Yf Zheng

List of Publications by Year in Descending Order

825 papers	39,466 citations	95 h-index	160 g-index
867 ext. papers	48,663 ext. citations	7.7 avg, IF	7.95 L-index

#	Paper	IF	Citations
825	Additively manufactured pure zinc porous scaffolds for critical-sized bone defects of rabbit femur.. *Bioactive Materials*, **2023**, 19, 12-23	16.7	1
824	Design and evaluation of an air-insulated catheter for intra-arterial selective cooling infusion from numerical simulation and in vitro experiment.. *Medical Engineering and Physics*, **2022**, 99, 103736	2.4	2
823	Divalent metal cations stimulate skeleton interoception for new bone formation in mouse injury models.. *Nature Communications*, **2022**, 13, 535	17.4	2
822	Processing optimization, mechanical properties, corrosion behavior and cytocompatibility of additively manufactured Zn-0.7Li biodegradable metals.. *Acta Biomaterialia*, **2022**,	10.8	2
821	Biodegradable ZnSr alloys with enhanced mechanical and biocompatibility for biomedical applications. *Smart Materials in Medicine*, **2022**, 3, 117-127	12.9	0
820	Photo-excited antibacterial poly(caprolactone)@MoS2/ZnS hybrid nanofibers. *Chemical Engineering Journal*, **2022**, 434, 134764	14.7	3
819	A robust calcium carbonate (CaCO3) coating on biomedical MgZnCa alloy for promising corrosion protection. *Corrosion Science*, **2022**, 198, 110124	6.8	1
818	Sulfur-regulated defect engineering for enhanced ultrasonic piezocatalytic therapy of bacteria-infected bone defects. *Chemical Engineering Journal*, **2022**, 435, 134624	14.7	7
817	Precipitation and coarsening kinetics of H-phase in NiTiHf high temperature shape memory alloy. *Journal of Materials Science and Technology*, **2022**, 114, 90-101	9.1	1
816	Noble metal-based nanomaterials as antibacterial agents. *Journal of Alloys and Compounds*, **2022**, 904, 164091	5.7	11
815	The enhanced photocatalytic sterilization of MOF-Based nanohybrid for rapid and portable therapy of bacteria-infected open wounds.. *Bioactive Materials*, **2022**, 13, 200-211	16.7	7
814	Electrophoretic deposited boron nitride nanosheets-containing chitosan-based coating on Mg alloy for better corrosion resistance, biocompatibility and antibacterial properties. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2022**, 638, 128303	5.1	3
813	Effect of nitrogen on the structure evolution and biological properties of mesoporous bioactive glass nanospheres: Experiments and simulations. *Journal of Non-Crystalline Solids*, **2022**, 578, 121329	3.9	2
812	Local pH and oxygen concentration at the interface of Zn alloys in Tris-HCl or HEPES buffered Hanks balanced salt solution. *Corrosion Science*, **2022**, 197, 110061	6.8	0
811	Current status and outlook of biodegradable metals in neuroscience and their potential applications as cerebral vascular stent materials.. *Bioactive Materials*, **2022**, 11, 140-153	16.7	0
810	Magnesium cationic cue enriched interfacial tissue microenvironment nurtures the osseointegration of gamma-irradiated allograft bone.. *Bioactive Materials*, **2022**, 10, 32-47	16.7	1
809	Photothermal therapy with regulated Nrf2/NF-B signaling pathway for treating bacteria-induced periodontitis. *Bioactive Materials*, **2022**, 9, 428-445	16.7	9

808	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.. *Bioactive Materials*, **2022**, 11, 181-191	16.7	4
807	Preparation of photo-crosslinked aliphatic polycarbonate coatings with predictable degradation behavior on magnesium-alloy stents by electrophoretic deposition. *Chemical Engineering Journal*, **2022**, 427, 131596	14.7	2
