

Ke Yang

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333
papers

10,998
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53
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89
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343
ext. papers

13,485
ext. citations

6
avg, IF

6.65
L-index

#	Paper	IF	Citations
333	In vivo corrosion behavior of Mg-Mn-Zn alloy for bone implant application. <i>Journal of Biomedical Materials Research - Part A</i> , 2007 , 83, 703-11	5.4	411
332	In vitro and in vivo evaluation of the surface bioactivity of a calcium phosphate coated magnesium alloy. <i>Biomaterials</i> , 2009 , 30, 1512-23	15.6	398
331	Microstructure, mechanical and corrosion properties and biocompatibility of Mg ₉₂ Zn ₈ Mn alloys for biomedical application. <i>Materials Science and Engineering C</i> , 2009 , 29, 987-993	8.3	328
330	Biodegradable Materials for Bone Repairs: A Review. <i>Journal of Materials Science and Technology</i> , 2013 , 29, 503-513	9.1	251
329	In vivo evaluation of biodegradable magnesium alloy bone implant in the first 6 months implantation. <i>Journal of Biomedical Materials Research - Part A</i> , 2009 , 90, 882-93	5.4	188
328	A new antibacterial titanium-copper sintered alloy: preparation and antibacterial property. <i>Materials Science and Engineering C</i> , 2013 , 33, 4280-7	8.3	174
327	The effects of thermo-mechanical control process on microstructures and mechanical properties of a commercial pipeline steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2002 , 335, 14-20	5.3	167
326	Fluoride treatment and in vitro corrosion behavior of an AZ31B magnesium alloy. <i>Materials Science and Engineering C</i> , 2010 , 30, 740-748	8.3	157
325	Vascularized bone grafting fixed by biodegradable magnesium screw for treating osteonecrosis of the femoral head. <i>Biomaterials</i> , 2016 , 81, 84-92	15.6	154
324	Effect of Cu content on the antibacterial activity of titanium-copper sintered alloys. <i>Materials Science and Engineering C</i> , 2014 , 35, 392-400	8.3	154
323	The in vitro degradation process and biocompatibility of a ZK60 magnesium alloy with a forsterite-containing micro-arc oxidation coating. <i>Acta Biomaterialia</i> , 2013 , 9, 8631-42	10.8	142
322	Nickel-free austenitic stainless steels for medical applications. <i>Science and Technology of Advanced Materials</i> , 2010 , 11, 014105	7.1	142
321	Biodegradable Mg-Cu alloy implants with antibacterial activity for the treatment of osteomyelitis: In vitro and in vivo evaluations. <i>Biomaterials</i> , 2016 , 106, 250-63	15.6	138
320	In situ TEM study of the effect of M/A films at grain boundaries on crack propagation in an ultra-fine acicular ferrite pipeline steel. <i>Acta Materialia</i> , 2006 , 54, 435-443	8.4	134
319	The effect of metallic magnesium degradation products on osteoclast-induced osteolysis and attenuation of NF- κ B and NFATc1 signaling. <i>Biomaterials</i> , 2014 , 35, 6299-310	15.6	127
318	Antibacterial effect of copper-bearing titanium alloy (Ti-Cu) against <i>Streptococcus mutans</i> and <i>Porphyromonas gingivalis</i> . <i>Scientific Reports</i> , 2016 , 6, 29985	4.9	122
317	Microstructure, mechanical properties and corrosion properties of Mg ₉₂ Zn ₈ alloys with low Zn content. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008 , 488, 102-111	5.3	117

316	Accelerated corrosion of 2205 duplex stainless steel caused by marine aerobic <i>Pseudomonas aeruginosa</i> biofilm. <i>Bioelectrochemistry</i> , 2017 , 113, 1-8	5.6	110
315	Mechanical properties of magnesium alloys for medical application: A review. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2018 , 87, 68-79	4.1	108
314	Biodegradable Mg-Cu alloys with enhanced osteogenesis, angiogenesis, and long-lasting antibacterial effects. <i>Scientific Reports</i> , 2016 , 6, 27374	4.9	103
313	The effect of Cu addition on the electrochemical corrosion and passivation behavior of stainless steels. <i>Electrochimica Acta</i> , 2010 , 55, 5028-5035	6.7	102
312	Surface Modification on Biodegradable Magnesium Alloys as Orthopedic Implant Materials to Improve the Bio-adaptability: A Review. <i>Journal of Materials Science and Technology</i> , 2016 , 32, 827-834	9.1	101
311	Antibacterial Properties of Ti ₆ Al ₄ V ₂ Cu Alloys. <i>Journal of Materials Science and Technology</i> , 2014 , 30, 699-705	9.1	100
310	Study of high strength pipeline steels with different microstructures. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2009 , 502, 38-44	5.3	99
309	Acicular ferritic microstructure of a low-carbon Mn ₂ Mo ₂ Nb microalloyed pipeline steel. <i>Materials Characterization</i> , 2005 , 54, 305-314	3.9	99
308	Study on antibacterial mechanism of copper-bearing austenitic antibacterial stainless steel by atomic force microscopy. <i>Journal of Materials Science: Materials in Medicine</i> , 2008 , 19, 3057-62	4.5	96
307	Toward a Molecular Understanding of the Antibacterial Mechanism of Copper-Bearing Titanium Alloys against <i>Staphylococcus aureus</i> . <i>Advanced Healthcare Materials</i> , 2016 , 5, 557-66	10.1	93
306	Effect of surface coating on antibacterial behavior of magnesium based metals. <i>Materials Letters</i> , 2011 , 65, 3509-3511	3.3	93
305	Antibacterial effect of 317L stainless steel contained copper in prevention of implant-related infection in vitro and in vivo. <i>Journal of Materials Science: Materials in Medicine</i> , 2011 , 22, 2525-35	4.5	92
304	In vitro and in vivo studies of anti-bacterial copper-bearing titanium alloy for dental application. <i>Dental Materials</i> , 2018 , 34, 1112-1126	5.7	87
303	Study of copper precipitation behavior in a Cu-bearing austenitic antibacterial stainless steel. <i>Materials & Design</i> , 2011 , 32, 2374-2379		86
302	Preliminary study of anti-infective function of a copper-bearing stainless steel. <i>Materials Science and Engineering C</i> , 2012 , 32, 1204-1209	8.3	85
301	Phosphating treatment and corrosion properties of Mg-Mn-Zn alloy for biomedical application. <i>Journal of Materials Science: Materials in Medicine</i> , 2009 , 20, 859-67	4.5	85
300	Investigation of microbiologically influenced corrosion of high nitrogen nickel-free stainless steel by <i>Pseudomonas aeruginosa</i> . <i>Corrosion Science</i> , 2016 , 111, 811-821	6.8	84
299	Effect of Heat Treatment on Cu Distribution, Antibacterial Performance and Cytotoxicity of Ti ₆ Al ₄ V ₂ Cu Alloy. <i>Journal of Materials Science and Technology</i> , 2015 , 31, 723-732	9.1	82

