Hendra Hermawan

List of Publications by Year
in descending order

93 papers	4,144 citations	147801 31 h-index	118850 62 g-index
97 all docs	97 docs citations	97 times ranked	3525 citing authors

#	Article	IF	Citations
1	Developments in metallic biodegradable stentsâ˜†. Acta Biomaterialia, 2010, 6, 1693-1697.	8.3	509
2	Feâ€“Mn alloys for metallic biodegradable stents: Degradation and cell viability studiesâ˜†. Acta Biomaterialia, 2010, 6, 1852-1860.	8.3	291
3	Ironâ€“manganese: new class of metallic degradable biomaterials prepared by powder metallurgy. Powder Metallurgy, 2008, 51, 38-45.	1.7	233
4	Design of a pseudo-physiological test bench specific to the development of biodegradable metallic biomaterials. Acta Biomaterialia, 2008, 4, 284-295.	8.3	221
5	Updates on the research and development of absorbable metals for biomedical applications. Progress in Biomaterials, 2018, 7, 93-110.	4.5	182
6	Current status and perspectives of zinc-based absorbable alloys for biomedical applications. Acta Biomaterialia, 2019, 97, 1-22.	8.3	179
7	Porous Biodegradable Metals for Hard Tissue Scaffolds: A Review. International Journal of Biomaterials, 2012, 2012, 1-10.	2.4	172
8	Cytotoxicity evaluation of biodegradable Znâ€“3Mg alloy toward normal human osteoblast cells. Materials Science and Engineering C, 2015, 49, 560-566.	7.3	166
9	Degradable metallic biomaterials: Design and development of Feâ€“Mn alloys for stents. Journal of Biomedical Materials Research - Part A, 2010, 93A, 1-11.	4.0	151
10	Bioinspired surface functionalization of metallic biomaterials. Journal of the Mechanical Behavior of Biomedical Materials, 2018, 77, 90-105.	3.1	146
11	Assessing the biocompatibility of degradable metallic materials: State-of-the-art and focus on the potential of genetic regulationâ˜†. Acta Biomaterialia, 2010, 6, 1800-1807.	8.3	130
12	Metals for Biomedical Applications. , 0, , .		105
13	The effect of hydrogen gas evolution of magnesium implant on the postimplantation mortality of rats. Journal of Orthopaedic Translation, 2016, 5, 9-15.	3.9	102
14	In vitro and in vivo degradation evaluation of novel iron-bioceramic composites for bone implant applications. Materials Science and Engineering C, 2014, 36, 336-344.	7.3	89
15	Controlling the degradation kinetics of porous iron by poly(lactic-co-glycolic acid) infiltration for use as temporary medical implants. Scientific Reports, 2015, 5, 11194.	3.3	78
16	Influence of thermal treatment on microstructure, mechanical and degradation properties of Znâ€“3Mg alloy as potential biodegradable implant material. Materials and Design, 2015, 85, 431-437.	7.0	76
17	Polydopamine as an intermediate layer for silver and hydroxyapatite immobilisation on metallic biomaterials surface. Materials Science and Engineering C, 2013, 33, 4715-4724.	7.3	73
18	Process of prototyping coronary stents from biodegradable Feâ€“Mn alloys. Acta Biomaterialia, 2013, 9, 8585-8592.	8.3	65