806	A review on current research status of the surface modification of Zn-based biodegradable metals. *Bioactive Materials*, **2022**, 7, 192-216	16.7	14
805	Tuning the surface potential to reprogram immune microenvironment for bone regeneration.. *Biomaterials*, **2022**, 282, 121408	15.6	3
804	Tailoring of Biodegradable Magnesium Alloy Surface with Schiff Base Coating via Electrostatic Spraying for Better Corrosion Resistance. *Metals*, **2022**, 12, 471	2.3	3
803	2D Molybdenum Sulfide-Based Materials for Photo-Excited Antibacterial Application.. *Advanced Healthcare Materials*, **2022**, e2200360	10.1	2
802	Recent progress of photo-excited antibacterial materials via chemical vapor deposition. *Chemical Engineering Journal*, **2022**, 437, 135401	14.7	2
801	Strain states and unique properties in cold-rolled TiNi shape memory alloys. *Acta Materialia*, **2022**, 231, 117890	8.4	0
800	Surface photodynamic ion sterilization of ITO-Cu2O/ZnO preventing touch infection. *Journal of Materials Science and Technology*, **2022**, 122, 10-19	9.1	2
799	Eco-friendly bacteria-killing by nanorods through mechano-puncture with top selectivity.. *Bioactive Materials*, **2022**, 15, 173-184	16.7	1
798	Biodegradable magnesium alloy WE43 porous scaffolds fabricated by laser powder bed fusion for orthopedic applications: Process optimization, and investigation.. *Bioactive Materials*, **2022**, 16, 301-319	16.7	3
797	Improved mechanical, degradation, and biological performances of Zn-Fe alloys as bioresorbable implants.. *Bioactive Materials*, **2022**, 17, 334-343	16.7	2
796	Simultaneously enhancing the photocatalytic and photothermal effect of NH-MIL-125-GO-Pt ternary heterojunction for rapid therapy of bacteria-infected wounds.. *Bioactive Materials*, **2022**, 18, 421-432	16.7	3
795	The highly effective therapy of ovarian cancer by Bismuth-doped oxygen-deficient BaTiO3 with enhanced sono-piezocatalytic effects. *Chemical Engineering Journal*, **2022**, 442, 136380	14.7	3
794	Microwave assisted antibacterial action of Garcinia nanoparticles on Gram-negative bacteria.. *Nature Communications*, **2022**, 13, 2461	17.4	7
793	Evidence-based biomaterials research. *Bioactive Materials*, **2022**, 15, 495-503	16.7	2
792	pH Stimuli-Responsive, Rapidly Self-healable Coatings Enhanced the Corrosion Resistance and Osteogenic Differentiation of Mg-1Ca Osteoimplant.. *Small*, **2022**, e2106056	11	
791	A compound Schiff base coating on biomedical magnesium alloy for enhanced corrosion resistance and biocompatibility **2022**, 100003		0

790	The effect of simulated inflammatory conditions on the corrosion of Mg, Fe and CoCrMo. *Materials Letters*, **2021**, 308, 131197	3.3	0
789	Photo-Sono Interfacial Engineering Exciting the Intrinsic Property of Herbal Nanomedicine for Rapid Broad-Spectrum Bacteria Killing. *ACS Nano*, **2021**,	16.7	15
788	Oxygen Vacancies-Rich Heterojunction of Ti C /BiOBr for Photo-Excited Antibacterial Textiles. *Small* , **2021**, e2104448	11	6
787	Self-activating anti-infection implant. *Nature Communications*, **2021**, 12, 6907	17.4	11
786	In vitro degradation behavior of novel Zn□Cu□i alloys: Roles of alloy composition and rolling processing. *Materials and Design*, **2021**, 212, 110288	8.1	2
785	A lithium-doped surface inspires immunomodulatory functions for enhanced osteointegration through PI3K/AKT signaling axis regulation. *Biomaterials Science*, **2021**, 9, 8202-8220	7.4	5