298	Laboratory investigation of the microbiologically influenced corrosion (MIC) resistance of a novel Cu-bearing 2205 duplex stainless steel in the presence of an aerobic marine <i>Pseudomonas aeruginosa</i> biofilm. <i>Biofouling</i> , 2015 , 31, 481-92	3.3	80
297	Microstructural stability of 9%Cr ferrite/martensite heat-resistant steels. <i>Frontiers of Materials Science</i> , 2013 , 7, 1-27	2.5	78
296	Antibacterial properties of magnesium in vitro and in an in vivo model of implant-associated methicillin-resistant <i>Staphylococcus aureus</i> infection. <i>Antimicrobial Agents and Chemotherapy</i> , 2014 , 58, 7586-91	5.9	77
295	Comparison on strength and toughness behaviors of microalloyed pipeline steels with acicular ferrite and ultrafine ferrite. <i>Materials Letters</i> , 2003 , 57, 1496-1500	3.3	75
294	Ion channel functional protein kinase TRPM7 regulates Mg ions to promote the osteoinduction of human osteoblast via PI3K pathway: In vitro simulation of the bone-repairing effect of Mg-based alloy implant. <i>Acta Biomaterialia</i> , 2017 , 63, 369-382	10.8	74
293	Loss of mechanical properties in vivo and bone-implant interface strength of AZ31B magnesium alloy screws with Si-containing coating. <i>Acta Biomaterialia</i> , 2014 , 10, 2333-40	10.8	73
292	Effect of preparation parameters on the properties of hydroxyapatite containing micro-arc oxidation coating on biodegradable ZK60 magnesium alloy. <i>Ceramics International</i> , 2014 , 40, 10043-10051	5.1	68
291	Relation among rolling parameters, microstructures and mechanical properties in an acicular ferrite pipeline steel. <i>Materials & Design</i> , 2009 , 30, 3436-3443		68
290	Fluoride Conversion Coating on Biodegradable AZ31B Magnesium Alloy. <i>Journal of Materials Science and Technology</i> , 2014 , 30, 666-674	9.1	66
289	Effect of copper addition on mechanical properties, corrosion resistance and antibacterial property of 316L stainless steel. <i>Materials Science and Engineering C</i> , 2017 , 71, 1079-1085	8.3	63
288	Finite element analyses for design evaluation of biodegradable magnesium alloy stents in arterial vessels. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2011 , 176, 1733-1740	3.1	63
287	Enhanced resistance of 2205 Cu-bearing duplex stainless steel towards microbiologically influenced corrosion by marine aerobic <i>Pseudomonas aeruginosa</i> biofilms. <i>Journal of Materials Science and Technology</i> , 2018 , 34, 1325-1336	9.1	62
286	Microbiological influenced corrosion resistance characteristics of a 304L-Cu stainless steel against <i>Escherichia coli</i> . <i>Materials Science and Engineering C</i> , 2015 , 48, 228-34	8.3	58
285	Corrosion of antibacterial Cu-bearing 316L stainless steels in the presence of sulfate reducing bacteria. <i>Corrosion Science</i> , 2018 , 132, 46-55	6.8	58
284	In vitro study of role of trace amount of Cu release from Cu-bearing stainless steel targeting for reduction of in-stent restenosis. <i>Journal of Materials Science: Materials in Medicine</i> , 2012 , 23, 1235-45	4.5	56
283	Investigation on the H ₂ S-resistant behaviors of acicular ferrite and ultrafine ferrite. <i>Materials Letters</i> , 2002 , 57, 141-145	3.3	55
282	Copper precipitation behavior and mechanical properties of Cu-bearing 316L austenitic stainless steel: A comprehensive cross-correlation study. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016 , 675, 243-252	5.3	53
281	Preliminary research on a novel bioactive silicon doped calcium phosphate coating on AZ31 magnesium alloy via electrodeposition. <i>Materials Science and Engineering C</i> , 2014 , 36, 65-76	8.3	53

280	Research on super-hydrophobic surface of biodegradable magnesium alloys used for vascular stents. <i>Materials Science and Engineering C</i> , 2013 , 33, 2885-90	8.3	53
279	In vitro degradation and biocompatibility of a strontium-containing micro-arc oxidation coating on the biodegradable ZK60 magnesium alloy. <i>Applied Surface Science</i> , 2014 , 288, 718-726	6.7	53
278	Study of the processing map and hot deformation behavior of a Cu-bearing 317LN austenitic stainless steel. <i>Materials and Design</i> , 2015 , 87, 303-312	8.1	52
277	Fabrication and Evaluation of a Bioactive SrTaB Contained Micro-Arc Oxidation Coating on Magnesium Strontium Alloy for Bone Repair Application. <i>Journal of Materials Science and Technology</i> , 2016 , 32, 233-244	9.1	51
276	Evolution of microstructure and changes of mechanical properties of CLAM steel after long-term aging. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013 , 586, 253-258	5.3	49
275	In vitro and in vivo evaluation of MgF coated AZ31 magnesium alloy porous scaffolds for bone regeneration. <i>Colloids and Surfaces B: Biointerfaces</i> , 2017 , 149, 330-340	6	49
274	Strengthening and improvement of sulfide stress cracking resistance in acicular ferrite pipeline steels by nano-sized carbonitrides. <i>Scripta Materialia</i> , 2005 , 52, 881-886	5.6	49
273	Effect of grain refinement and crystallographic texture produced by friction stir processing on the biodegradation behavior of a Mg-Nd-Zn alloy. <i>Journal of Materials Science and Technology</i> , 2019 , 35, 777-783	9.1	49
272	Experimental data confirm numerical modeling of the degradation process of magnesium alloys stents. <i>Acta Biomaterialia</i> , 2013 , 9, 8730-9	10.8	48
271	The fluoride coated AZ31B magnesium alloy improves corrosion resistance and stimulates bone formation in rabbit model. <i>Materials Science and Engineering C</i> , 2016 , 63, 506-11	8.3	47
270	Effects of aging time on intergranular and pitting corrosion behavior of Cu-bearing 304L stainless steel in comparison with 304L stainless steel. <i>Corrosion Science</i> , 2016 , 113, 46-56	6.8	47
269	Bio-functional Design for Metal Implants, a New Concept for Development of Metallic Biomaterials. <i>Journal of Materials Science and Technology</i> , 2013 , 29, 1005-1010	9.1	46
268	The antibacterial properties and biocompatibility of a Ti-Cu sintered alloy for biomedical application. <i>Biomedical Materials (Bristol)</i> , 2014 , 9, 025013	3.5	46
267	Strengthening and toughening of a 2800-MPa grade maraging steel. <i>Materials Letters</i> , 2002 , 56, 763-769	3.3	46
266	Antibacterial ability of a novel Cu-bearing 2205 duplex stainless steel against <i>Pseudomonas aeruginosa</i> biofilm in artificial seawater. <i>International Biodeterioration and Biodegradation</i> , 2016 , 110, 199-205	4.8	46
265	Antibacterial Performance of a Cu-bearing Stainless Steel against Microorganisms in Tap Water. <i>Journal of Materials Science and Technology</i> , 2015 , 31, 243-251	9.1	45
264	Antibacterial activity against <i>Porphyromonas gingivalis</i> and biological characteristics of antibacterial stainless steel. <i>Colloids and Surfaces B: Biointerfaces</i> , 2013 , 105, 51-7	6	45
263	Microbiologically influenced corrosion of titanium caused by aerobic marine bacterium <i>Pseudomonas aeruginosa</i> . <i>Journal of Materials Science and Technology</i> , 2019 , 35, 216-222	9.1	45

262	Study on improved tribological properties by alloying copper to CP-Ti and Ti-6Al-4V alloy. <i>Materials Science and Engineering C</i> , 2015 , 57, 123-32	8.3	44
261	In vivo degradation and tissue compatibility of ZK60 magnesium alloy with micro-arc oxidation coating in a transcortical model. <i>Materials Science and Engineering C</i> , 2013 , 33, 3881-8	8.3	44
260	Effect of minor content of Gd on the mechanical and degradable properties of as-cast Mg-2Zn-xGd-0.5Zr alloys. <i>Journal of Materials Science and Technology</i> , 2019 , 35, 503-511	9.1	44
259	Tailoring the degradation and biological response of a magnesium-strontium alloy for potential bone substitute application. <i>Materials Science and Engineering C</i> , 2016 , 58, 799-811	8.3	42
258	Osteogenic ability of Cu-bearing stainless steel. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2015 , 103, 1433-44	3.5	42
257	Novel Cu-bearing high-strength pipeline steels with excellent resistance to hydrogen-induced cracking. <i>Materials and Design</i> , 2016 , 92, 300-305	8.1	42
256	Effect of Cu Addition to 2205 Duplex Stainless Steel on the Resistance against Pitting Corrosion by the Pseudomonas aeruginosa Biofilm. <i>Journal of Materials Science and Technology</i> , 2017 , 33, 723-727	9.1	42
255	Dynamic behaviors of a CaP coated AZ31B magnesium alloy during in vitro and in vivo degradations. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2011 , 176, 1718-1726	3.1	42
254	Cu Ions Dissolution from Cu-bearing Antibacterial Stainless Steel. <i>Journal of Materials Science and Technology</i> , 2010 , 26, 941-944	9.1	42
253	Precipitate evolution and strengthening behavior during aging process in a 2.5 GPa grade maraging steel. <i>Acta Materialia</i> , 2019 , 179, 296-307	8.4	41
252	Optimization of mechanical property, antibacterial property and corrosion resistance of Ti-Cu alloy for dental implant. <i>Journal of Materials Science and Technology</i> , 2019 , 35, 2336-2344	9.1	41
251	Fabrication and evaluation of bioresorbable PLLA/magnesium and PLLA/magnesium fluoride hybrid composites for orthopedic implants. <i>Composites Science and Technology</i> , 2014 , 98, 36-43	8.6	40
250	In vitro and in vivo evaluations on osteogenesis and biodegradability of a β -tricalcium phosphate coated magnesium alloy. <i>Journal of Biomedical Materials Research - Part A</i> , 2012 , 100, 293-304	5.4	40
249	Influence of Cold Work on Pitting Corrosion Behavior of a High Nitrogen Stainless Steel. <i>Journal of the Electrochemical Society</i> , 2008 , 155, C455	3.9	40
248	Improvement of biodegradable and antibacterial properties by solution treatment and micro-arc oxidation (MAO) of a magnesium alloy with a trace of copper. <i>Corrosion Science</i> , 2019 , 156, 125-138	6.8	39
247	Cytotoxic Effect on Osteosarcoma MG-63 Cells by Degradation of Magnesium. <i>Journal of Materials Science and Technology</i> , 2014 , 30, 888-893	9.1	39
246	In vitro study of platelet adhesion on medical nickel-free stainless steel surface. <i>Materials Letters</i> , 2005 , 59, 1785-1789	3.3	39
245	Effect of heat treatment on mechanical and biodegradable properties of an extruded ZK60 alloy. <i>Bioactive Materials</i> , 2017 , 2, 19-26	16.7	38

