

# Hendra Hermawan

## List of Publications by Year in descending order

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Version: 2024-02-01

93  
papers

4,144  
citations

168829

31  
h-index

134545

62  
g-index

97  
all docs

97  
docs citations

97  
times ranked

3864  
citing authors

#	ARTICLE	IF	CITATIONS
1	Potential bioactive coating system for high-performance absorbable magnesium bone implants. <i>Bioactive Materials</i> , 2022, 12, 42-63.	8.6	42
2	Effectiveness of a fish scales-derived chitosan coating for corrosion protection of carbon steel. <i>Egyptian Journal of Petroleum</i> , 2022, 31, 25-31.	1.2	4
3	Niobium addition improves the corrosion resistance of TiHfZrNb <sub>x</sub> high-entropy alloys in Hank's™ solution. <i>Electrochimica Acta</i> , 2022, 424, 140651.	2.6	9
4	Synthesis, Characterization, and Antibacterial Evaluation of a Cost-Effective Endodontic Sealer Based on Tricalcium Silicate-White Portland Cement. <i>Materials</i> , 2021, 14, 417.	1.3	2
5	Optimum Processing of Absorbable Carbon Nanofiber Reinforced Mg-Zn Composites Based on Two-Level Factorial Design. <i>Metals</i> , 2021, 11, 278.	1.0	5
6	Post-corrosion mechanical properties of absorbable open cell iron foams with hollow struts. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2021, 117, 104413.	1.5	2
7	Special Issue "Absorbable Metals for Biomedical Applications". <i>Materials</i> , 2021, 14, 3835.	1.3	0
8	Effect of Mo addition on the pitting resistance of TiMn alloys in Hank's™ solution. <i>Journal of Alloys and Compounds</i> , 2021, 871, 159582.	2.8	12
9	Nephelium lappaceum Extract as an Organic Inhibitor to Control the Corrosion of Carbon Steel Weldment in the Acidic Environment. <i>Sustainability</i> , 2021, 13, 12135.	1.6	7
10	In Vitro Degradation, Hemocompatibility, and Cytocompatibility of Nanostructured Absorbable Fe-Mn-Ag Alloys for Biomedical Application. <i>ACS Biomaterials Science and Engineering</i> , 2020, 6, 2094-2106.	2.6	20
11	Current status and perspectives of zinc-based absorbable alloys for biomedical applications. <i>Acta Biomaterialia</i> , 2019, 97, 1-22.	4.1	179
12	Biological Assessment of Zn-Based Absorbable Metals for Ureteral Stent Applications. <i>Materials</i> , 2019, 12, 3325.	1.3	12
13	Absorbable metals for cardiovascular applications. , 2019, , 523-543.		1
14	Electrochemical Corrosion Behavior of Fe <sub>3</sub> Al/TiC and Fe <sub>3</sub> Al-Cr/TiC Coatings Prepared by HVOF in NaCl Solution. <i>Metals</i> , 2019, 9, 437.	1.0	9
15	In-Vivo Corrosion Characterization and Assessment of Absorbable Metal Implants. <i>Coatings</i> , 2019, 9, 282.	1.2	26
16	In Vitro Degradation of Absorbable Zinc Alloys in Artificial Urine. <i>Materials</i> , 2019, 12, 295.	1.3	32
17	Monitoring magnesium degradation using microdialysis and fabric-based biosensors. <i>Science China Materials</i> , 2018, 61, 643-651.	3.5	7
18	Mechanical and corrosion properties of partially degradable bone screws made of pure iron and stainless steel 316L by friction welding. <i>Science China Materials</i> , 2018, 61, 593-606.	3.5	8

