JiÅÃ- KubÃ¡sek

List of Publications by Year
in descending order

94 papers	2,696 citations	279487 23 h-index	197535 49 g-index
95 all docs	95 docs citations	95 times ranked	2302 citing authors

#	Article	IF	Citations
1	The evolution of microstructure and mechanical properties of Zn-0.8Mg-0.2Sr alloy prepared by casting and extrusion. Journal of Alloys and Compounds, 2022, 906, 164308.	2.8	14
2	The Effect of Extrusion Ratio on the Corrosion Resistance of Ultrafine-Grained Mg-4Li-3Al-Zn Alloy Deformed Using Extrusion with a Forward-Backward Oscillating Die. Journal of Materials Engineering and Performance, 2022, 31, 8932-8939.	1.2	5
3	Microstructure and corrosion resistance of a duplex structured Mgâ€"7.5Liâ€"3Alâ€"1Zn. Journal of Magnesium and Alloys, 2021, 9, 467-477.	5.5	34
4	The effect of powder size on the mechanical and corrosion properties and the ignition temperature of WE43 alloy prepared by spark plasma sintering. Journal of Magnesium and Alloys, 2021, 9, 1349-1362.	5.5	18
5	Specific interface prepared by the SPS of chemically treated Mg-based powder. Materials Chemistry and Physics, 2021, 261, 124197.	2.0	1
6	Microstructural, mechanical, in vitro corrosion and biological characterization of an extruded Zn-0.8Mg-0.2Sr (wt%) as an absorbable material. Materials Science and Engineering C, 2021, 122, 111924.	3.8	24
7	Test conditions can significantly affect the results of in vitro cytotoxicity testing of degradable metallic biomaterials. Scientific Reports, 2021, 11, 6628.	1.6	43
8	Microstructure, Mechanical, Corrosion, and Ignition Properties of WE43 Alloy Prepared by Different Processes. Metals, 2021, 11, 728.	1.0	11
9	Laser shock peening of copper poly- and single crystals. Materials Characterization, 2021, 174, 111037.	1.9	5
10	Znâ€"0.8Mgâ€"0.2Sr (wt.%) Absorbable Screwsâ€"An In-Vivo Biocompatibility and Degradation Pilot Study on a Rabbit Model. Materials, 2021, 14, 3271.	1.3	10
11	Influence of model environment complexity on corrosion mechanism of biodegradable zinc alloys. Corrosion Science, 2021, 187, 109520.	3.0	20
12	Microstructural instability of L-PBF Co-28Cr-6Mo alloy at elevated temperatures. Additive Manufacturing, 2021, 44, 102025.	1.7	6
13	Influence of the pre-exposure of a Zn-0.8Mg-0.2Sr absorbable alloy in bovine serum albumin containing media on its surface changes and their impact on the cytocompatibility of the material. Materials Today Communications, 2021, 28, 102556.	0.9	4
14	Microstructure evolution and mechanical performance of ternary Zn-0.8Mg-0.2Sr (wt. %) alloy processed by equal-channel angular pressing. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 824, 141809.	2.6	17
15	Novel magnesium alloy containing Y, Gd and Ca with enhanced ignition temperature and mechanical properties for aviation applications. Journal of Alloys and Compounds, 2021, 877, 160089.	2.8	17
16	Microstructure, Mechanical Properties, and Thermal Stability of Carbon-Free High Speed Tool Steel Strengthened by Intermetallics Compared to Vanadis 60 Steel Strengthened by Carbides. Metals, 2021, 11, 1901.	1.0	7
17	A Complex Evaluation of the In-Vivo Biocompatibility and Degradation of an Extruded ZnMgSr Absorbable Alloy Implanted into Rabbit Bones for 360 Days. International Journal of Molecular Sciences, 2021, 22, 13444.	1.8	7
18	WE43 magnesium alloy â€" material for challenging applications. Metallic Materials, 2020, 57, 159-165.	0.2	9