244	Biofunctional magnesium coated Ti6Al4V scaffold enhances osteogenesis and angiogenesis and for orthopedic application. <i>Bioactive Materials</i> , 2020 , 5, 680-693	16.7	38
243	Mitigation of microbiologically influenced corrosion of 304L stainless steel in the presence of <i>Pseudomonas aeruginosa</i> by <i>Cistus ladanifer</i> leaves extract. <i>International Biodeterioration and Biodegradation</i> , 2018 , 133, 159-169	4.8	38
242	Microstructure Evolution of a 10Cr Heat-Resistant Steel during High Temperature Creep. <i>Journal of Materials Science and Technology</i> , 2011 , 27, 344-351	9.1	38
241	Preparation and characterization of Ca-P coating on AZ31 magnesium alloy. <i>Transactions of Nonferrous Metals Society of China</i> , 2010 , 20, s648-s654	3.3	38
240	Effect of surface passivation on corrosion resistance and antibacterial properties of Cu-bearing 316L stainless steel. <i>Applied Surface Science</i> , 2016 , 386, 371-380	6.7	37
239	Influence of albumin and inorganic ions on electrochemical corrosion behavior of plasma electrolytic oxidation coated magnesium for surgical implants. <i>Applied Surface Science</i> , 2013 , 282, 186-194	6.7	37
238	Effect of nitrogen on blood compatibility of nickel-free high nitrogen stainless steel for biomaterial. <i>Materials Science and Engineering C</i> , 2010 , 30, 1183-1189	8.3	37
237	Inhibition of <i>Staphylococcus aureus</i> biofilm by a copper-bearing 317L-Cu stainless steel and its corrosion resistance. <i>Materials Science and Engineering C</i> , 2016 , 69, 744-50	8.3	36
236	Preclinical investigation of an innovative magnesium-based bone graft substitute for potential orthopaedic applications. <i>Journal of Orthopaedic Translation</i> , 2014 , 2, 139-148	4.2	36
235	Bio-Functional Cu Containing Biomaterials: a New Way to Enhance Bio-Adaption of Biomaterials. <i>Journal of Materials Science and Technology</i> , 2016 , 32, 835-839	9.1	36
234	A new 1.9 GPa maraging stainless steel strengthened by multiple precipitating species. <i>Materials and Design</i> , 2015 , 82, 56-63	8.1	35
233	Corrosion and biological performance of biodegradable magnesium alloys mediated by low copper addition and processing. <i>Materials Science and Engineering C</i> , 2018 , 93, 565-581	8.3	35
232	Role of microstructure on sulfide stress cracking of oil and gas pipeline steels. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2003 , 34, 1089-1096	2.3	35
231	An investigation of the antibacterial ability and cytotoxicity of a novel Cu-bearing 317L stainless steel. <i>Scientific Reports</i> , 2016 , 6, 29244	4.9	34
230	In vitro study on an antibacterial Ti-5Cu alloy for medical application. <i>Journal of Materials Science: Materials in Medicine</i> , 2016 , 27, 91	4.5	34
229	Study on antibacterial performance of Cu-bearing cobalt-based alloy. <i>Materials Letters</i> , 2014 , 129, 88-90	3.3	34
228	Study on fatigue property of a new 2.8 GPa grade maraging steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2010 , 527, 3057-3063	5.3	34
227	Cytocompatibility and Hemolysis of AZ31B Magnesium Alloy with Si-containing Coating. <i>Journal of Materials Science and Technology</i> , 2015 , 31, 845-851	9.1	33

226	Novel Bio-functional Magnesium Coating on Porous Ti6Al4V Orthopaedic Implants: In vitro and In vivo Study. <i>Scientific Reports</i> , 2017 , 7, 40755	4.9	32
225	Hot deformation characteristics of a nitride strengthened martensitic heat resistant steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014 , 590, 199-208	5.3	32
224	Differential scanning calorimetry analysis on Cu precipitation in a high Cu austenitic stainless steel. <i>Materials & Design</i> , 2011 , 32, 3980-3985		32
223	Microbial corrosion resistance of a novel Cu-bearing pipeline steel. <i>Journal of Materials Science and Technology</i> , 2018 , 34, 2480-2491	9.1	32
222	Oxidation behavior of ferritic/martensitic steels in stagnant liquid LBE saturated by oxygen at 600 °C. <i>Journal of Nuclear Materials</i> , 2015 , 457, 135-141	3.3	31
221	Antimicrobial Cu-bearing stainless steel scaffolds. <i>Materials Science and Engineering C</i> , 2016 , 68, 519-522.	3	31
220	Effect of annealing temperature on mechanical and antibacterial properties of Cu-bearing titanium alloy and its preliminary study of antibacterial mechanism. <i>Materials Science and Engineering C</i> , 2018 , 93, 495-504	8.3	31
219	In vitro degradation and antibacterial property of a copper-containing micro-arc oxidation coating on Mg-2Zn-1Gd-0.5Zr alloy. <i>Colloids and Surfaces B: Biointerfaces</i> , 2019 , 179, 77-86	6	30
218	Salvia officinalis extract mitigates the microbiologically influenced corrosion of 304L stainless steel by Pseudomonas aeruginosa biofilm. <i>Bioelectrochemistry</i> , 2019 , 128, 193-203	5.6	30
217	Antimicrobial Cu-bearing 2205 duplex stainless steel against MIC by nitrate reducing Pseudomonas aeruginosa biofilm. <i>International Biodeterioration and Biodegradation</i> , 2018 , 132, 132-138	4.8	30
216	Bioactive Ca-P coating with self-sealing structure on pure magnesium. <i>Journal of Materials Science: Materials in Medicine</i> , 2013 , 24, 889-901	4.5	30
215	Effect of nitrogen on biocorrosion behavior of high nitrogen nickel-free stainless steel in different simulated body fluids. <i>Materials Science and Engineering C</i> , 2012 , 32, 510-516	8.3	29
214	Study on microstructure and properties of extruded Mg-2Nd-0.2Zn alloy as potential biodegradable implant material. <i>Materials Science and Engineering C</i> , 2015 , 49, 422-429	8.3	29
213	Biocompatibility and neurotoxicity of magnesium alloys potentially used for neural repairs. <i>Materials Science and Engineering C</i> , 2017 , 78, 1155-1163	8.3	28
212	The effects of pulse electrodeposition parameters on morphology and formation of dual-layer Si-doped calcium phosphate coating on AZ31 alloy. <i>Ceramics International</i> , 2015 , 41, 787-796	5.1	28
211	Novel biocompatible magnesium alloys design with nutrient alloying elements Si, Ca and Sr: Structure and properties characterization. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2016 , 214, 26-36	3.1	28
210	Study on biodegradation of the second phase Mg ₁₇ Al ₁₂ in Mg-Al-Zn alloys: in vitro experiment and thermodynamic calculation. <i>Materials Science and Engineering C</i> , 2014 , 35, 1-7	8.3	28
209	Characterization of micro-arc oxidation coating post-treated by hydrofluoric acid on biodegradable ZK60 magnesium alloy. <i>Surface and Coatings Technology</i> , 2013 , 232, 899-905	4.4	28