784	Biomimicking Bone-Implant Interface Facilitates the Bioadaption of a New Degradable Magnesium Alloy to the Bone Tissue Microenvironment. *Advanced Science*, **2021**, 8, e2102035	13.6	6
783	Theory-screened MOF-based single-atom catalysts for facile and effective therapy of biofilm-induced periodontitis. *Chemical Engineering Journal*, **2021**, 431, 133279	14.7	5
782	Shape Memory Biomaterials and Their Clinical Applications **2021**, 195-255		0
781	Zn content mediated fibrinogen adsorption on biodegradable Mg-Zn alloys surfaces. *Journal of Magnesium and Alloys*, **2021**, 9, 2145-2145	8.8	2
780	In vitro and in vivo studies to evaluate the feasibility of Zn-0.1Li and Zn-0.8Mg application in the uterine cavity microenvironment compared to pure zinc. *Acta Biomaterialia*, **2021**, 123, 393-406	10.8	6
779	Precipitation in nanostructured alloys: A brief review. *MRS Bulletin*, **2021**, 46, 250-257	3.2	2
778	Investigation of Mg-xLi-Zn alloys for potential application of biodegradable bone implant materials. *Journal of Materials Science: Materials in Medicine*, **2021**, 32, 43	4.5	2
777	Mussel bioinspired morphosynthesis of substrate anchored core-shell silver self-assemblies with multifunctionality for bioapplications. *Materials Science and Engineering C*, **2021**, 123, 112025	8.3	0
776	Regulation of macrophage polarization through surface topography design to facilitate implant-to-bone osteointegration. *Science Advances*, **2021**, 7,	14.3	41
775	Degradation behaviors and in-vivo biocompatibility of a rare earth- and aluminum-free magnesium-based stent. *Acta Biomaterialia*, **2021**, 124, 382-397	10.8	3
774	Influence of Multi-Pass Hot Extrusion on Microstructure and Mechanical Properties of the Mg□Zn□.2Y□.8Nd Alloy. *Crystals*, **2021**, 11, 425	2.3	2
773	Na+ inserted metal-organic framework for rapid therapy of bacteria-infected osteomyelitis through microwave strengthened Fenton reaction and thermal effects. *Nano Today*, **2021**, 37, 101090	17.9	27

772	Microstructure, mechanical properties and corrosion fatigue behaviour of biodegradable Mg□Zn□□Nd alloy prepared by double extrusion. *Corrosion Engineering Science and Technology*, **2021**, 56, 584-593	1.7	1
771	Influence of Laser Energy Input and Shielding Gas Flow on Evaporation Fume during Laser Powder Bed Fusion of Zn Metal. *Materials*, **2021**, 14,	3.5	1
770	TRPM7 kinase-mediated immunomodulation in macrophage plays a central role in magnesium ion-induced bone regeneration. *Nature Communications*, **2021**, 12, 2885	17.4	22
769	Corrosion inhibition of Schiff bases for Mg-Zn-Y-Nd alloy in normal saline: Experimental and theoretical investigations. *Corrosion Science*, **2021**, 184, 109268	6.8	11
768	Tannic acid/Sr-coated silk/graphene oxide-based meniscus scaffold with anti-inflammatory and anti-ROS functions for cartilage protection and delaying osteoarthritis. *Acta Biomaterialia*, **2021**, 126, 119-131	10.8	10
767	Self-ion irradiation response of (CoCrFeNi)94Ti2Al4 alloy containing coherent nanoprecipitates. *Journal of Nuclear Materials*, **2021**, 549, 152889	3.3	1
766	Single-Atom Catalysis for Efficient Sonodynamic Therapy of Methicillin-Resistant -Infected Osteomyelitis. *ACS Nano*, **2021**, 15, 10628-10639	16.7	37
765	Enhanced Near-Infrared Photocatalytic Eradication of MRSA Biofilms and Osseointegration Using Oxide Perovskite-Based P-N Heterojunction. *Advanced Science*, **2021**, 8, e2002211	13.6	11
764	Nanoporous Nickel-Molybdenum Oxide with an Oxygen Vacancy for Electrocatalytic Nitrogen Fixation under Ambient Conditions. *ACS Applied Materials & Interfaces*, **2021**, 13, 30722-30730	9.5	11
