Annett Gebert

List of Publications by Year
in descending order

256 papers	8,123 citations	50170 46 h-index	82410 72 g-index
263 all docs	263 docs citations	263 times ranked	4794 citing authors

#	Article	IF	Citations
1	Effect of oxygen on phase formation and thermal stability of slowly cooled Zr65Al7.5Cu17.5Ni10 metallic glass. Acta Materialia, 1998, 46, 5475-5482.	3.8	293
2	Corrosion and related mechanical properties of bulk metallic glasses. Journal of Materials Research, 2007, 22, 302-313.	1.2	258
3	Effect of crystalline precipitations on the mechanical behavior of bulk glass forming Zr-based alloys. Scripta Materialia, 1998, 10, 805-817.	0.5	189
4	Designing biocompatible Ti-based metallic glasses for implant applications. Materials Science and Engineering C, 2013, 33, 875-883.	3.8	178
5	Microstructure and thermal behavior of two-phase amorphous Niâ€“Nbâ€“Y alloy. Scripta Materialia, 2005, 53, 271-274.	2.6	152
6	Hydrogen evolution under the influence of a magnetic field. Electrochimica Acta, 2011, 56, 2665-2675.	2.6	146
7	Tribological and corrosion properties of Alâ€“12Si produced by selective laser melting. Journal of Materials Research, 2014, 29, 2044-2054.	1.2	138
8	Investigations on the electrochemical behaviour of Zr-based bulk metallic glasses. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1999, 267, 294-300.	2.6	113
9	Thermal stability and phase transformations of martensitic Tiâ€“Nb alloys. Science and Technology of Advanced Materials, 2013, 14, 055004.	2.8	107
10	Pitting corrosion of bulk glass-forming zirconium-based alloys. Journal of Alloys and Compounds, 2004, 377, 290-297.	2.8	104
11	Yielding and intrinsic plasticity of Tiâ€“Zrâ€“Niâ€“Cuâ€“Be bulk metallic glass. International Journal of Plasticity, 2009, 25, 1540-1559.	4.1	103
12	Nanostructured Î²-phase Tiâ€“31.0Feâ€“9.0Sn and sub-Î¼m structured Tiâ€“39.3Nbâ€“13.3Zrâ€“10.7Ta alloys for biomedical applications: Microstructure benefits on the mechanical and corrosion performances. Materials Science and Engineering C, 2012, 32, 2418-2425.	3.8	90
13	Structural bulk metallic glasses with different length-scale of constituent phases. Intermetallics, 2002, 10, 1183-1190.	1.8	87
14	The effect of magnetic fields on the electrodeposition of cobalt. Electrochimica Acta, 2004, 49, 4127-4134.	2.6	87
15	In situ high temperature XRD studies of the thermal behaviour of the rapidly quenched Mg77Ni18Y5 alloy under hydrogen. Journal of Alloys and Compounds, 2005, 398, 156-164.	2.8	84
16	Pitting corrosion of Cuâ€“Zr metallic glasses in hydrochloric acid solutions. Journal of Alloys and Compounds, 2008, 462, 60-67.	2.8	81
17	In situ formation of two glassy phases in the Ndâ€“Zrâ€“Alâ€“Co alloy system. Scripta Materialia, 2007, 56, 197-200.	2.6	80
18	Comparison of the corrosion of bulk amorphous steel with conventional steel. Corrosion Science, 2010, 52, 273-281.	3.0	80

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19	Corrosion behaviour of Zr-based bulk glass-forming alloys containing Nb or Ti. Materials Letters, 2002, 57, 173-177.	1.3	77
20	Production of Porous Î²-Type Tiâ€"40Nb Alloy for Biomedical Applications: Comparison of Selective Laser Melting and Hot Pressing. Materials, 2013, 6, 5700-5712.	1.3	77
21	The influence of Co and Ga additions on the corrosion behavior of nanocrystalline NdFeB magnets. Corrosion Science, 2002, 44, 1857-1874.	3.0	75
22	Stability of the bulk glass-forming Mg65Y10Cu25 alloy in aqueous electrolytes. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2001, 299, 125-135.	2.6	74
23	Elastic softening of Î²-type Tiâ€"Nb alloys by indium (In) additions. Journal of the Mechanical Behavior of Biomedical Materials, 2014, 39, 162-174.	1.5	73
24	The effect of magnetic fields on the electrodeposition of CoFe alloys. Electrochimica Acta, 2008, 53, 5344-5353.	2.6	70
25	Effect of surface finishing of a Zr-based bulk metallic glass on its corrosion behaviour. Corrosion Science, 2010, 52, 1711-1720.	3.0	70
26	Magnetic field effect on the anodic behaviour of a ferromagnetic electrode in acidic solutions. Electrochimica Acta, 2009, 54, 2229-2233.	2.6	69
27	Fracture surface morphology of compressed bulk metallic glass-matrix-composites and bulk metallic glass. Intermetallics, 2006, 14, 982-986.	1.8	66
28	Impact of magnetic field gradients on the free corrosion of iron. Electrochimica Acta, 2010, 55, 5200-5203.	2.6	66
29	Composition-dependent magnitude of atomic shuffles in Tiâ€"Nb martensites. Journal of Applied Crystallography, 2014, 47, 1374-1379.	1.9	65
30	Corrosion behaviour of the amorphous Mg65Y10Cu15Ag10 alloy. Corrosion Science, 2003, 45, 817-832.	3.0	64
31	Desorption of hydrogen from the electrode surface under influence of an external magnetic field. Electrochemistry Communications, 2008, 10, 1330-1333.	2.3	64
32	Surface treatment, corrosion behavior, and apatiteâ€forming ability of Tiâ€45Nb implant alloy. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2013, 101B, 269-278.	1.6	64
33	Electrochemical hydrogenation of Mg65Cu25Y10 metallic glass. Journal of Alloys and Compounds, 2004, 364, 229-237.	2.8	63
34	Desorption of hydrogen from an electrode surface under influence of an external magnetic field â€" In-situ microscopic observations. Electrochemistry Communications, 2009, 11, 425-429.	2.3	61
35	Effect of thermomechanical processing on the mechanical biofunctionality of a low modulus Ti-40Nb alloy. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 65, 137-150.	1.5	61
36	Effect of relaxation and primary nanocrystallization on the mechanical properties of Cu60Zr22Ti18 bulk metallic glass. Intermetallics, 2005, 13, 1214-1219.	1.8	58