208	A novel coping metal material CoCrCu alloy fabricated by selective laser melting with antimicrobial and antibiofilm properties. <i>Materials Science and Engineering C</i> , 2016 , 67, 461-467	8.3	28
207	Preliminary Study on Cytotoxic Effect of Biodegradation of Magnesium on Cancer Cells. <i>Journal of Materials Science and Technology</i> , 2012 , 28, 769-772	9.1	27
206	Eliminating detrimental effect of cold working on pitting corrosion resistance in high nitrogen austenitic stainless steels. <i>Corrosion Science</i> , 2017 , 123, 351-355	6.8	26
205	Antibacterial durability and biocompatibility of antibacterial-passivated 316L stainless steel in simulated physiological environment. <i>Materials Science and Engineering C</i> , 2019 , 100, 396-410	8.3	26
204	Antibacterial Behavior of a Cu-bearing Type 200 Stainless Steel. <i>Journal of Materials Science and Technology</i> , 2012 , 28, 1067-1070	9.1	26
203	CoCrWCu alloy with antibacterial activity fabricated by selective laser melting: Densification, mechanical properties and microstructural analysis. <i>Powder Technology</i> , 2018 , 325, 289-300	5.2	26
202	Effect of Microstructure on Hydrogen Induced Cracking Behavior of a High Deformability Pipeline Steel. <i>Journal of Iron and Steel Research International</i> , 2015 , 22, 937-942	1.2	25
201	Biofunctional Mg coating on PEEK for improving bioactivity. <i>Bioactive Materials</i> , 2018 , 3, 139-143	16.7	25
200	Influence of thermal aging on microstructure and mechanical properties of CLAM steel. <i>Journal of Nuclear Materials</i> , 2013 , 443, 479-483	3.3	25
199	Antibacterial Performance of Cu-Bearing Stainless Steel against Staphylococcus aureus and Pseudomonas aeruginosa in Whole Milk. <i>Journal of Materials Science and Technology</i> , 2016 , 32, 445-451	9.1	25
198	A self-healing stainless steel: Role of nitrogen in eliminating detrimental effect of cold working on pitting corrosion resistance. <i>Corrosion Science</i> , 2018 , 145, 55-66	6.8	25
197	Finite element analyses for optimization design of biodegradable magnesium alloy stent. <i>Materials Science and Engineering C</i> , 2014 , 42, 705-14	8.3	24
196	Analysis of deformation behavior and workability of advanced 9CrNbV ferritic heat resistant steels. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014 , 604, 207-214	5.3	24
195	Study on Laves phase in an advanced heat-resistant steel. <i>Frontiers of Materials Science in China</i> , 2009 , 3, 434-441		24
194	Contact Killing of Cu-Bearing Stainless Steel Based on Charge Transfer Caused by the Microdomain Potential Difference. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 361-372	9.5	24
193	In vitro study on cytocompatibility and osteogenesis ability of Ti-Cu alloy. <i>Journal of Materials Science: Materials in Medicine</i> , 2019 , 30, 75	4.5	23
192	Optimization of annealing treatment and comprehensive properties of Cu-containing Ti6Al4V-xCu alloys. <i>Journal of Materials Science and Technology</i> , 2019 , 35, 2121-2131	9.1	23
191	Molecular and cellular mechanisms for zoledronic acid-loaded magnesium-strontium alloys to inhibit giant cell tumors of bone. <i>Acta Biomaterialia</i> , 2018 , 77, 365-379	10.8	23

190	High nitrogen nickel-free austenitic stainless steel: A promising coronary stent material. <i>Science China Technological Sciences</i> , 2012 , 55, 329-340	3.5	23
189	Antibacterial effect of a copper-containing titanium alloy against implant-associated infection induced by methicillin-resistant <i>Staphylococcus aureus</i> . <i>Acta Biomaterialia</i> , 2021 , 119, 472-484	10.8	23
188	Anti-biofilm formation of a novel stainless steel against <i>Staphylococcus aureus</i> . <i>Materials Science and Engineering C</i> , 2015 , 51, 356-61	8.3	22
187	Effects of combined chemical design (Cu addition) and topographical modification (SLA) of Ti-Cu/SLA for promoting osteogenic, angiogenic and antibacterial activities. <i>Journal of Materials Science and Technology</i> , 2020 , 47, 202-215	9.1	22
186	Influence of hybrid extrusion and solution treatment on the microstructure and degradation behavior of Mg-0.1Cu alloy. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2018 , 229, 105-117	3.1	22
185	Preliminary study on a bioactive Sr containing CaP coating on pure magnesium by a two-step procedure. <i>Surface and Coatings Technology</i> , 2014 , 252, 79-86	4.4	22
184	Short-term effect of magnesium implantation on the osteomyelitis modeled animals induced by <i>Staphylococcus aureus</i> . <i>Journal of Materials Science: Materials in Medicine</i> , 2013 , 24, 2405-16	4.5	22
183	Biofilm inhibition and corrosion resistance of 2205-Cu duplex stainless steel against acid producing bacterium <i>Acetobacter acetii</i> . <i>Journal of Materials Science and Technology</i> , 2019 , 35, 2494-2502	9.1	21
182	Surface characterization and preparation of Ta coating on Ti6Al4V alloy. <i>Journal of Alloys and Compounds</i> , 2015 , 644, 698-703	5.7	21
181	Antibacterial TiCu/TiCuN Multilayer Films with Good Corrosion Resistance Deposited by Axial Magnetic Field-Enhanced Arc Ion Plating. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 125-136	9.5	21
180	Biological applications of copper-containing materials. <i>Bioactive Materials</i> , 2021 , 6, 916-927	16.7	21
179	Effect of copper content on the corrosion behaviors and antibacterial properties of binary MgCu alloys. <i>Materials Technology</i> , 2018 , 33, 145-152	2.1	20
178	Effect of Cu on microstructure, mechanical properties, corrosion resistance and cytotoxicity of CoCrW alloy fabricated by selective laser melting. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2018 , 81, 130-141	4.1	20
177	Effect of cold deformation on corrosion fatigue behavior of nickel-free high nitrogen austenitic stainless steel for coronary stent application. <i>Journal of Materials Science and Technology</i> , 2018 , 34, 660-665	8.15	20
176	Antibacterial activity of copper-bearing 316L stainless steel for the prevention of implant-related infection. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2020 , 108, 484-495	3.5	20
175	Evaluation of the osteo-inductive potential of hollow three-dimensional magnesium-strontium substitutes for the bone grafting application. <i>Materials Science and Engineering C</i> , 2017 , 73, 347-356	8.3	19
174	Microstructure, mechanical and biodegradable properties of a Mg _{0.2} Zn _{0.1} Gd _{0.5} Zr alloy with different solution treatments. <i>Rare Metals</i> , 2019 , 38, 532-542	5.5	19
173	HIC and SSC Behavior of High-Strength Pipeline Steels. <i>Acta Metallurgica Sinica (English Letters)</i> , 2015 , 28, 799-808	2.5	19