763	Fabrication of Citric Acid/RGD Multilayers on Mg-Zn-Y-Nd Alloy via Layer-by-Layer Self-Assembly for Promoting Surface Biocompatibility. *Advanced Materials Interfaces*, **2021**, 8, 2002241	4.6	6
762	Simulation of dynamic recrystallization behavior of hot extruded Mg-Zn-Y-Nd alloy tubes by the finite element method. *Materials Today Communications*, **2021**, 27, 102384	2.5	0
761	Toward a Better Regeneration through Implant-Mediated Immunomodulation: Harnessing the Immune Responses. *Advanced Science*, **2021**, 8, e2100446	13.6	15
760	PDLLA-Zn-nitrided Fe bioresorbable scaffold with 53-□m-thick metallic struts and tunable multistage biodegradation function. *Science Advances*, **2021**, 7,	14.3	10
759	Microstructure and mechanical properties of the sub-rapidly solidified Mg□Zn□□Nd alloy prepared by step-copper mold casting. *Materials Today Communications*, **2021**, 27, 102308	2.5	1
758	Rapid bacteria capturing and killing by AgNPs/N-CD@ZnO hybrids strengthened photo-responsive xerogel for rapid healing of bacteria-infected wounds. *Chemical Engineering Journal*, **2021**, 414, 128805	14.7	22
757	Very Fine-Grained Cu-0.4Mg Alloy Improving Intrauterine Device. *Microscopy and Microanalysis*, **2021**, 27, 3464-3465	0.5	
756	Hierarchical macro-microporous WPU-ECM scaffolds combined with Microfracture Promote Articular Cartilage Regeneration in Rabbits. *Bioactive Materials*, **2021**, 6, 1932-1944	16.7	9
755	Graphitic carbon nitride-based materials for photocatalytic antibacterial application. *Materials Science and Engineering Reports*, **2021**, 145, 100610	30.9	55

754	Influence of the second phase on protein adsorption on biodegradable Mg alloys' surfaces: Comparative experimental and molecular dynamics simulation studies. *Acta Biomaterialia*, **2021**, 129, 323-332	10.8	1
753	Effective easing of the side effects of copper intrauterine devices using ultra-fine-grained Cu-0.4Mg alloy. *Acta Biomaterialia*, **2021**, 128, 523-539	10.8	2
752	Biodegradable metal-derived magnesium and sodium enhances bone regeneration by angiogenesis aided osteogenesis and regulated biological apatite formation. *Chemical Engineering Journal*, **2021**, 410, 127616	14.7	2
751	Eco-friendly and degradable red phosphorus nanoparticles for rapid microbial sterilization under visible light. *Journal of Materials Science and Technology*, **2021**, 67, 70-79	9.1	19
750	A self-healing coating containing curcumin for osteoimmunomodulation to ameliorate osseointegration. *Chemical Engineering Journal*, **2021**, 403, 126323	14.7	10
749	Microstructural characteristics and mechanical properties of the hot extruded Mg-Zn-Y-Nd alloys. *Journal of Materials Science and Technology*, **2021**, 60, 44-55	9.1	31
748	Photothermy-strengthened photocatalytic activity of polydopamine-modified metal-organic frameworks for rapid therapy of bacteria-infected wounds. *Journal of Materials Science and Technology*, **2021**, 62, 83-95	9.1	48
747	Photo-controlled degradation of PLGA/TiC hybrid coating on Mg-Sr alloy using near infrared light. *Bioactive Materials*, **2021**, 6, 568-578	16.7	13
746	Stepwise 3D-spatio-temporal magnesium cationic niche: Nanocomposite scaffold mediated microenvironment for modulating intramembranous ossification. *Bioactive Materials*, **2021**, 6, 503-519	16.7	10
745	Polyetheretherketone with citrate potentiated influx of copper boosts osteogenesis, angiogenesis, and bacteria-triggered antibacterial abilities. *Journal of Materials Science and Technology*, **2021**, 71, 31-43	9.1	2