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19	Novel aircraft Mg-Y-Gd-Ca alloys with high ignition temperature and suppressed flammability. Materials Letters, 2020, 264, 127313.	1.3	13
20	Ultrathin hydroxyapatite coating on pure magnesium substrate prepared by pulsed electron ablation technique. Materials and Corrosion - Werkstoffe Und Korrosion, 2020, 71, 1794-1801.	0.8	2
21	Extrusion of the biodegradable ZnMg0.8Ca0.2 alloy â€" The influence of extrusion parameters on microstructure and mechanical characteristics. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 108, 103796.	1.5	26
22	Mechanical, corrosion and biological properties of advanced biodegradable Mgâ€"MgF2 and WE43-MgF2 composite materials prepared by spark plasma sintering. Journal of Alloys and Compounds, 2020, 825, 154016.	2.8	28
23	Texture Hardening Observed in Mgâ€"Znâ€"Nd Alloy Processed by Equal-Channel Angular Pressing (ECAP). Metals, 2020, 10, 35.	1.0	14
24	ZnMg0.8Ca0.2 (wt%) biodegradable alloy â€" The influence of thermal treatment and extrusion on microstructural and mechanical characteristics. Materials Characterization, 2020, 162, 110230.	1.9	21
25	Characterization of a Zn-Ca5(PO4)3(OH) Composite with a High Content of the Hydroxyapatite Particles Prepared by the Spark Plasma Sintering Process. Metals, 2020, 10, 372.	1.0	15
26	The effect of Y, Gd and Ca on the ignition temperature of extruded magnesium alloys. Materiali in Tehnologije, 2020, 54, 669-675.	0.3	2
27	Microstructure, mechanical and corrosion properties of extruded milled magnesium powder. Manufacturing Technology, 2020, 20, 708-713.	0.2	1
28	Characterization of the High-Strength Mgâ€"3Ndâ€"0.5Zn Alloy Prepared by Thermomechanical Processing. Acta Metallurgica Sinica (English Letters), 2019, 32, 321-331.	1.5	8
29	On the Structural and Chemical Homogeneity of Spark Plasma Sintered Tungsten. Metals, 2019, 9, 879.	1.0	8
30	High strength AM50 magnesium alloy as a material for possible stent application in medicine. Materials Technology, 2019, 34, 838-842.	1.5	8
31	Characterization of Zn-1.5Mg and Zn-1.5Mg-0.5Ca Alloys Considered for Biomedical Application. Key Engineering Materials, 2019, 821, 17-22.	0.4	2
32	Structure, mechanical and corrosion properties of extruded Mg-Nd-Zn, Mg-Y-Zn and Mg-Y-Nd alloys. Materials Science and Technology, 2019, 35, 520-529.	0.8	17
33	Thermal Plasma Spraying as a New Approach for Preparation of Zinc Biodegradable Scaffolds: A Complex Material Characterization. Journal of Thermal Spray Technology, 2019, 28, 826-841.	1.6	13
34	The Fundamental Comparison of Znâ€"2Mg and Mgâ€"4Yâ€"3RE Alloys as a Perspective Biodegradable Materials. Materials, 2019, 12, 3745.	1.3	22
35	Zn-Mg Biodegradable Composite: Novel Material with Tailored Mechanical and Corrosion Properties. Materials, 2019, 12, 3930.	1.3	20
36	High Strength X3NiCoMoTi 18-9-5 Maraging Steel Prepared by Selective Laser Melting from Atomized Powder. Materials, 2019, 12, 4174.	1.3	14