172	Rough surface of copper-bearing titanium alloy with multifunctions of osteogenic ability and antibacterial activity. <i>Journal of Materials Science and Technology</i> , 2020 , 48, 130-139	9.1	19
171	Preliminary study of microstructure, mechanical properties and corrosion resistance of antibacterial Ti-15Zr-xCu alloy for dental application. <i>Journal of Materials Science and Technology</i> , 2020 , 50, 31-43	9.1	19
170	Dissolution and repair of passive film on Cu-bearing 304L stainless steels immersed in H2SO4 solution. <i>Journal of Materials Science and Technology</i> , 2018 , 34, 2149-2159	9.1	19
169	Relationship between Laves phase and the impact brittleness of P92 steel reevaluated. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015 , 639, 252-258	5.3	19
168	Regulation of osteogenesis and osteoclastogenesis by zoledronic acid loaded on biodegradable magnesium-strontium alloy. <i>Scientific Reports</i> , 2019 , 9, 933	4.9	18
167	Biodegradation Behavior of Coated As-Extruded MgBr Alloy in Simulated Body Fluid. <i>Acta Metallurgica Sinica (English Letters)</i> , 2019 , 32, 1195-1206	2.5	18
166	Laves-phase in the China Low Activation Martensitic steel after long-term creep exposure. <i>Materials & Design</i> , 2014 , 63, 333-335		18
165	In vitro Study on a New High Nitrogen Nickel-free Austenitic Stainless Steel for Coronary Stents. <i>Journal of Materials Science and Technology</i> , 2011 , 27, 325-331	9.1	18
164	Residual Ferrite and Relationship Between Composition and Microstructure in High-Nitrogen Austenitic Stainless Steels. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2015 , 46, 5537-5545	2.3	17
163	Silicon enhances high temperature oxidation resistance of SIMP steel at 700 °C. <i>Corrosion Science</i> , 2020 , 167, 108519	6.8	17
162	Role of Co in formation of Ni-Ti clusters in maraging stainless steel. <i>Journal of Materials Science and Technology</i> , 2018 , 34, 1671-1675	9.1	17
161	Comparison study of different coatings on degradation performance and cell response of Mg-Sr alloy. <i>Materials Science and Engineering C</i> , 2016 , 69, 95-107	8.3	17
160	Effect of implantation of biodegradable magnesium alloy on BMP-2 expression in bone of ovariectomized osteoporosis rats. <i>Materials Science and Engineering C</i> , 2013 , 33, 4470-4	8.3	17
159	Degradation and biological properties of Ca-P contained micro-arc oxidation self-sealing coating on pure magnesium for bone fixation. <i>International Journal of Energy Production and Management</i> , 2015 , 2, 107-18	5.3	16
158	Synthesis and characterization of CaBrP coating on pure magnesium for biomedical application. <i>Ceramics International</i> , 2014 , 40, 4559-4565	5.1	16
157	Cytotoxic Effects of Biodegradation of Pure Mg and MAO-Mg on Tumor Cells of MG63 and KB. <i>Journal of Materials Science and Technology</i> , 2014 , 30, 487-492	9.1	16
156	Nano-copper-bearing stainless steel promotes fracture healing by accelerating the callus evolution process. <i>International Journal of Nanomedicine</i> , 2017 , 12, 8443-8457	7.3	15
155	A novel ureteral stent material with antibacterial and reducing encrustation properties. <i>Materials Science and Engineering C</i> , 2016 , 68, 221-228	8.3	15

154	Preliminary assessment of metal-porcelain bonding strength of CoCrW alloy after 3wt.% Cu addition. <i>Materials Science and Engineering C</i> , 2016 , 63, 37-45	8.3	15
153	Effect of cold deformation on pitting corrosion of 00Cr18Mn15Mo2N0.86 stainless steel for coronary stent application. <i>Materials Science and Engineering C</i> , 2016 , 60, 293-297	8.3	15
152	A New Maraging Stainless Steel with Excellent Strength-Toughness-Corrosion Synergy. <i>Materials</i> , 2017 , 10,	3.5	15
151	Fabrication and Characterization of CaMgB Containing Coating on Pure Magnesium. <i>Journal of Materials Science and Technology</i> , 2012 , 28, 636-641	9.1	15
150	In vitro study on infectious ureteral encrustation resistance of Cu-bearing stainless steel. <i>Journal of Materials Science and Technology</i> , 2017 , 33, 1604-1609	9.1	14
149	An induced corrosion inhibition of X80 steel by using marine bacterium <i>Marinobacter salsuginis</i> . <i>Colloids and Surfaces B: Biointerfaces</i> , 2020 , 189, 110858	6	14
148	Investigation of the inner corrosion layer formed in pulse electrodeposition coating on Mg-Sr alloy and corresponding degradation behavior. <i>Journal of Colloid and Interface Science</i> , 2016 , 481, 1-12	9.3	14
147	9-12Cr Heat-Resistant Steels. <i>Engineering Materials</i> , 2015 ,	0.4	14
146	Three dimensional atom probe and first-principles studies on spinodal decomposition of Cr in a Co-alloyed maraging stainless steel. <i>Scripta Materialia</i> , 2016 , 121, 37-41	5.6	14
145	Study on a biodegradable antibacterial Fe-Mn-C-Cu alloy as urinary implant material. <i>Materials Science and Engineering C</i> , 2019 , 103, 109718	8.3	13
144	Surface degradation-enabled osseointegrative, angiogenic and antiinfective properties of magnesium-modified acrylic bone cement. <i>Journal of Orthopaedic Translation</i> , 2019 , 17, 121-132	4.2	13
143	High Temperature Oxidation Behavior of SIMP Steel. <i>Oxidation of Metals</i> , 2015 , 83, 521-532	1.6	13
142	Comparative study of the effect of Nd and Y content on the mechanical and biodegradable properties of Mg-Zn-Zr-xNd/Y (x=0.5, 1, 2) alloys. <i>Materials Technology</i> , 2018 , 33, 659-671	2.1	13
141	Comparative study on effects of different coatings on biodegradable and wear properties of Mg-2Zn-1Gd-0.5Zr alloy. <i>Surface and Coatings Technology</i> , 2018 , 352, 273-284	4.4	13
140	Research on the corrosion resistance and formation of double-layer calcium phosphate coating on AZ31 obtained at varied temperatures. <i>Materials Science and Engineering C</i> , 2014 , 43, 264-71	8.3	13
139	A novel nano-copper-bearing stainless steel with reduced Cu(2+) release only inducing transient foreign body reaction via affecting the activity of NF- κ B and Caspase 3. <i>International Journal of Nanomedicine</i> , 2015 , 10, 6725-39	7.3	13
138	Hot Deformation Behavior of a New Nuclear Use Reduced Activation Ferritic/Martensitic Steel. <i>Acta Metallurgica Sinica (English Letters)</i> , 2019 , 32, 825-834	2.5	13
137	Antibacterial Titanium Produced Using Selective Laser Melting. <i>Jom</i> , 2017 , 69, 2719-2724	2.1	12

136	Effects of microstructure on the torsional properties of biodegradable WE43 Mg alloy. <i>Journal of Materials Science and Technology</i> , 2020 , 51, 102-110	9.1	12
135	In vitro and in vivo studies on degradation and bone response of Mg-Sr alloy for treatment of bone defect. <i>Materials Technology</i> , 2018 , 33, 387-397	2.1	12
134	Investigation on mechanical, corrosion resistance and antibacterial properties of Cu-bearing 2205 duplex stainless steel by solution treatment. <i>RSC Advances</i> , 2016 , 6, 112738-112747	3.7	12
133	Effects of temperature and strain rate on the tensile behaviors of SIMP steel in static lead bismuth eutectic. <i>Journal of Nuclear Materials</i> , 2016 , 473, 189-196	3.3	12
132	Constitutive Modeling, Microstructure Evolution, and Processing Map for a Nitride-Strengthened Heat-Resistant Steel. <i>Journal of Materials Engineering and Performance</i> , 2014 , 23, 3042-3050	1.6	12
131	Magnesium Alloy for Repair of Lateral Tibial Plateau Defect in Minipig Model. <i>Journal of Materials Science and Technology</i> , 2013 , 29, 539-544	9.1	12
130	Effect of Cu Addition in Pipeline Steels on Microstructure, Mechanical Properties and Microbiologically Influenced Corrosion. <i>Acta Metallurgica Sinica (English Letters)</i> , 2017 , 30, 601-613	2.5	12
129	Study of second phase in bioabsorbable magnesium alloys: Phase stability evaluation via Dmol3 calculation. <i>APL Materials</i> , 2013 , 1, 052104	5.7	12
128	Potential antiosteoporosis effect of biodegradable magnesium implanted in STZ-induced diabetic rats. <i>Journal of Biomedical Materials Research - Part A</i> , 2011 , 99, 386-94	5.4	12
127	Osteogenesis stimulation by copper-containing 316L stainless steel via activation of akt cell signaling pathway and Runx2 upregulation. <i>Journal of Materials Science and Technology</i> , 2019 , 35, 2727-2733	9.1	11
126	In Vivo Study on Degradation Behavior and Histologic Response of Pure Magnesium in Muscles. <i>Journal of Materials Science and Technology</i> , 2017 , 33, 469-474	9.1	11
125	Reduction of in-stent restenosis risk on nickel-free stainless steel by regulating cell apoptosis and cell cycle. <i>PLoS ONE</i> , 2013 , 8, e62193	3.7	11
124	Examining Cu content contribution to changes in oxide layer formed on selective-laser-melted CoCrW alloys. <i>Applied Surface Science</i> , 2019 , 464, 262-272	6.7	11
123	The effect of different coatings on bone response and degradation behavior of porous magnesium-strontium devices in segmental defect regeneration. <i>Bioactive Materials</i> , 2021 , 6, 1765-1776	16.7	11
122	Mg-based absorbable membrane for guided bone regeneration (GBR): a pilot study. <i>Rare Metals</i> , 2019 , 38, 577-587	5.5	10
121	The in vitro biocompatibility and macrophage phagocytosis of Mg17Al12 phase in Mg-Al-Zn alloys. <i>Journal of Biomedical Materials Research - Part A</i> , 2015 , 103, 2405-15	5.4	10
120	Microstructure evolution in CLAM steel under low cycle fatigue. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014 , 607, 356-359	5.3	10
119	A novel polymer critical re-melting treatment for improving corrosion resistance of magnesium alloy stent. <i>Journal of Materials Science and Technology</i> , 2019 , 35, 19-22	9.1	10