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37	Novel biodegradable Fe-Mn-C-S alloy with superior mechanical and corrosion properties. Materials Letters, 2017, 186, 330-333.	1.3	58
38	Effects of well-defined magnetic field gradients on the electrodeposition of copper and bismuth. Electrochemistry Communications, 2009, 11, 2241-2244.	2.3	57
39	Electrochemical Deposition of Co under the Influence of High Magnetic Fields. Journal of the Electrochemical Society, 2005, 152, C817.	1.3	53
40	Hydrogenation and its effect on the crystallisation behaviour of Zr55Cu30Al10Ni5 metallic glass. Journal of Alloys and Compounds, 2000, 298, 146-152.	2.8	52
41	Effect of high gradient magnetic fields on the anodic behaviour and localized corrosion of iron in sulphuric acid solutions. Corrosion Science, 2011, 53, 3222-3230.	3.0	52
42	Microstructural inhomogeneities introduced in a Zr-based bulk metallic glass upon low-temperature annealing. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 491, 124-130.	2.6	50
43	Self-Organized TiO₂/CoO Nanotubes as Potential Anode Materials for Lithium Ion Batteries. ACS Sustainable Chemistry and Engineering, 2015, 3, 909-919.	3.2	50
44	Corrosion studies on highly textured Ndâ€“Feâ€“B sintered magnets. Journal of Alloys and Compounds, 2006, 415, 111-120.	2.8	49
45	Plastic Deformation and Mechanical Softening of Pd40Cu30Ni10P20 Bulk Metallic Glass During Nanoindentation. Journal of Materials Research, 2005, 20, 2719-2725.	1.2	48
46	Magnetic field induced micro-convective phenomena inside the diffusion layer during the electrodeposition of Co, Ni and Cu. Electrochimica Acta, 2007, 52, 6338-6345.	2.6	48
47	Mechanical performance and corrosion behaviour of Zr-based bulk metallic glass produced by selective laser melting. Materials and Design, 2020, 189, 108532.	3.3	48
48	Mechanical properties of a two-phase amorphous Niâ€“Nbâ€“Y alloy studied by nanoindentation. Scripta Materialia, 2007, 56, 85-88.	2.6	46
49	Anodically fabricated TiO₂â€“SnO₂nanotubes and their application in lithium ion batteries. Journal of Materials Chemistry A, 2016, 4, 5542-5552.	5.2	46
50	Acid corrosion process of Fe-based bulk metallic glass. Corrosion Science, 2012, 62, 112-121.	3.0	45
51	Enhancement of oxidation resistance of the supercooled liquid in Cuâ€“Zr-based metallic glass by forming an amorphous oxide layer with high thermal stability. Corrosion Science, 2013, 66, 1-4.	3.0	45
52	Effect of Nb addition on microstructure evolution and nanomechanical properties of a glass-forming Tiâ€“Zrâ€“Si alloy. Intermetallics, 2014, 46, 156-163.	1.8	45
53	Pitting corrosion of zirconium-based bulk glass-matrix composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 415, 242-249.	2.6	44
54	Effect of indium (In) on corrosion and passivity of a beta-type Tiâ€“Nb alloy in Ringer's solution. Applied Surface Science, 2015, 335, 213-222.	3.1	44

