materials Chemistry A, 2022, 10, 12722-12732.	10.3	8
203	Investigation of plasma immersion ion implantation of nickel-titanium rod by multiple-grid particle-in-cell simulation. Journal of Applied Physics, 2008, 103, 053308.	2.5	7
204	Reversing Multidrug-Resistant <i>Escherichia coli</i> by Compromising Its BAM Biogenesis and Enzymatic Catalysis through Microwave Hyperthermia Therapy. Advanced Functional Materials, 2022, 32, .	14.9	7
205	Self-Assembled Glucose and Thermo Dual-Responsive Micelles of an Amphiphilic Graft Copolymer. International Journal of Polymeric Materials and Polymeric Biomaterials, 2014, 63, 115-122.	3.4	6
206	Preparation and physicochemical properties of an injectable alginate-based hydrogel by the regulated release of divalent ions via the hydrolysis of glucono-δ-lactone. Journal of Biomaterials Applications, 2020, 34, 891-901.	2.4	6
207	Enhanced Electrocatalysis for Hydrogen Evolution over a Nanoporous NiAlTi/Al <sub>3</sub> Ti Hybrid. ACS Applied Energy Materials, 2021, 4, 7579-7588.	5.1	6
208	Enhanced Bioactivity of Biomedical NiTi Through Surface Plasma Polymerization. Nanoscience and Nanotechnology Letters, 2015, 7, 220-225.	0.4	6
209	Synthesis and characterization of novel highly branched block copoly(urethane-imide)s based on pentaerythritol, different diisocyanate and aromatic dianhydride. Journal of Applied Polymer Science, 2010, 118, 99-104.	2.6	5
210	Preparation, characterization of cationic terbium luminescent copolymer and its interaction with DNA. Colloid and Polymer Science, 2011, 289, 1459-1468.	2.1	5
211	Editorial for rare metals, special issue on biomedical metal implants. Rare Metals, 2019, 38, 475-475.	7.1	4
212	Osseointegration: Long-Term Prevention of Bacterial Infection and Enhanced Osteoinductivity of a Hybrid Coating with Selective Silver Toxicity (Adv. Healthcare Mater. 5/2019). Advanced Healthcare Materials, 2019, 8, 1970020.	7.6	4
213	Photocatalysis: Light-Activated Rapid Disinfection by Accelerated Charge Transfer in Red Phosphorus/ZnO Heterointerface (Small Methods 3/2019). Small Methods, 2019, 3, 1970008.	8.6	4
214	A self-supported FeNi layered double hydroxide anode with high activity and long-term stability for efficient oxygen evolution reaction. Sustainable Energy and Fuels, 2021, 5, 3205-3212.	4.9	3
215	Nanomaterials: Functionalized TiO <sub>2</sub> Based Nanomaterials for Biomedical Applications (Adv. Funct. Tj ETQq1 1 0.784314 rgBT <sub>2</sub> /Overlook	14.9	2
216	Fabrication and Surface Modification of Porous Nano-Structured NiTi Orthopedic Scaffolds for Bone Implants. Materials Research Society Symposia Proceedings, 2009, 1181, 7.	0.1	1

#	ARTICLE	IF	CITATIONS
217	Construction of Bio-functionalized ZnO Coatings on Titanium Implants with Both Self-Antibacterial and Osteoinductive Properties. , 2020, , 169-182.		1
218	A Three-Dimensional Cement Quantification Method for Decision Prediction of Vertebral Recompression after Vertebroplasty. Computational and Mathematical Methods in Medicine, 2022, 2022, 1-14.	1.3	1
219	Production of Three-Dimensional Hierarchical Nano Ti-Based Metals Scaffolds for Bone Tissue Grafts. , 2012, , 69-82.		0