744	Biodegradable Zn-Sr alloy for bone regeneration in rat femoral condyle defect model: In vitro and in vivo studies. *Bioactive Materials*, **2021**, 6, 1588-1604	16.7	35
743	Based on the synergistic effect of Mg and antibacterial peptides to improve the corrosion resistance, antibacterial ability and osteogenic activity of magnesium-based degradable metals. *Biomaterials Science*, **2021**, 9, 807-825	7.4	5
742	Nitrogen-containing bisphosphonate-loaded micro-arc oxidation coating for biodegradable magnesium alloy pellets inhibits osteosarcoma through targeting of the mevalonate pathway. *Acta Biomaterialia*, **2021**, 121, 682-694	10.8	6
741	Investigating the stress corrosion cracking of a biodegradable Zn-0.8wt%Li alloy in simulated body fluid. *Bioactive Materials*, **2021**, 6, 1468-1478	16.7	8
740	In vitro and in vivo studies of biodegradable Zn-Li-Mn alloy staples designed for gastrointestinal anastomosis. *Acta Biomaterialia*, **2021**, 121, 713-723	10.8	11
739	AgPO decorated black urchin-like defective TiO for rapid and long-term bacteria-killing under visible light. *Bioactive Materials*, **2021**, 6, 1575-1587	16.7	50
738	Ultrasonic Interfacial Engineering of Red Phosphorous-Metal for Eradicating MRSA Infection Effectively. *Advanced Materials*, **2021**, 33, e2006047	24	41
737	Synthesis and degradation behaviour of Zn-modified coating on Mg alloy. *Surface Engineering*, **2021**, 37, 963-971	2.6	2

736	Enhanced photocatalytic and photothermal properties of ecofriendly metal-organic framework heterojunction for rapid sterilization. *Chemical Engineering Journal*, **2021**, 405, 126730	14.7	49
735	Antibacterial Hybrid Hydrogels. *Macromolecular Bioscience*, **2021**, 21, e2000252	5.5	23
734	Strategic Advances in Spatiotemporal Control of Bioinspired Phenolic Chemistries in Materials Science. *Advanced Functional Materials*, **2021**, 31, 2008821	15.6	9
733	Rapid bacterial elimination achieved by sonodynamic Au@CuO hybrid nanocubes. *Nanoscale*, **2021**, 13, 15699-15710	7.7	4
732	Recent Progress in Photocatalytic Antibacterial.. *ACS Applied Bio Materials*, **2021**, 4, 3909-3936	4.1	27
731	Designing HA/PEI nanoparticle composite coating on biodegradable Mg□n□-Nd alloy to direct cardiovascular cells fate. *Smart Materials in Medicine*, **2021**, 2, 124-133	12.9	9
730	The recent progress on metal-organic frameworks for phototherapy. *Chemical Society Reviews*, **2021**, 50, 5086-5125	58.5	96
729	First-principles studies on structure stability, segregation, and work function of Mg doped with metal elements. *International Journal of Quantum Chemistry*, **2021**, 121, e26626	2.1	1
728	Photothermal-controlled sustainable degradation of protective coating modified Mg alloy using near-infrared light. *Rare Metals*, **2021**, 40, 2538-2551	5.5	5
727	Interfacial engineering of BiS/TiCT MXene based on work function for rapid photo-excited bacteria-killing. *Nature Communications*, **2021**, 12, 1224	17.4	82
726	Zn-0.4Li alloy shows great potential for the fixation and healing of bone fractures at load-bearing sites. *Chemical Engineering Journal*, **2021**, 417, 129317	14.7	8
725	An Engineered Pseudo-Macrophage for Rapid Treatment of Bacteria-Infected Osteomyelitis via Microwave-Excited Anti-Infection and Immunoregulation. *Advanced Materials*, **2021**, 33, e2102926	24	30
724	Zn0.8Li0.1Sr-a biodegradable metal with high mechanical strength comparable to pure Ti for the treatment of osteoporotic bone fractures: In vitro and in vivo studies. *Biomaterials*, **2021**, 275, 120905	15.6	12