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55	The mechanism of generating nanoporous Au by de-alloying amorphous alloys. Acta Materialia, 2016, 119, 177-183.	3.8	44
56	Corrosion behaviour of Mg65Y10Cu25 metallic glass. Scripta Materialia, 2000, 43, 279-283.	2.6	43
57	The effect of a magnetic field on the pH value in front of the electrode surface during the electrodeposition of Co, Fe and CoFe alloys. Journal of Electroanalytical Chemistry, 2008, 617, 194-202.	1.9	43
58	Corrosion behaviour of Mg65Cu7.5Ni7.5Ag5Zn5Gd5Y5 bulk metallic glass in aqueous environments. Electrochimica Acta, 2008, 53, 3403-3411.	2.6	43
59	Bulk ultra-fine eutectic structure in Tiâ€"Feâ€"base alloys. Journal of Alloys and Compounds, 2007, 434-435, 28-31.	2.8	42
60	Magnetic field effects on the active dissolution of iron. Electrochimica Acta, 2011, 56, 5866-5871.	2.6	42
61	Interactions between mechanically generated defects and corrosion phenomena of Zr-based bulk metallic glasses. Acta Materialia, 2012, 60, 2300-2309.	3.8	42
62	Ab-initio and experimental study of phase stability of Ti-Nb alloys. Journal of Alloys and Compounds, 2017, 696, 481-489.	2.8	42
63	Grain growth effects on the corrosion behavior of nanocrystalline NdFeB magnets. Corrosion Science, 2002, 44, 1097-1112.	3.0	41
64	Effect of thermal stability of the amorphous substrate on the amorphous oxide growth on Zrâ€"Alâ€"(Cu,Ni) metallic glass surfaces. Corrosion Science, 2013, 73, 1-6.	3.0	41
65	Improved plasticity and corrosion behavior in Tiâ€"Zrâ€"Cuâ€"Pd metallic glass with minor additions of Nb: An alloy composition intended for biomedical applications. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 559, 159-164.	2.6	40
66	Chemical nanoroughening of Ti40Nb surfaces and its effect on human mesenchymal stromal cell response. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2014, 102, 31-41.	1.6	40
67	Electrocrystallisation of CoFe alloys under the influence of external homogeneous magnetic fieldsâ€"Properties of deposited thin films. Electrochimica Acta, 2010, 55, 819-831.	2.6	39
68	Structured electrodeposition in magnetic gradient fields. European Physical Journal: Special Topics, 2013, 220, 287-302.	1.2	39
69	Effect of hydrogen on Zr65Cu17.5Al7.5Ni10 metallic glass. Journal of Alloys and Compounds, 2001, 314, 170-176.	2.8	38
70	Electrochemical deposition and modification of Cu/Coâ€"Cu multilayer. Electrochimica Acta, 2003, 48, 3005-3011.	2.6	38
71	A study of nucleation, growth, texture and phase formation of electrodeposited cobalt layers and the influence of magnetic fields. Thin Solid Films, 2006, 515, 1694-1700.	0.8	38
72	Characterization of corrosion phenomena of Zrâ€"Tiâ€"Cuâ€"Alâ€"Ni metallic glass by SEM and TEM. Materials Characterization, 2010, 61, 1000-1008.	1.9	38

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73	Electrochemical deposition of hydroxyapatite on beta-Ti-40Nb. Surface and Coatings Technology, 2016, 294, 186-193.	2.2	38
74	Title is missing!. Journal of Applied Electrochemistry, 2003, 33, 795-805.	1.5	37
75	Selective electrochemical dissolution in two-phase La?Zr?Al?Cu?Ni metallic glass. Scripta Materialia, 2004, 51, 961-965.	2.6	37
76	Influence of a magnetic field on the morphology of electrodeposited cobalt. Journal of Magnetism and Magnetic Materials, 2005, 290-291, 261-264.	1.0	37
77	Nanostructured Zr- and Ti-based composite materials with high strength and enhanced plasticity. Journal of Applied Physics, 2005, 98, 054307.	1.1	37
78	Correlation between plasticity and fragility in Mg-based bulk metallic glasses with modulated heterogeneity. Journal of Applied Physics, 2008, 104, 023520.	1.1	37
79	Passivation behaviour of structurally relaxed Zr48Cu36Ag8Al8 metallic glass. Journal of Alloys and Compounds, 2009, 479, 257-261.	2.8	36
80	Electrochemical micromachining of a Zr-based bulk metallic glass using a micro-tool electrode technique. Intermetallics, 2011, 19, 437-444.	1.8	36
81	In Situ Analysis of Three-Dimensional Electrolyte Convection Evolving during the Electrodeposition of Copper in Magnetic Gradient Fields. Analytical Chemistry, 2011, 83, 3275-3281.	3.2	36
82	Effect of a magnetic field on the local pH value in front of the electrode surface during electrodeposition of Co. Journal of Electroanalytical Chemistry, 2005, 577, 19-24.	1.9	35
83	Studies on the patterning effect of copper deposits in magnetic gradient fields. Electrochimica Acta, 2010, 56, 297-304.	2.6	35
84	The effect of magnetic fields on the electrodeposition of iron. Journal of Solid State Electrochemistry, 2007, 12, 181-192.	1.2	33
85	Nano-porous surface states of Tiâ€"Yâ€"Alâ€"Co phase separated metallic glass. Intermetallics, 2009, 17, 1120-1123.	1.8	33
86	Hot water corrosion behaviour of Zrâ€"Cuâ€"Alâ€"Ni bulk metallic glass. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2001, 316, 60-65.	2.6	32
87	Corrosion behaviour of hot-pressed and die-upset nanocrystalline NdFeB-based magnets. Journal of Magnetism and Magnetic Materials, 2002, 248, 121-133.	1.0	32
88	Polarisation behaviour of the Zr57Ti8Nb2.5Cu13.9Ni11.1Al7.5 alloy in different microstructural states in acid solutions. Scripta Materialia, 2004, 50, 1379-1384.	2.6	32
89	Polyelectrolyte Complex Based Interfacial Drug Delivery System with Controlled Loading and Improved Release Performance for Bone Therapeutics. Nanomaterials, 2016, 6, 53.	1.9	32
90	Investigations of the corrosion behaviour of nanocrystalline Ndâ€"Feâ€"B hot pressed magnets. Journal of Alloys and Compounds, 2000, 311, 299-304.	2.8	31