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19	Development and characterization of silver containing calcium phosphate coatings on pure iron foam intended for bone scaffold applications. <i>Materials and Design</i> , 2018, 148, 124-134.	3.3	36
20	Novel antibacterial biodegradable Fe-Mn-Ag alloys produced by mechanical alloying. <i>Materials Science and Engineering C</i> , 2018, 88, 88-94.	3.8	64
21	Bioinspired surface functionalization of metallic biomaterials. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2018, 77, 90-105.	1.5	146
22	Structure, degradation, drug release and mechanical properties relationships of iron-based drug eluting scaffolds: The effects of PLGA. <i>Materials and Design</i> , 2018, 160, 203-217.	3.3	23
23	Updates on the research and development of absorbable metals for biomedical applications. <i>Progress in Biomaterials</i> , 2018, 7, 93-110.	1.8	182
24	Design and characterization of nano and bimodal structured biodegradable Fe-Mn-Ag alloy with accelerated corrosion rate. <i>Journal of Alloys and Compounds</i> , 2018, 767, 955-965.	2.8	39
25	Processing of Zn-3Mg alloy by equal channel angular pressing for biodegradable metal implants. <i>Journal of King Saud University - Science</i> , 2017, 29, 455-461.	1.6	58
26	Monitoring degradation products and metal ions in vivo. , 2017, , 19-44.		9
27	Investigation on Mechanical Behavior of Biodegradable Iron Foams under Different Compression Test Conditions. <i>Metals</i> , 2017, 7, 202.	1.0	36
28	Antibacterial efficacy of triple-layered poly(lactic-co-glycolic) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 387 Td (acid)/nanoa Materials Journal, 2017, 36, 260-265.	0.8	10
29	Systemic Assessment of Calcium and Phosphorus Level after Implantation of Porous Iron in Rats. <i>IOP Conference Series: Materials Science and Engineering</i> , 2017, 214, 012019.	0.3	0
30	Structure and Properties of Biomaterials. <i>Advanced Structured Materials</i> , 2016, , 1-22.	0.3	4
31	Indonesian Perspective on Biomaterials and Medical Devices. <i>Advanced Structured Materials</i> , 2016, , 235-242.	0.3	3
32	Biomaterials in Orthopaedics. <i>Advanced Structured Materials</i> , 2016, , 161-181.	0.3	36
33	Dynamic degradation of porous magnesium under a simulated environment of human cancellous bone. <i>Corrosion Science</i> , 2016, 112, 495-506.	3.0	44
34	Improvement of microstructure, mechanical and corrosion properties of biomedical Ti-Mn alloys by Mo addition. <i>Materials and Design</i> , 2016, 110, 414-424.	3.3	54
35	Drug-eluting coating of ginsenoside Rg1 and Re incorporated poly(lactic-co-glycolic acid) on stainless steel 316L: Physicochemical and drug release analyses. <i>International Journal of Pharmaceutics</i> , 2016, 515, 460-466.	2.6	13
36	Immobilization of antibacterial chlorhexidine on stainless steel using crosslinking polydopamine film: Towards infection resistant medical devices. <i>Colloids and Surfaces B: Biointerfaces</i> , 2016, 145, 130-139.	2.5	27