723	Corrosion behavior of Mg wires for ureteral stent in artificial urine solution. *Corrosion Science*, **2021**, 189, 109567	6.8	6
722	Bioadaptability of biomaterials: Aiming at precision medicine. *Matter*, **2021**, 4, 2648-2650	12.7	5
721	Exploring the biodegradation of pure Zn under simulated inflammatory condition. *Corrosion Science* , **2021**, 189, 109606	6.8	4
720	Regulation of extracellular bioactive cations in bone tissue microenvironment induces favorable osteoimmune conditions to accelerate bone regeneration. *Bioactive Materials*, **2021**, 6, 2315-2330	16.7	23
719	Sequential activation of heterogeneous macrophage phenotypes is essential for biomaterials-induced bone regeneration. *Biomaterials*, **2021**, 276, 121038	15.6	13

718	2D MOF Periodontitis Photodynamic Ion Therapy. *Journal of the American Chemical Society*, **2021**, 143, 15427-15439	16.4	36
717	Material-herbology: An effective and safe strategy to eradicate lethal viral-bacterial pneumonia. *Matter*, **2021**, 4, 3030-3048	12.7	6
716	A simple approach for synthesizing polyglycolide coating on magnesium alloy. *Materials Letters*, **2021**, 298, 130046	3.3	2
715	3D-printed cell-free PCL-MECM scaffold with biomimetic micro-structure and micro-environment to enhance in situ meniscus regeneration. *Bioactive Materials*, **2021**, 6, 3620-3633	16.7	12
714	Hot cracking in ZK60 magnesium alloy produced by laser powder bed fusion process. *Materials Letters*, **2021**, 301, 130283	3.3	6
713	Cu nanoparticle-decorated two-dimensional carbon nanosheets with superior photothermal conversion efficiency of 65 % for highly efficient disinfection under near-infrared light. *Journal of Materials Science and Technology*, **2021**, 87, 83-94	9.1	8
712	Antibacterial and cell-friendly copper-substituted tricalcium phosphate ceramics for biomedical implant applications. *Materials Science and Engineering C*, **2021**, 129, 112410	8.3	3
711	Improvement of ductility and work hardening ability in a high strength Zn-Mg-Y alloy via micron-sized and submicron-sized YZn12 particles. *Journal of Alloys and Compounds*, **2021**, 877, 160268	5.7	4
710	Biodegradable ZnLiCa ternary alloys for critical-sized bone defect regeneration at load-bearing sites: and studies. *Bioactive Materials*, **2021**, 6, 3999-4013	16.7	10
709	Sol-gel coating loaded with inhibitor on ZE21B Mg alloy for improving corrosion resistance and endothelialization aiming at potential cardiovascular application. *Colloids and Surfaces B: Biointerfaces*, **2021**, 207, 111993	6	6
708	Improved corrosion resistance and cytocompatibility of MgZnYNd alloy by the electrografted polycaprolactone coating. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2021**, 629, 127471	5.1	3
707	Research status of biodegradable metals designed for oral and maxillofacial applications: A review. *Bioactive Materials*, **2021**, 6, 4186-4208	16.7	16
706	The enhanced near-infrared photocatalytic and photothermal effects of MXene-based heterojunction for rapid bacteria-killing. *Applied Catalysis B: Environmental*, **2021**, 297, 120500	21.8	11
705	Three-dimensional-printed individualized porous implants: A new "implant-bone" interface fusion concept for large bone defect treatment. *Bioactive Materials*, **2021**, 6, 3659-3670	16.7	8
704	Zinc alloy-based bone internal fixation screw with antibacterial and anti-osteolytic properties. *Bioactive Materials*, **2021**, 6, 4607-4624	16.7	12