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91	Limited quasicrystal formation in Zrâ€“Tiâ€“Cuâ€“Niâ€“Al bulk metallic glasses. Acta Materialia, 2006, 54, 4685-4692.	3.8	31
92	Dealloying of an Au-based amorphous alloy. Intermetallics, 2010, 18, 2338-2342.	1.8	31
93	Oxidation resistance of the supercooled liquid in Cu₅₀Zr₅₀ and Cu₄₆Zr₄₆Al₈ metallic glasses. Journal of Materials Research, 2012, 27, 1178-1186.	1.2	31
94	Phase transformations in ball-milled Tiâ€“40Nb and Tiâ€“45Nb powders upon quenching from the ÃŸ-phase region. Powder Technology, 2014, 253, 166-171.	2.1	31
95	Corrosion behavior of textured and isotropic nanocrystalline NdFeB-based magnets. IEEE Transactions on Magnetics, 2002, 38, 2979-2981.	1.2	30
96	Corrosion behaviour of a Ti-base nanostructure-dendrite composite. Electrochimica Acta, 2005, 50, 2461-2467.	2.6	30
97	Characterization of oxide layers on amorphous Zr-based alloys by Auger electron spectroscopy with sputter depth profiling. Applied Surface Science, 2005, 252, 162-166.	3.1	30
98	Passivity of polycrystalline NiMnGa alloys for magnetic shape memory applications. Corrosion Science, 2009, 51, 1163-1171.	3.0	30
99	Porous low modulus Ti40Nb compacts with electrodeposited hydroxyapatite coating for biomedical applications. Materials Science and Engineering C, 2013, 33, 2280-2287.	3.8	30
100	Oxidation treatments of beta-type Ti-40Nb for biomedical use. Surface and Coatings Technology, 2016, 302, 88-99.	2.2	30
101	Prediction of the oxidation behaviour of Smâ€“Co-based magnets. Journal of Magnetism and Magnetic Materials, 2005, 290-291, 1226-1229.	1.0	29
102	Effect of magnetization state on the corrosion behaviour of NdFeB permanent magnets. Corrosion Science, 2011, 53, 2843-2852.	3.0	29
103	How to obtain structured metal deposits from diamagnetic ions in magnetic gradient fields?. Electrochemistry Communications, 2011, 13, 946-950.	2.3	29
104	Clarifying the Mechanism of Reverse Structuring during Electrodeposition in Magnetic Gradient Fields. Analytical Chemistry, 2012, 84, 2328-2334.	3.2	29
105	Corrosion Behavior of Smâ€“Co-Based Permanent Magnets in Oxidizing Environments. IEEE Transactions on Magnetics, 2004, 40, 2931-2933.	1.2	28
106	Capacitance performance of cobalt hydroxide-based capacitors with utilization of near-neutral electrolytes. Electrochimica Acta, 2013, 90, 166-170.	2.6	28
107	S and B microalloying of biodegradable Fe-30Mn-1C - Effects on microstructure, tensile properties, in vitro degradation and cytotoxicity. Materials and Design, 2018, 142, 22-35.	3.3	28
108	Effects of electrochemical hydrogenation of Zr-based alloys with high glass-forming ability. Intermetallics, 2002, 10, 1207-1213.	1.8	27