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37	Rapidly Solidified Aluminium Alloy Composite with Nickel Prepared by Powder Metallurgy: Microstructure and Self-Healing Behaviour. Materials, 2019, 12, 4193.	1.3	3
38	Influence of Production Parameters on the Properties of 3D Printed Magnesium Alloy Mg-4Y-3RE-Zr (WE43). Manufacturing Technology, 2019, 19, 613-618.	0.2	6
39	Magnesium Composite Materials Prepared by Extrusion of Chemically Treated Powders. Manufacturing Technology, 2019, 19, 740-744.	0.2	6
40	HIGH STRAIN RATE Superplasticity of WE43 magnesium alloy. , 2019, , .		0
41	structure and properties of additively manufactured WE43 magnesium alloy. , 2019, , .		0
42	MECHANICAL PROPERTIES AND MICROSTRUCTURE OF ULTRAFINE-GRAINED MAGNESIUM ALLOYS CONTAINING NEODYMIUM AND ZINC. , 2019, , .		0
43	Microstructure of the Mg-4Y-3RE-Zr (WE43) Magnesium Alloy Produced by 3D Printing. Manufacturing Technology, 2019, 19, 89-94.	0.2	6
44	A robust biomimetic blade design for micro wind turbines. Renewable Energy, 2018, 125, 155-165.	4.3	29
45	Effect of secondary phase particles on thermal stability of ultra-fine grained Mg-4Y-3RE alloy prepared by equal channel angular pressing. Materials Characterization, 2018, 140, 207-216.	1.9	25
46	The in-situ mechanical spectroscopy and electric resistance study of WE43 magnesium alloy during aging. Journal of Alloys and Compounds, 2018, 743, 646-653.	2.8	6
47	In vivo study on biodegradable magnesium alloys: Bone healing around WE43 screws. Journal of Biomaterials Applications, 2018, 32, 886-895.	1.2	36
48	Improved corrosion resistance of WE43 magnesium alloy with continuous network of MgF2 prepared by powder metallurgy. IOP Conference Series: Materials Science and Engineering, 2018, 461, 012016.	0.3	2
49	Corrosion of pure magnesium and a WE43 magnesium alloy studied by advanced acoustic emission analysis. Corrosion Science, 2018, 145, 10-15.	3.0	22
50	A new approach in the preparation of biodegradable Mg-MgF2 composites with tailored corrosion and mechanical properties by powder metallurgy. Materials Letters, 2018, 227, 78-81.	1.3	18
51	Advanced Mechanical and Corrosion Properties of WE43 Alloy Prepared by Powder Metallurgy. Acta Physica Polonica A, 2018, 134, 748-752.	0.2	13
52	Effect of heat pre-treatment and extrusion on the structure and mechanical properties of WZ21 magnesium alloy. Materiali in Tehnologije, 2018, 52, 499-505.	0.3	2
53	Corrosion Resistant Magnesium-Based Composite Material with MgF2 Continuous Network Prepared by Powder Metallurgy. Manufacturing Technology, 2018, 18, 737-741.	0.2	3
54	The effect of hydroxyapatite reinforcement and preparation methods on the structure and mechanical properties of Mg-HA composites. Science and Engineering of Composite Materials, 2017, 24, 297-307.	0.6	8

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55	Promising characteristics of gradient porosity Ti-6Al-4V alloy prepared by SLM process. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 69, 368-376.	1.5	161
56	Biodegradable Metallic Materials for Temporary Medical Implants. Materials Science Forum, 2017, 891, 395-399.	0.3	2
57	Exceptional mechanical properties of ultra-fine grain Mg-4Y-3RE alloy processed by ECAP. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 708, 193-198.	2.6	77
58	3D printed porous stainless steel for potential use in medicine. IOP Conference Series: Materials Science and Engineering, 2017, 179, 012025.	0.3	12
59	Superior Properties of Mgâ€“4Yâ€“3REâ€“Zr Alloy Prepared by Powder Metallurgy. Journal of Materials Science and Technology, 2017, 33, 652-660.	5.6	49
60	Structure and mechanical characterization of Mg-Nd-Zn alloys prepared by different processes. IOP Conference Series: Materials Science and Engineering, 2017, 179, 012018.	0.3	9
61	Corrosion Protection of WE43 Magnesium Alloy by Fluoride Conversion Coating. Manufacturing Technology, 2017, 17, 440-446.	0.2	11
62	The effect of thermo-mechanical processing on the structure, static mechanical properties and fatigue behaviour of pure Mg. Materiali in Tehnologije, 2017, 51, 289-296.	0.3	3
63	Influence of surface pre-treatment on the cytocompatibility of a novel biodegradable ZnMg alloy. Materials Science and Engineering C, 2016, 68, 198-204.	3.8	48
64	Highly porous, low elastic modulus 316L stainless steel scaffold prepared by selective laser melting. Materials Science and Engineering C, 2016, 69, 631-639.	3.8	148
65	Microstructure and mechanical properties of the micrograined hypoeutectic Znâ€“Mg alloy. International Journal of Minerals, Metallurgy and Materials, 2016, 23, 1167-1176.	2.4	38
66	Comparison of Mechanical and Superconducting Properties of YBaCuO and GdBaCuO Single Grains Prepared by Top-Seeded Melt Growth. Journal of Superconductivity and Novel Magnetism, 2016, 29, 1773-1778.	0.8	6
67	Structural and mechanical study on Mgâ€“<i>xLM</i> (<i>x</i> = 0â€“5 wt.%, <i>LM</i> = Sn, Ga) alloys. International Journal of Materials Research, 2016, 107, 459-471.	0.1	14
68	Microstructural, mechanical, corrosion and cytotoxicity characterization of the hot forged FeMn30(wt.%) alloy. Materials Science and Engineering C, 2016, 58, 900-908.	3.8	59
69	Structure, mechanical characteristics and in vitro degradation, cytotoxicity, genotoxicity and mutagenicity of novel biodegradable Znâ€“Mg alloys. Materials Science and Engineering C, 2016, 58, 24-35.	3.8	245
70	Preparation of WE43 Using Powder Metallurgy Route. Manufacturing Technology, 2016, 16, 680-687.	0.2	15
71	Structure and Mechanical Properties of WE43 Prepared by Powder Metallurgy Route. Manufacturing Technology, 2016, 16, 896-902.	0.2	14
72	Effect of Microstructure on the Mechanical Properties of Binary Magnesium Alloys Containing Ga, In and Sn. Manufacturing Technology, 2016, 16, 971-978.	0.2	2