703	Practical strategy to construct anti-osteosarcoma bone substitutes by loading cisplatin into 3D-printed titanium alloy implants using a thermosensitive hydrogel. *Bioactive Materials*, **2021**, 6, 4542-4557	16.7	8
702	Nanotopography Sequentially Mediates Human Mesenchymal Stem Cell-Derived Small Extracellular Vesicles for Enhancing Osteogenesis.. *ACS Nano*, **2021**,	16.7	2
701	Sustainable release of vancomycin from micro-arc oxidised 3D-printed porous Ti6Al4V for treating methicillin-resistant Staphylococcus aureus bone infection and enhancing osteogenesis in a rabbit tibia osteomyelitis model. *Biomaterials Science*, **2020**, 8, 3106-3115	7.4	12

700	Biodegradation behavior of micro-arc oxidation coating on magnesium alloy-from a protein perspective. *Bioactive Materials*, **2020**, 5, 398-409	16.7	49
699	Micro-/Nanotopography on Bioresorbable Zinc Dictates Cytocompatibility, Bone Cell Differentiation, and Macrophage Polarization. *Nano Letters*, **2020**, 20, 4594-4602	11.5	28
698	Effects of Sr addition on microstructure, mechanical and corrosion properties of biodegradable Mg□Zn□a alloy. *Journal of Alloys and Compounds*, **2020**, 838, 155611	5.7	21
697	A Z-scheme heterojunction of ZnO/CDots/C3N4 for strengthened photoresponsive bacteria-killing and acceleration of wound healing. *Journal of Materials Science and Technology*, **2020**, 57, 1-11	9.1	38
696	Cell-free 3D wet-electrospun PCL/silk fibroin/Sr scaffold promotes successful total meniscus regeneration in a rabbit model. *Acta Biomaterialia*, **2020**, 113, 196-209	10.8	20
695	Effects of annealing treatment on microstructure and tensile behavior of the Mg-Zn-Y-Nd alloy. *Journal of Magnesium and Alloys*, **2020**, 8, 601-613	8.8	23
694	The rapid photoresponsive bacteria-killing of Cu-doped MoS. *Biomaterials Science*, **2020**, 8, 4216-4224	7.4	30
693	and degradation behavior of Mg-2Sr-Ca and Mg-2Sr-Zn alloys. *Bioactive Materials*, **2020**, 5, 275-285	16.7	28
692	Biomechanics study of a 3D printed sacroiliac joint fixed modular hemipelvic endoprosthesis. *Clinical Biomechanics*, **2020**, 74, 87-95	2.2	1
691	Overcoming Multidrug-Resistant MRSA Using Conventional Aminoglycoside Antibiotics. *Advanced Science*, **2020**, 7, 1902070	13.6	30
690	In vitro and in vivo studies of Zn-Mn biodegradable metals designed for orthopedic applications. *Acta Biomaterialia*, **2020**, 108, 358-372	10.8	50
689	Effect of extrusion process on the mechanical and in vitro degradation performance of a biomedical Mg-Zn-Y-Nd alloy. *Bioactive Materials*, **2020**, 5, 219-227	16.7	26
688	Magnetic resonance (MR) safety and compatibility of a novel iron bioresorbable scaffold. *Bioactive Materials*, **2020**, 5, 260-274	16.7	11
687	Rapid and highly effective bacteria-killing by polydopamine/IR780@MnO2□i using near-infrared light. *Progress in Natural Science: Materials International*, **2020**, 30, 677-685	3.6	6
686	Effects of Sc addition and aging on microstructure and martensitic transformation of Ni-rich NiTiHfSc high temperature shape memory alloys. *Journal of Alloys and Compounds*, **2020**, 845, 156331	5.7	3
685	Near-Infrared Light Triggered Phototherapy and Immunotherapy for Elimination of Methicillin-Resistant Biofilm Infection on Bone Implant. *ACS Nano*, **2020**, 14, 8157-8170	16.7	67
684	Microstructure, mechanical properties and creep behaviour of extruded Zn-xLi (x = 0.1, 0.3 and 0.4) alloys for biodegradable vascular stent applications. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2020**, 777, 139082	5.3	20