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109	Corrosion behaviour of the Mg65Y10Cu15Ag10 bulk metallic glass. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 375-377, 280-284.	2.6	27
110	Electrodeposition of separated 3D metallic structures by pulse-reverse plating in magnetic gradient fields. Electrochimica Acta, 2011, 56, 5174-5177.	2.6	27
111	Controlling the Youngâ€™s modulus of a ÃŸ-type Ti-Nb alloy via strong texturing by LPBF. Materials and Design, 2022, 216, 110516.	3.3	27
112	Effect of shot-peening on the corrosion resistance of a Zr-based bulk metallic glass. Scripta Materialia, 2010, 62, 635-638.	2.6	26
113	Electrodeposition of Sr-substituted hydroxyapatite on low modulus beta-type Ti-45Nb and effect on in vitro Sr release and cell response. Materials Science and Engineering C, 2020, 108, 110425.	3.8	26
114	Stability of rapidly quenched and hydrogenated Mgâ€“Niâ€“Y and Mgâ€“Cuâ€“Y alloys in extreme alkaline medium. Journal of Alloys and Compounds, 2006, 419, 319-327.	2.8	25
115	Nucleation and growth of the electrodeposited iron layers in the presence of an external magnetic field. Electrochimica Acta, 2008, 53, 7972-7980.	2.6	25
116	A route for recycling Nd from Nd-Fe-B magnets using Cu melts. Journal of Alloys and Compounds, 2015, 647, 997-1006.	2.8	25
117	Effect of Selective Laser Melting on Microstructure, Mechanical, and Corrosion Properties of Biodegradable FeMnCS for Implant Applications. Advanced Engineering Materials, 2020, 22, 2000182.	1.6	25
118	Tailoring biocompatible Ti-Zr-Nb-Hf-Si metallic glasses based on high-entropy alloys design approach. Materials Science and Engineering C, 2021, 121, 111733.	3.8	25
119	Mechanical Alloying of Î²â€Type Tiâ€“Nb for Biomedical Applications. Advanced Engineering Materials, 2013, 15, 262-268.	1.6	24
120	Controlled surface modification of Tiâ€“40Nb implant alloy by electrochemically assisted inductively coupled RF plasma oxidation. Acta Biomaterialia, 2013, 9, 9201-9210.	4.1	24
121	Design procedure for triply periodic minimal surface based biomimetic scaffolds. Journal of the Mechanical Behavior of Biomedical Materials, 2022, 126, 104871.	1.5	24
122	Designing new biocompatible glassâ€forming Ti_{75â€}<i>_x</i>Zr₁₀Nb<i>_x</i>Si₁₅ (<i>x</i>â€‰=â€‰0, 15) alloys: corrosion, passivity, and apatite formation. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2016, 104, 27-38.	1.6	23
123	Metal release and cell biological compatibility of betaâ€type Tiâ€40Nb containing indium. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2018, 106, 1686-1697.	1.6	23
124	Insights into the surface and biocompatibility aspects of laser shock peened Ti-22Nb alloy for orthopedic implant applications. Applied Surface Science, 2022, 586, 152816.	3.1	23
125	Influence of press-fit parameters on the primary stability of uncemented femoral resurfacing implants. Medical Engineering and Physics, 2009, 31, 160-164.	0.8	22
126	Influence of Co and Pd on the formation of nanostructured LaMg2Ni and its hydrogen reactivity. Journal of Alloys and Compounds, 2014, 582, 647-658.	2.8	22

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127	Mechanical and Corrosion Behavior of New Generation Ti-45Nb Porous Alloys Implant Devices. Technologies, 2016, 4, 33.	3.0	22
128	Determination of the Youngâ€™s modulus of porous ÃŸ-type Tiâ€"40Nb by finite element analysis. Materials & Design, 2014, 64, 1-8.	5.1	21
129	Exploring corrosion protection of La-Fe-Si magnetocaloric alloys by passivation. Intermetallics, 2016, 75, 88-95.	1.8	21
130	Designing the microstructural constituents of an additively manufactured near Î² Ti alloy for an enhanced mechanical and corrosion response. Materials and Design, 2022, 217, 110618.	3.3	21
131	The effect of magnetic field on the electrodeposition of CoFe alloys. Journal of Magnetism and Magnetic Materials, 2009, 321, 2265-2268.	1.0	20
132	The Influence of Deformationâ€Induced Martensitic Transformations on the Mechanical Properties of Nanocomposite Cuâ€Zrâ€(Al) Systems. Advanced Engineering Materials, 2011, 13, 57-63.	1.6	20
133	Investigation of early cellâ€"surface interactions of human mesenchymal stem cells on nanopatterned Î²-type titaniumâ€"niobium alloy surfaces. Interface Focus, 2014, 4, 20130046.	1.5	20
134	Partially and fully de-alloyed glassy ribbons based on Au: Application in methanol electro-oxidation studies. Journal of Alloys and Compounds, 2016, 667, 302-309.	2.8	20
135	Corrosion studies on Feâ€30Mnâ€1C alloy in chlorideâ€containing solutions with view to biomedical application. Materials and Corrosion - Werkstoffe Und Korrosion, 2018, 69, 167-177.	0.8	20
136	Electrodeposition of manganese layers from sustainable sulfate based electrolytes. Surface and Coatings Technology, 2018, 334, 261-268.	2.2	20
137	Electrochemical response of Fe65.5Cr4Mo4Ga4P12 C5B5.5 bulk amorphous alloy in different aqueous media. Materials and Corrosion - Werkstoffe Und Korrosion, 2004, 55, 36-42.	0.8	19
138	Deformation behavior of a Ti66Cu8Ni4.8Sn7.2Nb14 nanostructured composite containing ductile dendrites. Journal of Alloys and Compounds, 2007, 434-435, 13-17.	2.8	19
139	Phase separation in liquid and amorphous Niâ€"Nbâ€"Y alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 449-451, 207-210.	2.6	19
140	Glass formability and fragility of Fe61Co9âˆ'xZr8Mo5WxB17 (x=0 and 2) bulk metallic glassy alloys. Intermetallics, 2008, 16, 267-272.	1.8	19
141	Electrocrystallisation of metallic films under the influence of an external homogeneous magnetic fieldâ€"Early stages of the layer growth. Electrochimica Acta, 2010, 55, 6533-6541.	2.6	19
142	Comparing the pitting corrosion behavior of prominent Zr-based bulk metallic glasses. Journal of Materials Research, 2015, 30, 233-241.	1.2	19
143	Formation of a metastable eutectic during the solidification of the alloy Ti60Cu14Ni12Sn4Ta10. Acta Materialia, 2005, 53, 5141-5149.	3.8	18
144	Electrochemical micromachining of passive electrodes. Electrochimica Acta, 2013, 109, 562-569.	2.6	18