118	New strategy to delay food spoilage: Application of new food contact material with antibacterial function. <i>Journal of Materials Science and Technology</i> , 2021 , 70, 59-66	9.1	10
117	Ultra-high cycle fatigue behavior of a novel 1.9 GPa grade super-high-strength maraging stainless steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019 , 755, 50-56	5.3	9
116	Effect of deformation on precipitation hardening behavior of a maraging steel in the aging process. <i>Materials Characterization</i> , 2019 , 155, 109827	3.9	9
115	In Vitro Biocompatibility of a New High Nitrogen Nickel Free Austenitic Stainless Steel. <i>Key Engineering Materials</i> , 2007 , 342-343, 605-608	0.4	9
114	Molecular mechanisms of osteogenesis and antibacterial activity of Cu-bearing Ti alloy in a bone defect model with infection. <i>Journal of Orthopaedic Translation</i> , 2021 , 27, 77-89	4.2	9
113	Enoxacin-loaded Poly (lactic-co-glycolic acid) Coating on Porous Magnesium Scaffold as a Drug Delivery System: Antibacterial Properties and Inhibition of Osteoclastic Bone Resorption. <i>Journal of Materials Science and Technology</i> , 2016 , 32, 865-873	9.1	9
112	Surface Roughness of Cu-Bearing Stainless Steel Affects Its Contact-Killing Efficiency by Mediating the Interfacial Interaction with Bacteria. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 2303-2315	9.5	9
111	Corrosion Inhibition of X80 Steel in Simulated Marine Environment with <i>Marinobacter aquaeolei</i> . <i>Acta Metallurgica Sinica (English Letters)</i> , 2019 , 32, 1373-1384	2.5	8
110	Hot deformation behavior of Cu-bearing antibacterial titanium alloy. <i>Journal of Materials Science and Technology</i> , 2018 , 34, 1867-1875	9.1	8
109	Biological behaviour of human umbilical artery smooth muscle cell grown on nickel-free and nickel-containing stainless steel for stent implantation. <i>Scientific Reports</i> , 2016 , 6, 18762	4.9	8
108	Effect of Cold Deformation on the Friction/Wear Property of a Biomedical Nickel-Free High-Nitrogen Stainless Steel. <i>Acta Metallurgica Sinica (English Letters)</i> , 2016 , 29, 217-227	2.5	8
107	MgCu coating on Ti6Al4V alloy for orthopedic application. <i>Materials Letters</i> , 2018 , 233, 35-38	3.3	8
106	Evaluation of promoting effect of a novel Cu-bearing metal stent on endothelialization process from in vitro and in vivo studies. <i>Scientific Reports</i> , 2017 , 7, 17394	4.9	8
105	The impact toughness of a nitride-strengthened martensitic heat resistant steel. <i>Science China Technological Sciences</i> , 2012 , 55, 1858-1862	3.5	8
104	Facile fabrication of the zoledronate-incorporated coating on magnesium alloy for orthopaedic implants. <i>Journal of Orthopaedic Translation</i> , 2020 , 22, 2-6	4.2	8
103	Dynamic Continuous Cooling Transformation Behavior of A Novel Cu-bearing Pipeline Steel. <i>ISIJ International</i> , 2016 , 56, 2284-2289	1.7	8
102	Ce addition enhances the microbially induced corrosion resistance of Cu-bearing 2205 duplex stainless steel in presence of sulfate reducing bacteria. <i>Corrosion Science</i> , 2021 , 179, 109141	6.8	8
101	Enhancing Pitting Corrosion Resistance of Severely Cold-Worked High Nitrogen Austenitic Stainless Steel by Nitric Acid Passivation. <i>Journal of the Electrochemical Society</i> , 2019 , 166, C365-C374	3.9	7

100	In vitro and in vivo characterization of novel calcium phosphate and magnesium (CaP-Mg) bilayer coated titanium for implantation. <i>Surface and Coatings Technology</i> , 2019 , 374, 784-796	4.4	7
99	Effects of solution treatment on mechanical properties and degradation of Mg-2Zn-0.5Nd-0.5Zr alloy. <i>Materials Technology</i> , 2019 , 34, 592-601	2.1	7
98	In vitro degradation and biocompatibility evaluation of fully biobased thermoplastic elastomers consisting of poly(Emyrcene) and poly(l-lactide) as stent coating. <i>Polymer Degradation and Stability</i> , 2020 , 179, 109254	4.7	7
97	In vitro study of stimulation effect on endothelialization by a copper bearing cobalt alloy. <i>Journal of Biomedical Materials Research - Part A</i> , 2018 , 106, 561-569	5.4	7
96	Oxidation and tensile behavior of ferritic/martensitic steels after exposure to lead-bismuth eutectic. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016 , 670, 97-105	5.3	7
95	Study on the antibacterial mechanism of Cu-bearing titanium alloy in the view of materials science. <i>Materials Technology</i> , 2020 , 35, 11-20	2.1	7
94	Investigation of microbial corrosion inhibition of Cu-bearing 316L stainless steel in the presence of acid producing bacterium <i>Acidithiobacillus caldus</i> SM-1. <i>Journal of Materials Science and Technology</i> , 2021 , 64, 176-186	9.1	7
93	Antibacterial behavior and related mechanisms of martensitic Cu-bearing stainless steel evaluated by a mixed infection model of <i>Escherichia coli</i> and <i>Staphylococcus aureus</i> in vitro. <i>Journal of Materials Science and Technology</i> , 2021 , 62, 139-147	9.1	7
92	Effect of Cu on the passivity of Ti-Cu (x = 0, 3 and 5wt%) alloy in phosphate-buffered saline solution within the framework of PDM-II. <i>Electrochimica Acta</i> , 2021 , 386, 138466	6.7	7
91	Optimized antibacterial treatment for the Cu-bearing 420 stainless steel. <i>Materials Technology</i> , 2018 , 33, 699-708	2.1	6
90	Improvement of notch fatigue properties of ultra-high CM400 maraging steel through shot peening. <i>Journal of Materials Research</i> , 2017 , 32, 4424-4432	2.5	6
89	Optimising the torsional properties and corrosion resistance of biodegradable WE43 Mg alloy by ECAP and subsequent ageing. <i>Materials Technology</i> , 2020 , 35, 402-410	2.1	6
88	Improved corrosion resistance and biofilm inhibition ability of copper-bearing 304 stainless steel against oral microaerobic <i>Streptococcus mutans</i> . <i>Journal of Materials Science and Technology</i> , 2021 , 66, 112-120	9.1	6
87	Nitrogen-containing bisphosphonate-loaded micro-arc oxidation coating for biodegradable magnesium alloy pellets inhibits osteosarcoma through targeting of the mevalonate pathway. <i>Acta Biomaterialia</i> , 2021 , 121, 682-694	10.8	6
86	Preliminary study of adsorption behavior of bovine serum albumin (BSA) protein and its effect on antibacterial and corrosion property of Ti-3Cu alloy. <i>Journal of Materials Science and Technology</i> , 2021 , 80, 117-127	9.1	6
85	Hot Deformation Behavior of an Ultra-High-Strength Fe-Ni-Co-Based Maraging Steel. <i>Acta Metallurgica Sinica (English Letters)</i> , 2019 , 32, 1161-1172	2.5	5
84	Cu-bearing steel reduce inflammation after stent implantation. <i>Journal of Materials Science: Materials in Medicine</i> , 2015 , 26, 114	4.5	5
83	Lead-Bismuth Eutectic Corrosion Behaviors of Ferritic/Martensitic Steels in Low Oxygen Concentration Environment. <i>Oxidation of Metals</i> , 2015 , 84, 383-395	1.6	5