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37	Degradable Biomaterials for Temporary Medical Implants. <i>Advanced Structured Materials</i> , 2016, , 127-160.	0.3	10
38	Naturally Derived Biomaterials and Its Processing. <i>Advanced Structured Materials</i> , 2016, , 23-39.	0.3	3
39	Influence of homogenization treatment on the degradation behavior of Zn-3Mg alloy in simulated body fluid solution. <i>Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications</i> , 2016, 230, 615-619.	0.7	0
40	The effect of hydrogen gas evolution of magnesium implant on the postimplantation mortality of rats. <i>Journal of Orthopaedic Translation</i> , 2016, 5, 9-15.	1.9	102
41	Surface Characterization of Biomimetic Hydroxyapatite-Silver Functionalized on Polydopamine Film. <i>Advanced Materials Research</i> , 2015, 1125, 395-400.	0.3	2
42	Peripheral white blood cells profile of biodegradable metal implant in mice animal model. <i>AIP Conference Proceedings</i> , 2015, , .	0.3	3
43	<i>In Vitro</i> Cytotoxicity and <i>In Vivo</i> Tissue Response Study of Foreign Bodies Iron Based Materials. <i>Advanced Materials Research</i> , 2015, 1112, 449-452.	0.3	6
44	Radiography Study of Iron-Based Foreign Body Material Degradation at Different Implantation Site in Mice. <i>Advanced Materials Research</i> , 2015, 1112, 466-469.	0.3	0
45	Evidences of <i>in vivo</i> bioactivity of Fe-bioceramic composites for temporary bone implants. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2015, 103, 1354-1365.	1.6	38
46	In vitro degradation and cell viability assessment of Zn-3Mg alloy for biodegradable bone implants. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2015, 229, 335-342.	1.0	15
47	Assessment of prolonged tissue response to porous iron implant by radiodensity approach. , 2015, , .		1
48	Degradation behavior of biodegradable Fe35Mn alloy stents. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2015, 103, 572-577.	1.6	21
49	Cytotoxicity evaluation of biodegradable Zn-3Mg alloy toward normal human osteoblast cells. <i>Materials Science and Engineering C</i> , 2015, 49, 560-566.	3.8	166
50	Controlling the degradation kinetics of porous iron by poly(lactic-co-glycolic acid) infiltration for use as temporary medical implants. <i>Scientific Reports</i> , 2015, 5, 11194.	1.6	78
51	Influence of thermal treatment on microstructure, mechanical and degradation properties of Zn-3Mg alloy as potential biodegradable implant material. <i>Materials and Design</i> , 2015, 85, 431-437.	3.3	76
52	Structure-property relationships of iron-hydroxyapatite ceramic matrix nanocomposite fabricated using mechanosynthesis method. <i>Materials Science and Engineering C</i> , 2015, 51, 294-299.	3.8	21
53	Partially degradable friction-welded pure iron-stainless steel 316L bone pin. , 2015, 103, 31-38.		17
54	The Effect of TiCl <sub>4</sub> and Chitosan Concentration on the Coating of TiO <sub>2</sub> on Iron Foam Substrate by Self-Assembled Monolayer Method. <i>Applied Mechanics and Materials</i> , 2014, 660, 265-269.	0.2	0

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55	Degradation and in vitro cell-material interaction studies on hydroxyapatite-coated biodegradable porous iron for hard tissue scaffolds. <i>Journal of Orthopaedic Translation</i> , 2014, 2, 177-184.	1.9	40
56	Antibacterial Properties of Guided Bone Regeneration Membrane for Periodontal Applications. <i>Applied Mechanics and Materials</i> , 2014, 606, 47-50.	0.2	0
57	In vitro and in vivo degradation evaluation of novel iron-bioceramic composites for bone implant applications. <i>Materials Science and Engineering C</i> , 2014, 36, 336-344.	3.8	89
58	The influence of new wet synthesis route on the morphology, crystallinity and thermal stability of multiple ions doped nanoapatite. <i>Ceramics International</i> , 2014, 40, 1001-1012.	2.3	12
59	Triple-layered PLGA/nanoapatite/lauric acid graded composite membrane for periodontal guided bone regeneration. <i>Materials Science and Engineering C</i> , 2014, 43, 253-263.	3.8	28
60	Biodegradable Metal Stents: A Focused Review on Materials and Clinical Studies. <i>Journal of Biomaterials and Tissue Engineering</i> , 2014, 4, 868-874.	0.0	38
61	Process of prototyping coronary stents from biodegradable Fe-Mn alloys. <i>Acta Biomaterialia</i> , 2013, 9, 8585-8592.	4.1	65
62	Polydopamine as an intermediate layer for silver and hydroxyapatite immobilisation on metallic biomaterials surface. <i>Materials Science and Engineering C</i> , 2013, 33, 4715-4724.	3.8	73
63	Gene expression profile of mouse fibroblasts exposed to a biodegradable iron alloy for stents. <i>Acta Biomaterialia</i> , 2013, 9, 8746-8753.	4.1	14
64	Can the Current Stent Manufacturing Process be Used for Making Metallic Biodegradable Stents. <i>Advanced Materials Research</i> , 2013, 746, 416-421.	0.3	1
65	Interaction between fibroblast cells and porous iron-based biodegradable metals. , 2012, , .		4
66	Porous Biodegradable Metals for Hard Tissue Scaffolds: A Review. <i>International Journal of Biomaterials</i> , 2012, 2012, 1-10.	1.1	172
67	Monitoring system for degradation assessment of biodegradable metals using microdialysis and enzymatic-spectrophotometric analysis. , 2012, , .		0
68	Introduction to Metallic Biomaterials. <i>SpringerBriefs in Materials</i> , 2012, , 1-11.	0.1	3
69	Biodegradable Metals for Cardiovascular Applications. <i>SpringerBriefs in Materials</i> , 2012, , 23-37.	0.1	8
70	Metallic Biodegradable Coronary Stent: Materials Development. <i>SpringerBriefs in Materials</i> , 2012, , 39-48.	0.1	0
71	Biodegradable Metals: State of the Art. <i>SpringerBriefs in Materials</i> , 2012, , 13-22.	0.1	27
72	Metallic Biodegradable Coronary Stent: Degradation Study. <i>SpringerBriefs in Materials</i> , 2012, , 49-57.	0.1	1