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145	Thermal stability of amorphous oxide in Al87Ni3Y10 metallic glass. Corrosion Science, 2013, 77, 1-5.	3.0	18
146	Superhydrophilic nanostructured surfaces of beta Ti 29Nb alloy for cardiovascular stent applications. Surface and Coatings Technology, 2020, 396, 125965.	2.2	18
147	Characteristics of Slowly Cooled Zr-Al-Cu-Ni Bulk Samples with Different Oxygen Content. Materials Science Forum, 1998, 269-272, 797-806.	0.3	17
148	Effect of surface pretreatment on the electrochemical activity of a glass-forming Zrâ€“Tiâ€“Alâ€“Cuâ€“Ni alloy. Journal of Alloys and Compounds, 2002, 346, 222-229.	2.8	17
149	Effect of mechanical alloying conditions on the microstructure evolution and electrode characteristics of Mg63Ni30Y7. Journal of Alloys and Compounds, 2006, 416, 110-119.	2.8	17
150	Corrosion, passivation and breakdown of passivity of neodymium. Corrosion Science, 2010, 52, 886-891.	3.0	17
151	Thermomechanical processing of In-containing Î²-type Ti-Nb alloys. Journal of the Mechanical Behavior of Biomedical Materials, 2018, 79, 283-291.	1.5	17
152	Cellâ€“Material Interactions in Direct Contact Culture of Endothelial Cells on Biodegradable Iron-Based Stents Fabricated by Laser Powder Bed Fusion and Impact of Ion Release. ACS Applied Materials & Interfaces, 2022, 14, 439-451.	4.0	17
153	Microstructure and Magnetic Properties in Fe61Co9âˆ'x Zr8Mo5W x B17 (0Ââ‰ÂxÂâ‰Â3) Glasses and Glass-Matrix Composites. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2009, 40, 511-521.	1.1	16
154	Powder metallurgical processing of low modulus Î²-type Ti-45Nb to bulk and macro-porous compacts. Powder Technology, 2017, 322, 393-401.	2.1	16
155	Cyclic deformation characteristics of the metastable Î²-type Tiâ€“40Nb alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 761, 137966.	2.6	16
156	Effect of Build Orientation on the Microstructure, Mechanical and Corrosion Properties of a Biodegradable High Manganese Steel Processed by Laser Powder Bed Fusion. Metals, 2021, 11, 944.	1.0	16
157	Improving the performance of hydrogen storage electrodes based on mechanically alloyed Mg61Ni30Y9. Journal of Alloys and Compounds, 2008, 458, 479-486.	2.8	15
158	Effect of Si on the glass-forming ability, thermal stability and magnetic properties of Feâ€“Coâ€“Zrâ€“Moâ€“Wâ€“B alloys. Journal of Alloys and Compounds, 2008, 459, 203-208.	2.8	15
159	Electrochemical Deposition of Co(Cu)/Cu Multilayered Nanowires. Journal of the Electrochemical Society, 2013, 160, D13-D19.	1.3	15
160	Effects of new beta-type Ti-40Nb implant materials, brain-derived neurotrophic factor, acetylcholine and nicotine on human mesenchymal stem cells of osteoporotic and non osteoporotic donors. PLoS ONE, 2018, 13, e0193468.	1.1	15
161	Stability of the Mg₆₅Y₁₀Cu₁₅Ag₁₀metallic glass in neutral and weakly acidic media. Journal of Materials Research, 2003, 18, 97-105.	1.2	14
162	Effect of cathodic hydrogen charging on catalytic activity of Cuâ€“Hf amorphous alloys. Applied Catalysis A: General, 2004, 267, 1-8.	2.2	14