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19	Novel antibacterial biodegradable Fe-Mn-Ag alloys produced by mechanical alloying. Materials Science and Engineering C, 2018, 88, 88-94.	7.3	64
20	Processing of Zn-3Mg alloy by equal channel angular pressing for biodegradable metal implants. Journal of King Saud University - Science, 2017, 29, 455-461.	3.5	58
21	Development of Degradable Fe-35Mn Alloy for Biomedical Application. Advanced Materials Research, 2007, 15-17, 107-112.	0.3	56
22	Improvement of microstructure, mechanical and corrosion properties of biomedical Ti-Mn alloys by Mo addition. Materials and Design, 2016, 110, 414-424.	7.0	54
23	Biodegradable Metals. SpringerBriefs in Materials, 2012, , .	0.3	52
24	Dynamic degradation of porous magnesium under a simulated environment of human cancellous bone. Corrosion Science, 2016, 112, 495-506.	6.6	44
25	Potential bioactive coating system for high-performance absorbable magnesium bone implants. Bioactive Materials, 2022, 12, 42-63.	15.6	42
26	Degradation and inÂvitro cellâ€“material interaction studies on hydroxyapatite-coated biodegradable porous iron for hard tissue scaffolds. Journal of Orthopaedic Translation, 2014, 2, 177-184.	3.9	40
27	Degradation Behaviour of Metallic Biomaterials for Degradable Stents. Advanced Materials Research, 2007, 15-17, 113-118.	0.3	39
28	Design and characterization of nano and bimodal structured biodegradable Fe-Mn-Ag alloy with accelerated corrosion rate. Journal of Alloys and Compounds, 2018, 767, 955-965.	5.5	39
29	Evidences of <i>in vivo</i> bioactivity of Feâ€bioceramic composites for temporary bone implants. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2015, 103, 1354-1365.	3.4	38
30	Biodegradable Metal Stents: A Focused Review on Materials and Clinical Studies. Journal of Biomaterials and Tissue Engineering, 2014, 4, 868-874.	0.1	38
31	Biomaterials in Orthopaedics. Advanced Structured Materials, 2016, , 161-181.	0.5	36
32	Investigation on Mechanical Behavior of Biodegradable Iron Foams under Different Compression Test Conditions. Metals, 2017, 7, 202.	2.3	36
33	Development and characterization of silver containing calcium phosphate coatings on pure iron foam intended for bone scaffold applications. Materials and Design, 2018, 148, 124-134.	7.0	36
34	In Vitro Degradation of Absorbable Zinc Alloys in Artificial Urine. Materials, 2019, 12, 295.	2.9	32
35	Triple-layered PLGA/nanoapatite/lauric acid graded composite membrane for periodontal guided bone regeneration. Materials Science and Engineering C, 2014, 43, 253-263.	7.3	28
36	Biodegradable Metals: State of the Art. SpringerBriefs in Materials, 2012, , 13-22.	0.3	27

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37	Immobilization of antibacterial chlorhexidine on stainless steel using crosslinking polydopamine film: Towards infection resistant medical devices. Colloids and Surfaces B: Biointerfaces, 2016, 145, 130-139.	5.0	27
38	In-Vivo Corrosion Characterization and Assessment of Absorbable Metal Implants. Coatings, 2019, 9, 282.	2.6	26
39	Structure, degradation, drug release and mechanical properties relationships of iron-based drug eluting scaffolds: The effects of PLGA. Materials and Design, 2018, 160, 203-217.	7.0	23
40	Degradation behavior of biodegradable Fe35Mn alloy stents. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2015, 103, 572-577.	3.4	21
41	Structureâ€"property relationships of ironâ€"hydroxyapatite ceramic matrix nanocomposite fabricated using mechanosynthesis method. Materials Science and Engineering C, 2015, 51, 294-299.	7.3	21
42	In Vitro Degradation, Hemocompatibility, and Cytocompatibility of Nanostructured Absorbable Feâ€"Mnâ€"Ag Alloys for Biomedical Application. ACS Biomaterials Science and Engineering, 2020, 6, 2094-2106.	5.2	20
43	Partially degradable friction-welded pure iron-stainless steel 316L bone pin. , 2015, 103, 31-38.		17
44	In vitro degradation and cell viability assessment of Znâ€"3Mg alloy for biodegradable bone implants. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2015, 229, 335-342.	1.8	15
45	Gene expression profile of mouse fibroblasts exposed to a biodegradable iron alloy for stents. Acta Biomaterialia, 2013, 9, 8746-8753.	8.3	14
46	Drug-eluting coating of ginsenoside Rg1 and Re incorporated poly(lactic- co -glycolic acid) on stainless steel 316L: Physicochemical and drug release analyses. International Journal of Pharmaceutics, 2016, 515, 460-466.	5.2	13
47	The influence of new wet synthesis route on the morphology, crystallinity and thermal stability of multiple ions doped nanoapatite. Ceramics International, 2014, 40, 1001-1012.	4.8	12
48	Biological Assessment of Znâ€"Based Absorbable Metals for Ureteral Stent Applications. Materials, 2019, 12, 3325.	2.9	12
49	Effect of Mo addition on the pitting resistance of TiMn alloys in Hanksâ€™ solution. Journal of Alloys and Compounds, 2021, 871, 159582.	5.5	12
50	Synthesis and Development of Polymers-Infiltrated Porous Iron for Temporary Medical Implants: A Preliminary Result. Advanced Materials Research, 0, 686, 331-335.	0.3	11
51	Review on Zn-Based Alloys as Potential Biodegradable Medical Devices Materials. Applied Mechanics and Materials, 0, 776, 277-281.	0.2	11
52	Degradable metallic biomaterials for cardiovascular applications. , 2010, , 379-404.		10
53	Influence of Heat Treatment Cooling Mediums on the Degradation Property of Biodegradable Zn-3Mg Alloy. Advanced Materials Research, 0, 845, 7-11.	0.3	10
54	Degradable Biomaterials for Temporary Medical Implants. Advanced Structured Materials, 2016, , 127-160.	0.5	10