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73	Biodegradable Metals. SpringerBriefs in Materials, 2012, , .	0.1	52
74	New generation of medical implants: Metallic biodegradable coronary stent. , 2011, , .		6
75	Degradable metallic biomaterials: Design and development of Feâ€Mn alloys for stents. Journal of Biomedical Materials Research - Part A, 2010, 93A, 1-11.	2.1	151
76	Developments in metallic biodegradable stentsâ†. Acta Biomaterialia, 2010, 6, 1693-1697.	4.1	509
77	Feâ€Mn alloys for metallic biodegradable stents: Degradation and cell viability studiesâ†. Acta Biomaterialia, 2010, 6, 1852-1860.	4.1	291
78	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.	4.1	130
79	Degradable metallic biomaterials for cardiovascular applications. , 2010, , 379-404.		10
80	Patents on Metallic Biodegradable Stents. Recent Patents on Materials Science, 2010, 3, 140-145.	0.5	2
81	Patents on Metallic Biodegradable Stents. Recent Patents on Materials Science, 2010, 3, 140-145.	0.5	0
82	Design of a pseudo-physiological test bench specific to the development of biodegradable metallic biomaterials. Acta Biomaterialia, 2008, 4, 284-295.	4.1	221
83	Ironâ€manganese: new class of metallic degradable biomaterials prepared by powder metallurgy. Powder Metallurgy, 2008, 51, 38-45.	0.9	233
84	Degradation Behaviour of Metallic Biomaterials for Degradable Stents. Advanced Materials Research, 2007, 15-17, 113-118.	0.3	39
85	Development of Degradable Fe-35Mn Alloy for Biomedical Application. Advanced Materials Research, 2007, 15-17, 107-112.	0.3	56
86	Metals for Biomedical Applications. , 0, , .		105
87	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
88	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
89	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
90	Chemical and Thermal Stability of Multiple Ions Doped Non-Stoichiometric Nanoapatite Heat-Treated in CO&lt;sub>2&lt;/sub> and Air Atmospheres. Advanced Materials Research, 0, 925, 77-81.	0.3	0

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91	Effect of Heat Treatment on Microstructure Homogeneity of Zn-3Mg Alloy. Applied Mechanics and Materials, 0, 493, 777-782.	0.2	1
92	Review on Zn-Based Alloys as Potential Biodegradable Medical Devices Materials. Applied Mechanics and Materials, 0, 776, 277-281.	0.2	11
93	Friction welding of AZ31-SS316L for partially-degradable orthopaedic pins. IOP Conference Series: Materials Science and Engineering, 0, 532, 012014.	0.3	4