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163	Severe plastic deformation of a Ti-based nanocomposite alloy studied by nanoindentation. Intermetallics, 2007, 15, 1038-1045.	1.8	14
164	Electrochemical micromachining of passive electrodes â€“ Application to bulk metallic glasses. Journal of Materials Processing Technology, 2015, 219, 193-198.	3.1	14
165	Corrosion of Al-3.5Cu-1.5ÂMgâ€“1Si alloy prepared by selective laser melting and heat treatment. Intermetallics, 2020, 124, 106871.	1.8	14
166	Ductile Ti-based nanocrystalline matrix composites. Intermetallics, 2006, 14, 978-981.	1.8	13
167	Retarding the corrosion of iron by inhomogeneous magnetic fields. Materials and Corrosion - Werkstoffe Und Korrosion, 2014, 65, 803-808.	0.8	13
168	Effect of silicon content on the microstructure evolution, mechanical properties, and biocompatibility of Î²-type TiNbZrTa alloys fabricated by laser powder bed fusion. Materials Science and Engineering C, 2022, 133, 112625.	3.8	13
169	Hydrogenation of Zr60Ti2Cu20Al10Ni8 bulk metallic glass. Applied Physics Letters, 2003, 83, 1134-1135.	1.5	12
170	Electrode characteristics of two-phase glass-forming Niâ€“Nbâ€“Y alloys. Intermetallics, 2007, 15, 1183-1189.	1.8	12
171	Comparing the corrosion behaviour of Zr66/Ti66â€“Nb13Cu8Ni6.8Al6.2 bulk nanostructure-dendrite composites. Intermetallics, 2008, 16, 1179-1184.	1.8	12
172	Work-hardening mechanisms of the Ti₆₀Cu₁₄Ni₁₂Sn₄Nb₁₀ nanocomposite alloy. Journal of Materials Research, 2009, 24, 3146-3153.	1.2	12
173	Corrosion and pitting behaviour of ultrafine eutectic Tiâ€“Feâ€“Sn alloys. Journal of Alloys and Compounds, 2010, 503, 19-24.	2.8	12
174	Micropatterning of Fe-based bulk metallic glass surfaces by pulsed electrochemical micromachining. Journal of Materials Research, 2012, 27, 3033-3040.	1.2	12
175	Polarization Studies of Zr-Based Bulk Metallic Glasses for Electrochemical Machining. Journal of the Electrochemical Society, 2014, 161, E66-E73.	1.3	12
176	Magnetic field templated patterning of the soft magnetic alloy CoFe. Electrochimica Acta, 2014, 123, 477-484.	2.6	12
177	Stress corrosion cracking of a Zr-based bulk metallic glass. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 639, 681-690.	2.6	12
178	Catastrophic stress corrosion failure of Zr-base bulk metallic glass through hydrogen embrittlement. Corrosion Science, 2019, 159, 108057.	3.0	12
179	Influence of oxide structure on the elevated temperature pitting behaviour of Fe-Cr-Ni alloys. Nuclear Engineering and Design, 1997, 174, 327-334.	0.8	11
180	Cathodes for chlorate electrolysis with nanocrystalline Tiâ€“Ruâ€“Feâ€“O catalyst. Journal of Applied Electrochemistry, 2000, 30, 1061-1067.	1.5	11

#	Article	IF	Citations
181	Enhanced microhardness in nanocomposite Ti60Cu14Ni12Sn4Ta10 processed by high pressure torsion. Intermetallics, 2006, 14, 871-875.	1.8	11
182	Corrosion behaviour of FePt-based bulk magnets in artificial saliva solution. Journal of Alloys and Compounds, 2007, 436, 309-312.	2.8	11
183	Hydrogenation of Zrâ€“Cuâ€“Alâ€“Niâ€“Pd metallic glasses by electrochemical means. Journal of Alloys and Compounds, 2009, 480, 321-324.	2.8	11
184	Formation of nanostructured LaMg2Ni by rapid quenching and intensive milling and its hydrogen reactivity. Journal of Alloys and Compounds, 2009, 481, 144-151.	2.8	11
185	XPS and AES sputterâ€depth profiling at surfaces of biocompatible passivated Tiâ€based alloys: concentration quantification considering chemical effects. Surface and Interface Analysis, 2014, 46, 683-688.	0.8	11
186	Toughening mechanisms of a Ti-based nanostructured composite containing ductile dendrites. International Journal of Materials Research, 2005, 96, 675-680.	0.8	11
187	Glass Transition, Viscosity of the Supercooled Liquid and Crystallization Behaviour of Zr–Al–Cu–Ni–Fe Metallic Glasses. Materials Transactions, JIM, 2000, 41, 1415-1422.	0.9	10
188	Corrosion behavior of Ndâ€“Feâ€“B/Î±â€“Fe nanocomposite magnets. Journal of Magnetism and Magnetic Materials, 2005, 290-291, 1251-1254.	1.0	10
189	Investigation of nucleation processes under the influence of magnetic fields. Journal of Solid State Electrochemistry, 2007, 11, 679-685.	1.2	10
190	The metastable Mgâ^¼6Ni phaseâ€”Thermal behaviour, crystal structure and hydrogen reactivity of the rapidly quenched alloy. Journal of Alloys and Compounds, 2009, 475, 191-197.	2.8	10
191	Complex microshaping of bulk metallic glass surfaces by electrochemical means. Journal of Materials Research, 2015, 30, 3493-3501.	1.2	10
192	Ultrafine-grained Ti-40Nb prepared by reactive milling of the elements in hydrogen. Journal of Alloys and Compounds, 2017, 729, 1244-1249.	2.8	10
193	Effects of thermomechanical history and environment on the fatigue behavior of (Î²)-Ti-Nb implant alloys. MATEC Web of Conferences, 2018, 165, 06001.	0.1	10
194	Magnetoelectrochemical Surface Structuring: Electrodeposition of Structured Metallic Layers in Magnetic Gradient Fields. ECS Transactions, 2010, 25, 149-155.	0.3	9
195	Corrosion behavior of the bulk glassy (Fe_{44.3}Cr₅Co₅Mo_{12.8}Mn_{11.2}C_{15.8}B_{5.9}) alloy. Journal of Materials Research, 2009, 24, 1471-1479.	1.2	9
196	Casting vacuum effects on the precipitates and magnetic properties of Fe-based glassy alloys. Journal of Non-Crystalline Solids, 2011, 357, 1657-1664.	1.5	9
197	Interplay of the Open Circuit Potential-Relaxation and the Dissolution Behavior of a Single H2Bubble Generated at a Pt Microelectrode. Journal of Physical Chemistry C, 2016, 120, 15137-15146.	1.5	9
198	Self-organized double-wall oxide nanotube layers on glass-forming Ti-Zr-Si(-Nb) alloys. Materials Science and Engineering C, 2017, 70, 258-263.	3.8	9