82	Precipitation behavior in a nitride-strengthened martensitic heat resistant steel during hot deformation. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015 , 639, 173-180	5.3	5
81	In vitro insights into the role of copper ions released from selective laser melted CoCrW-xCu alloys in the potential attenuation of inflammation and osteoclastogenesis. <i>Journal of Materials Science and Technology</i> , 2020 , 41, 56-67	9.1	5
80	Fabrication of biodegradable MgXCu(X=0, 0.1, 0.4, 0.7) coating on Ti6Al4V alloy with enhanced antibacterial property. <i>Materials Technology</i> , 2021 , 36, 179-188	2.1	5
79	Interfacial segregation and precipitation behavior of Cu-rich precipitates in Cu-bearing 316LN stainless steel after aging at different temperatures. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021 , 805, 140571	5.3	5
78	Understanding main factors controlling high cycle fatigue crack initiation and propagation of high strength maraging stainless steels with Ti addition. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021 , 805, 140589	5.3	5
77	Oxidation behavior of ferritic/martensitic steels in flowing supercritical water. <i>Journal of Materials Science and Technology</i> , 2021 , 64, 114-125	9.1	5
76	Anti-fibrotic function of Cu-bearing stainless steel for reducing recurrence of urethral stricture after stent implantation. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2018 , 106, 2019-2028	3.5	5
75	Cu-bearing stainless steel reduces cytotoxicity and crystals adhesion after ureteral epithelial cells exposing to calcium oxalate monohydrate. <i>Scientific Reports</i> , 2018 , 8, 14094	4.9	5
74	Biodegradable magnesium pins enhanced the healing of transverse patellar fracture in rabbits. <i>Bioactive Materials</i> , 2021 , 6, 4176-4185	16.7	5
73	Anti-infection mechanism of a novel dental implant made of titanium-copper (TiCu) alloy and its mechanism associated with oral microbiology. <i>Bioactive Materials</i> , 2022 , 8, 381-395	16.7	5
72	Enhancing general corrosion resistance of biomedical high nitrogen nickel-free stainless steel by water treatment. <i>Materials Letters</i> , 2019 , 251, 196-200	3.3	4
71	High nitrogen stainless steel drug-eluting stent - Assessment of pharmacokinetics and preclinical safety. <i>Bioactive Materials</i> , 2020 , 5, 779-786	16.7	4
70	A Ca-deficient hydroxyapatite (CDHA)/MgF bi-layer coating with unique nano-scale topography on biodegradable high-purity Mg. <i>Colloids and Surfaces B: Biointerfaces</i> , 2020 , 190, 110911	6	4
69	High-Temperature Oxidation Behavior of SIMP Steel at 800 °C. <i>Oxidation of Metals</i> , 2018 , 89, 49-60	1.6	4
68	Thermodynamic Calculation Study on Effect of Manganese on Stability of Austenite in High Nitrogen Stainless Steels. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2016 , 47, 3284-3288	2.3	4
67	Biodegradation behaviour of hydroxyapatite-containing self-sealing micro-arc-oxidation coating on pure Mg. <i>Surface Engineering</i> , 2021 , 37, 942-952	2.6	4
66	One-step electrodeposition synthesis of bisphosphonate loaded magnesium implant: A strategy to modulate drug release for osteoporotic fracture healing. <i>Journal of Materials Science and Technology</i> , 2021 , 78, 92-99	9.1	4
65	Anticoagulation and antibacterial functional coating on vascular implant interventional medical catheter. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2020 , 108, 2868-2877	3.5	3

64	A novel laminated metal composite with superior interfacial bonding composed of ultrahigh-strength maraging steel and 316L stainless steel. <i>Journal of Iron and Steel Research International</i> , 2020 , 27, 433-439	1.2	3
63	In vitro and in vivo studies on the biodegradable behavior and bone response of Mg ₆₉ Zn ₂₇ Ca ₄ metal glass for treatment of bone defect. <i>Journal of Materials Science and Technology</i> , 2019 , 35, 2254-2262	0.1	3
62	In vivo research on Cu-bearing ureteral stent. <i>Journal of Materials Science: Materials in Medicine</i> , 2019 , 30, 83	4.5	3
61	Biodegradable Metals for Orthopedic Applications 2017 , 275-309		3
60	An alternative magnesium-based root canal disinfectant: Preliminary study of its efficacy against <i>Enterococcus faecalis</i> and <i>Candida albicans</i> in vitro. <i>Progress in Natural Science: Materials International</i> , 2014 , 24, 441-445	3.6	3
59	Study of TiCu/TiCuN multilayer films with antibacterial activity. <i>Materials Technology</i> , 2020 , 35, 475-482	2.1	3
58	Effects of ECAP extrusion on the mechanical and biodegradable properties of an extruded Mg-1.5Zn-0.5Y-0.5Zr alloy. <i>Materials Technology</i> , 2020 , 1-8	2.1	3
57	Microstructural effects on mechanical properties and degradation behavior of MgTi alloy. <i>Materialia</i> , 2021 , 16, 101089	3.2	3
56	Passivation potential regulating corrosion resistance and antibacterial property of 316L-Cu stainless steel in different simulated body fluids. <i>Materials Technology</i> , 2021 , 36, 118-130	2.1	3
55	Stability of passive film and antibacterial durability of Cu-bearing L605 alloy in simulated physiological solutions. <i>Rare Metals</i> , 2021 , 40, 1126-1133	5.5	3
54	Study on W-rich M ₃ B ₂ borides in a 9Cr ₃ W ₃ CoB heat-resistant steel. <i>Journal of Materials Research and Technology</i> , 2021 , 10, 594-604	5.5	3
53	On Laves phase in a 9Cr ₃ W ₃ CoB martensitic heat resistant steel when aged at high temperatures. <i>Journal of Materials Science and Technology</i> , 2021 , 85, 129-140	9.1	3
52	Biocompatibility of surface-modified magnesium and magnesium alloys 2015 , 231-260		2
51	Study on Microbiologically Influenced Corrosion Resistance of Stainless Steels With Weld Seams. <i>Frontiers in Materials</i> , 2020 , 7,	4	2
50	Hot Deformation Behavior and Processing Map of a Cu-Bearing 2205 Duplex Stainless Steel. <i>Acta Metallurgica Sinica (English Letters)</i> , 2019 , 32, 1537-1548	2.5	2
49	The role of prismatic slip dependent dynamic recrystallization in the fabrication of a submicrocrystalline Ti-Cu alloy with high thermostability. <i>Materials and Design</i> , 2020 , 188, 108475	8.1	2
48	Influence of Strontium phosphate Coating on the Degradation of Physical Vapor Deposition Sprayed Mg Coating on Ti6Al4V Substrate to Promote Bone Tissue Healing. <i>Frontiers in Materials</i> , 2020 , 7,	4	2
47	An Antibacterial Strategy of Mg-Cu Bone Grafting in Infection-Mediated Periodontics. <i>BioMed Research International</i> , 2020 , 2020, 7289208	3	2