683	Ce and Er Co-doped TiO for rapid bacteria- killing using visible light. *Bioactive Materials*, **2020**, 5, 201-209	16.7	37

682	Porous zinc scaffolds for bone tissue engineering applications: A novel additive manufacturing and casting approach. *Materials Science and Engineering C*, **2020**, 110, 110738	8.3	28
681	Advances in coatings on biodegradable magnesium alloys. *Journal of Magnesium and Alloys*, **2020**, 8, 42-65	8.8	141
680	A pure zinc membrane with degradability and osteogenesis promotion for guided bone regeneration: In vitro and in vivo studies. *Acta Biomaterialia*, **2020**, 106, 396-409	10.8	34
679	Effect of grain structure on the mechanical properties and in vitro corrosion behavior of additively manufactured pure Zn. *Additive Manufacturing*, **2020**, 33, 101134	6.1	7
678	In vitro and in vivo biodegradation and biocompatibility of an MMT/BSA composite coating upon magnesium alloy AZ31. *Journal of Materials Science and Technology*, **2020**, 47, 52-67	9.1	27
677	Visible light responsive CuS/ protonated g-CN heterostructure for rapid sterilization. *Journal of Hazardous Materials*, **2020**, 393, 122423	12.8	57
676	ROS induced bactericidal activity of amorphous Zn-doped titanium oxide coatings and enhanced osseointegration in bacteria-infected rat tibias. *Acta Biomaterialia*, **2020**, 107, 313-324	10.8	34
675	Effects of alloy elements on adsorption of fibrinogen on biodegradable magnesium alloys surfaces: The MD simulations and experimental studies. *Applied Surface Science*, **2020**, 512, 145725	6.7	2
674	Corrosion fatigue of the extruded Mg□Zn□□Nd alloy in simulated body fluid. *Journal of Magnesium and Alloys*, **2020**, 8, 231-240	8.8	15
673	A novel photothermally controlled multifunctional scaffold for clinical treatment of osteosarcoma and tissue regeneration. *Materials Today*, **2020**, 36, 48-62	21.8	53
672	Recent Development of TiNi-Based Shape Memory Alloys with High Cycle Stability and High Transformation Temperature. *Advanced Engineering Materials*, **2020**, 22, 1900496	3.5	43
671	In-situ sulfuration of Cu-based metal-organic framework for rapid near-infrared light sterilization. *Journal of Hazardous Materials*, **2020**, 390, 122126	12.8	43
670	Rapid Photo-Sonotherapy for Clinical Treatment of Bacterial Infected Bone Implants by Creating Oxygen Deficiency Using Sulfur Doping. *ACS Nano*, **2020**, 14, 2077-2089	16.7	98
669	Alloying design of biodegradable zinc as promising bone implants for load-bearing applications. *Nature Communications*, **2020**, 11, 401	17.4	124
668	Controllable biodegradation and enhanced osseointegration of ZrO-nanofilm coated Zn-Li alloy: In vitro and in vivo studies. *Acta Biomaterialia*, **2020**, 105, 290-303	10.8	22
667	Rapid Sterilization by Photocatalytic Ag3PO4/□Fe2O3 Composites Using Visible Light. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 2577-2585	8.3	33
666	Biodegradation, hemocompatibility and covalent bonding mechanism of electrografting polyethylacrylate coating on Mg alloy for cardiovascular stent. *Journal of Materials Science and Technology*, **2020**, 46, 114-126	9.1	14
665	Rapid bacteria trapping and killing of metal-organic frameworks strengthened photo-responsive hydrogel for rapid tissue repair of bacterial infected wounds. *Chemical Engineering Journal*, **2020**, 396, 125194	14.7	77

664	Microstructure and properties of biodegradable Mg□Zn□-Nd alloy micro-tubes prepared by an improved method. *Journal of Alloys and Compounds*, **2020**, 835, 155369	5.7	2
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