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55	Antibacterial efficacy of triple-layered poly(lactic-<i>co</i>-glycolic) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 747 Td (acid Materials Journal, 2017, 36, 260-265.	1.8	10
56	Monitoring degradation products and metal ions inÂvivo. , 2017, , 19-44.		9
57	Electrochemical Corrosion Behavior of Fe3Al/TiC and Fe3Al-Cr/TiC Coatings Prepared by HVOF in NaCl Solution. Metals, 2019, 9, 437.	2.3	9
58	Niobium addition improves the corrosion resistance of TiHfZrNbx high-entropy alloys in Hanksâ€™ solution. Electrochimica Acta, 2022, 424, 140651.	5.2	9
59	Biodegradable Metals for Cardiovascular Applications. SpringerBriefs in Materials, 2012, , 23-37.	0.3	8
60	Mechanical and corrosion properties of partially degradable bone screws made of pure iron and stainless steel 316L by friction welding. Science China Materials, 2018, 61, 593-606.	6.3	8
61	Monitoring magnesium degradation using microdialysis and fabric-based biosensors. Science China Materials, 2018, 61, 643-651.	6.3	7
62	Nephelium lappaceum Extract as an Organic Inhibitor to Control the Corrosion of Carbon Steel Weldment in the Acidic Environment. Sustainability, 2021, 13, 12135.	3.2	7
63	New generation of medical implants: Metallic biodegradable coronary stent. , 2011, , .		6
64	<i>In Vitro</i> Cytotoxicity and <i>In Vivo</i> Tissue Response Study of Foreign Bodies Iron Based Materials. Advanced Materials Research, 2015, 1112, 449-452.	0.3	6
65	Optimum Processing of Absorbable Carbon Nanofiber Reinforced Mgâ€"Zn Composites Based on Two-Level Factorial Design. Metals, 2021, 11, 278.	2.3	5
66	Interaction between fibroblast cells and porous iron-based biodegradable metals. , 2012, , .		4
67	Structure and Properties of Biomaterials. Advanced Structured Materials, 2016, , 1-22.	0.5	4
68	Friction welding of AZ31-SS316L for partially-degradable orthopaedic pins. IOP Conference Series: Materials Science and Engineering, 0, 532, 012014.	0.6	4
69	Effectiveness of a fish scales-derived chitosan coating for corrosion protection of carbon steel. Egyptian Journal of Petroleum, 2022, 31, 25-31.	2.6	4
70	Introduction to Metallic Biomaterials. SpringerBriefs in Materials, 2012, , 1-11.	0.3	3
71	Peripheral white blood cells profile of biodegradable metal implant in mice animal model. AIP Conference Proceedings, 2015, , .	0.4	3
72	Indonesian Perspective on Biomaterials and Medical Devices. Advanced Structured Materials, 2016, , 235-242.	0.5	3