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73	Comparative mechanical and corrosion studies on magnesium, zinc and iron alloys as biodegradable metals. Materiali in Tehnologije, 2015, 49, 877-882.	0.3	34
74	3D Printing as an Alternative to Casting, Forging and Machining Technologies?. Manufacturing Technology, 2015, 15, 809-814.	0.2	21
75	Hydroxyapatite in Materials for Medical Applications. Manufacturing Technology, 2015, 15, 969-973.	0.2	7
76	Structural characteristics and corrosion behavior of biodegradable Mgâ€“Zn, Mgâ€“Znâ€“Gd alloys. Journal of Materials Science: Materials in Medicine, 2013, 24, 1615-1626.	1.7	53
77	Structural and mechanical characteristics of Mgâ€“4Zn and Mgâ€“4Znâ€“0.4Ca alloys after different thermal and mechanical processing routes. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 586, 284-291.	2.6	36
78	Structural characteristics and elevated temperature mechanical properties of AJ62 Mg alloy. Materials Characterization, 2013, 86, 270-282.	1.9	15
79	Structure, mechanical properties, corrosion behavior and cytotoxicity of biodegradable Mgâ€“X (X=Sn,) Tj ETQq1 1 0.784314 rgBT /Ove	3.8	130
80	Structural and corrosion characterization of biodegradable Mgâ€“RE (RE=Gd, Y, Nd) alloys. Transactions of Nonferrous Metals Society of China, 2013, 23, 1215-1225.	1.7	93
81	Structure and properties of Tiâ€“Alâ€“Si-X alloys produced by SHS method. Intermetallics, 2013, 39, 11-19.	1.8	21
82	Properties of Biodegradable Alloys Usable for Medical Purposes. Acta Physica Polonica A, 2012, 122, 520-523.	0.2	7
83	Comparison of Nb- and Ta-effectiveness for improvement of the cyclic oxidation resistance of TiAl-based intermetallics. Intermetallics, 2011, 19, 493-501.	1.8	57
84	Effect of reactive sintering conditions on microstructure of<i>in situ</i>titanium aluminide and silicide composites. Powder Metallurgy, 2011, 54, 50-55.	0.9	13
85	Mechanical and corrosion properties of newly developed biodegradable Zn-based alloys for bone fixation. Acta Biomaterialia, 2011, 7, 3515-3522.	4.1	533
86	Effects of short-time heat treatment and subsequent chemical surface treatment on the mechanical properties, low-cycle fatigue behavior and corrosion resistance of a Niâ€“Ti (50.9 at.% Ni) biomedical alloy wire used for the manufacture of stents. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 1864-1876.	2.6	31
87	Intermediary phases formation in Feâ€“Alâ€“Si alloys during reactive sintering. Journal of Alloys and Compounds, 2010, 497, 90-94.	2.8	32
88	Mechanism and kinetics of the intermediary phase formation in Tiâ€“Al and Tiâ€“Alâ€“Si systems during reactive sintering. International Journal of Materials Research, 2009, 100, 353-355.	0.1	13
89	Corrosion Behaviour of Magnesium Lithium Alloys in NaCl Solution. Solid State Phenomena, 0, 227, 87-90.	0.3	7
90	Novel Trends in the Development of Metallic Materials for Medical Implants. Key Engineering Materials, 0, 647, 59-65.	0.4	0

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91	Corrosion and Mechanical Behavior of Biodegradable Metallic Biomaterials. Solid State Phenomena, 0, 227, 431-434.	0.3	5
92	AZ31 and WE43 Alloys for Biomedical Applications. Solid State Phenomena, 0, 270, 205-211.	0.3	4
93	Characterisation of structure, mechanical and corrosion properties of pure magnesium prepared by powder metallurgy route. IOP Conference Series: Materials Science and Engineering, 0, 1178, 012012.	0.3	0
94	Magnesium Alloy WE43 Produced by 3D Printing (SLM). Defect and Diffusion Forum, 0, 405, 345-350.	0.4	0