46	Preparation and in vitro degradation characterization of Si-containing coating on AZ31B alloy. <i>Materials Technology</i> , 2016 , 31, 828-835	2.1	2
45	Enhancement of strength and ductility by Cu-rich precipitation in Cu-bearing 304L austenitic stainless steel. <i>Materials Letters</i> , 2020 , 272, 127815	3.3	2
44	Microstructure, mechanical and corrosion properties of Mg ₂ ZnNd alloy with different accumulative area reduction after room-temperature drawing. <i>Rare Metals</i> , 2021 , 40, 897-907	5.5	2
43	Microstructural Evolution and Biodegradation Response of Mg ₂ Zn _{0.5} Nd Alloy During Tensile and Compressive Deformation. <i>Acta Metallurgica Sinica (English Letters)</i> , 2021 , 34, 834-844	2.5	2
42	Copper-Containing Alloy as Immunoregulatory Material in Bone Regeneration via Mitochondrial Oxidative Stress. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020 , 8, 620629	5.8	2
41	Transfer from M ₃ B ₂ boride to BN nitride in 9Cr3W3CoB martensitic heat-resistant steel. <i>Journal of Materials Research and Technology</i> , 2021 , 13, 513-523	5.5	2
40	Study the existing form of copper (p-type oxide/segregation) and its release mechanism from the passive film of Ti-7Cu alloy. <i>Corrosion Science</i> , 2021 , 190, 109693	6.8	2
39	Promoting osteointegration effect of Cu-alloyed titanium in ovariectomized rats.. <i>International Journal of Energy Production and Management</i> , 2022 , 9, rbac011	5.3	2
38	In vitro evaluation of cell compatibility and hemocompatibility of a Cu-bearing titanium alloy. <i>International Journal of Computational Materials Science and Surface Engineering</i> , 2016 , 6, 228	0.4	1
37	Investigation on Corrosion Resistance of Welded Cu-Bearing 304L Stainless Steel Against <i>Pseudomonas aeruginosa</i> . <i>Frontiers in Materials</i> , 2020 , 7,	4	1
36	Introduction to Heat-Resistant Steels. <i>Engineering Materials</i> , 2015 , 1-24	0.4	1
35	Enhanced initial biodegradation resistance of the biomedical Mg-Cu alloy by surface nanomodification. <i>Journal of Magnesium and Alloys</i> , 2022 ,	8.8	1
34	Inhibition effect on microbologically influenced corrosion of Ti-6Al-4V-5Cu alloy against marine bacterium <i>Pseudomonas aeruginosa</i> . <i>Journal of Materials Science and Technology</i> , 2021 , 109, 282-282	9.1	1
33	Novel Cu-bearing stainless steel: A promising food preservation material. <i>Journal of Materials Science and Technology</i> , 2022 , 113, 246-252	9.1	1
32	Enhancing mechanical property and corrosion resistance of Mg ₂ Zn-Nd alloy wire by a combination of SPD techniques, extrusion and hot drawing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022 , 829, 142058	5.3	1
31	Creep of Heat-Resistant Steels. <i>Engineering Materials</i> , 2015 , 163-189	0.4	1
30	Enhancing General Corrosion Resistance of Biomedical High Nitrogen Nickel-Free Stainless Steel by Nitric Acid Passivation. <i>Acta Metallurgica Sinica (English Letters)</i> , 2020 , 33, 307-312	2.5	1
29	Influence of microstructure modification on corrosion resistance of friction stir processing biodegradable Mg-Zn-Nd alloy. <i>Materials Technology</i> , 2020 , 1-6	2.1	1

28	Optimized Mechanical Properties, Corrosion Resistance and Bactericidal Ability of Ti-15Zr-xCu Biomedical Alloys During Aging Treatment. <i>Acta Metallurgica Sinica (English Letters)</i> ,1	2.5	1
27	Effect of copper content on the biodegradation behavior of Fe-Mn-C alloy system. <i>Materials Technology</i> ,1-11	2.1	1
26	Effect of tempering temperature on the microstructure, corrosion resistance, and antibacterial properties of Cu-bearing martensitic stainless steel. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 2021 , 72, 1668	1.6	1
25	Cytotoxicity of Ti ₆ Al ₄ V ₃ Cu Alloy to MC3T3-E1 Cells. <i>Acta Metallurgica Sinica (English Letters)</i> , 2021 , 34, 694-700	2.5	1
24	Improvement of mechanical property and corrosion resistance of Mg-Zn-Nd alloy by bi-direction drawing. <i>Journal of Materials Science and Technology</i> , 2021 , 81, 88-96	9.1	1
23	Biocompatibility and Cu ions release kinetics of copper-bearing titanium alloys. <i>Journal of Materials Science and Technology</i> , 2021 , 95, 237-248	9.1	1
22	Effect of Microstructure and Crystallographic Orientation Characteristics on Low Temperature Toughness and Fracture Behavior of Pipeline Steels. <i>Journal of Materials Research and Technology</i> , 2022 , 17, 3172-3172	5.5	0
21	Preliminary study on biocorrosion inhibition effect of Ti-5Cu alloy against marine bacterium <i>Pseudomonas aeruginosa</i> . <i>Applied Surface Science</i> , 2022 , 578, 151981	6.7	0
20	Macroporous and Antibacterial Hydrogels Enabled by Incorporation of Mg-Cu Alloy Particles for Accelerating Skin Wound Healing. <i>Acta Metallurgica Sinica (English Letters)</i> ,1	2.5	0
19	The effect of high temperature aging on the corrosion resistance, mechanical property and antibacterial activity of Cu-2205 DSS.. <i>Colloids and Surfaces B: Biointerfaces</i> , 2021 , 211, 112309	6	0
18	Study on mechanical behavior of Cu-bearing antibacterial titanium alloy implant. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2022 , 125, 104926	4.1	0
17	Corrosion resistance of Cu-bearing 316L stainless steel tuned by various passivation potentials. <i>Surface and Interface Analysis</i> , 2021 , 53, 592-602	1.5	0
16	Anticancer Effect of Biodegradable Magnesium on Hepatobiliary Carcinoma: An and Study. <i>ACS Biomaterials Science and Engineering</i> , 2021 , 7, 2774-2782	5.5	0
15	Antibacterial mechanism of Cu-bearing 430 ferritic stainless steel. <i>Rare Metals</i> , 2021 , 1-11	5.5	0
14	Biosafety and biodegradation studies of AZ31B magnesium alloy carotid artery stent in vitro and in vivo. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2022 , 110, 239-248	3.5	0
13	Strength, strain capacity and toughness of five dual-phase pipeline steels. <i>Journal of Iron and Steel Research International</i> , 2021 , 28, 752-761	1.2	0
12	Design and Development of Antibacterial Metal Implants. <i>Design Science and Innovation</i> , 2022 , 163-175	0.2	0
11	Mitigation of microbial corrosion by Cu addition to X65 pipeline steel by <i>Pseudomonas aeruginosa</i> MCCC 1A00099.. <i>Archives of Microbiology</i> , 2022 , 204, 299	3	0

10	Fabrication of ultrafine-grained Ti-15Zr-xCu alloys through martensite decompositions under thermomechanical coupling conditions. <i>Journal of Materials Science and Technology</i> , 2022 , 127, 19-28	9.1	0
9	Microstructural Stability of Heat-Resistant Steels. <i>Engineering Materials</i> , 2015 , 135-161	0.4	
8	Conventional Heat-Resistant Steels. <i>Engineering Materials</i> , 2015 , 27-43	0.4	
7	Inhibition efficiency of 304-Cu stainless steel against oral bacterial biofilm.. <i>Journal of Applied Biomaterials and Functional Materials</i> , 2022 , 20, 22808000211065259	1.8	
6	In Vitro Cytocompatibility and Osteogenic Potential of Biodegradable MgBr Alloys 2018 , 425-436		
5	Hot Deformation of Heat-Resistant Steels. <i>Engineering Materials</i> , 2015 , 191-215	0.4	
4	Microstructures, Corrosion and Mechanical Properties of MgBi Alloys as Biodegradable Implant Materials. <i>Minerals, Metals and Materials Series</i> , 2019 , 151-157	0.3	
3	Enhanced Bio-corrosion Resistance by Cu Alloying in a Micro-alloyed Pipeline Steel. <i>Acta Metallurgica Sinica (English Letters)</i> ,1	2.5	
2	Study of the Osteoimmunomodulatory Properties of Curcumin-Modified Copper-Bearing Titanium. <i>Molecules</i> , 2022 , 27, 3205	4.8	
1	Study of TiCuN/ZrN multilayer coatings with adjustable combination properties deposited on TiCu alloy. <i>Vacuum</i> , 2022 , 111202	3.7	