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73	Naturally Derived Biomaterials and Its Processing. Advanced Structured Materials, 2016, , 23-39.	0.5	3
74	Susceptibility to Stress Corrosion Cracking of Fe-35Mn Alloy under a Pseudo-Physiological Condition. Applied Mechanics and Materials, 0, 284-287, 216-219.	0.2	2
75	Surface Characterization of Biomimetic Hydroxyapatite-Silver Functionalized on Polydopamine Film. Advanced Materials Research, 2015, 1125, 395-400.	0.3	2
76	Synthesis, Characterization, and Antibacterial Evaluation of a Cost-Effective Endodontic Sealer Based on Tricalcium Silicate-White Portland Cement. Materials, 2021, 14, 417.	2.9	2
77	Post-corrosion mechanical properties of absorbable open cell iron foams with hollow struts. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 117, 104413.	3.1	2
78	Patents on Metallic Biodegradable Stents. Recent Patents on Materials Science, 2010, 3, 140-145.	0.5	2
79	Metallic Biodegradable Coronary Stent: Degradation Study. SpringerBriefs in Materials, 2012, , 49-57.	0.3	1
80	Can the Current Stent Manufacturing Process be Used for Making Metallic Biodegradable Stents. Advanced Materials Research, 2013, 746, 416-421.	0.3	1
81	Effect of Heat Treatment on Microstructure Homogeneity of Zn-3Mg Alloy. Applied Mechanics and Materials, 0, 493, 777-782.	0.2	1
82	Assessment of prolonged tissue response to porousiron implant by radiodensity approach. , 2015, , .		1
83	Absorbable metals for cardiovascular applications. , 2019, , 523-543.		1
84	Monitoring system for degradation assessment of biodegradable metals using microdialysis and enzymatic-spectrophotometric analysis. , 2012, , .		0
85	Metallic Biodegradable Coronary Stent: Materials Development. SpringerBriefs in Materials, 2012, , 39-48.	0.3	0
86	Chemical and Thermal Stability of Multiple Ions Doped Non-Stoichiometric Nanoapatite Heat-Treated in CO₂ and Air Atmospheres. Advanced Materials Research, 0, 925, 77-81.	0.3	0
87	The Effect of TiCl₄ and Chitosan Concentration on the Coating of TiO₂ on Iron Foam Substrate by Self-Assembled Monolayer Method. Applied Mechanics and Materials, 2014, 660, 265-269.	0.2	0
88	Antibacterial Properties of Guided Bone Regeneration Membrane for Periodontal Applications. Applied Mechanics and Materials, 2014, 606, 47-50.	0.2	0
89	Radiography Study of Iron-Based Foreign Body Material Degradation at Different Implantation Site in Mice. Advanced Materials Research, 2015, 1112, 466-469.	0.3	0
90	Influence of homogenization treatment on the degradation behavior of Znâ€“3â€‰Mg alloy in simulated body fluid solution. Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, 2016, 230, 615-619.	1.1	0

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91	Systemic Assessment of Calcium and Phosphorus Level after Implantation of Porous Iron in Rats. IOP Conference Series: Materials Science and Engineering, 2017, 214, 012019.	0.6	0
92	Special Issue â€œAbsorbable Metals for Biomedical Applicationsâ€• Materials, 2021, 14, 3835.	2.9	0
93	Patents on Metallic Biodegradable Stents. Recent Patents on Materials Science, 2010, 3, 140-145.	0.5	0