#	Article	IF	Citations
199	A comparative study of the influence of the deposition technique (electrodeposition versus) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T Materials, 2020, 21, 424-434.	2.8	9
200	Effect of silver additions on the microstructure, mechanical properties and corrosion behavior of biodegradable Fe-30Mn-6Si. Materials Today Communications, 2021, 28, 102689.	0.9	9
201	Strengthening of multicomponent glass-forming alloys by microstructure design. Journal of Non-Crystalline Solids, 2007, 353, 3742-3749.	1.5	8
202	Impact of magnetization state on the corrosion of sintered Nd-Fe-B magnets for e-motor applications. Materials and Corrosion - Werkstoffe Und Korrosion, 2014, 65, 891-896.	0.8	8
203	Effect of DyF₃ on the corrosion behavior of hotâ€pressed Ndâ€"Feâ€"B permanent magnets. Materials and Corrosion - Werkstoffe Und Korrosion, 2015, 66, 152-157.	0.8	8
204	In Situ Electrochemical Analysis during Deformation of a Zrâ€Based Bulk Metallic Glass: A Sensitive Tool Revealing Early Shear Banding. Advanced Engineering Materials, 2015, 17, 1532-1535.	1.6	8
205	Nanostructured Tiâ€Zrâ€Pdâ€Siâ€(Nb) bulk metallic composites: Novel biocompatible materials with superior mechanical strength and elastic recovery. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2015, 103, 1569-1579.	1.6	8
206	Synthesis of spherical nanocrystalline titanium hydride powder via calciothermic low temperature reduction. Scripta Materialia, 2017, 130, 256-259.	2.6	8
207	The Electrochemical Hydrogen Sorption Behaviour of Zr-Cu-Al-Ni Metallic Glasses. Materials Transactions, 2002, 43, 1133-1137.	0.4	7
208	Corrosion Behavior of Polymer-Bonded NdFeB-Based Nanocrystalline Magnets. IEEE Transactions on Magnetics, 2004, 40, 2864-2866.	1.2	7
209	Effect of hydrofluoric acid treatment on the crystallisation behaviour of Zrâ€"Tiâ€"Cuâ€"Alâ€"Ni metallic glass. Thermochimica Acta, 2010, 497, 85-95.	1.2	7
210	Stress-Corrosion Interactions in Zr-Based Bulk Metallic Glasses. Metals, 2015, 5, 1262-1278.	1.0	7
211	Influence of Cu²⁺Ion Concentration on the Uniform Electrochemical Growth of Copper Nanowires in Ordered Alumina Template. Journal of the Electrochemical Society, 2015, 162, D568-D574.	1.3	7
212	On sample size effects in fracture toughness determination of Bulk Metallic Glasses. Engineering Fracture Mechanics, 2018, 202, 500-507.	2.0	7
213	Corrosion behaviour of carbon steel coated with Zr-based metallic glass. Materials and Corrosion - Werkstoffe Und Korrosion, 2002, 53, 85-90.	0.8	6
214	Electrodeposition of Fe-based Magnetic Alloy Nanowires. Zeitschrift Fur Physikalische Chemie, 0, , 130603060405002.	1.4	6
215	The effect of surface grain reversal on the AC losses of sintered Ndâ€"Feâ€"B permanent magnets. Journal of Magnetism and Magnetic Materials, 2015, 375, 43-48.	1.0	6
216	Fatigue properties of a new generation ÃŸ-type Ti-Nb alloy for osteosynthesis with an industrial standard surface condition. International Journal of Fatigue, 2017, 103, 147-156.	2.8	6

#	Article	IF	Citations
217	Comparing selective corrosion of Au-based amorphous, partially amorphous, and devitrified alloys. Journal of Alloys and Compounds, 2018, 745, 212-216.	2.8	6
218	Stability and Electrochemical Properties of Mg₆₅Y₁₀Cu₂₅ Metallic Glass. Materials Science Forum, 2001, 377, 9-14.	0.3	5
219	Nanomechanical characterization of Ti-base nanostructure-dendrite composite. International Journal of Materials Research, 2004, 95, 317-319.	0.8	5
220	Pitting corrosion behaviour of diamond coated tool steel. Surface and Coatings Technology, 2005, 191, 119-126.	2.2	5
221	Corrosion of a Zr-based Bulk Metallic Glass with Different Surface Finishing States. ECS Transactions, 2009, 16, 1-7.	0.3	5
222	Thermal oxidation behavior of glass-forming Tiâ€“Zrâ€“(Nb)â€“Si alloys. Journal of Materials Research, 2016, 31, 1264-1274.	1.2	5
223	Corrosion Fatigue Studies on a Bulk Glassy Zr-Based Alloy under Three-Point Bending. Frontiers in Materials, 2017, 3, .	1.2	5
224	Comparative study of the sustainable preparation of FeMn thin films via electrodeposition and magnetron co-sputtering. Surface and Coatings Technology, 2019, 375, 182-196.	2.2	5
225	Rolledâ€Up Metal Oxide Microscaffolds to Study Early Bone Formation at Single Cell Resolution. Small, 2021, 17, e2005527.	5.2	5
226	Thermal Stability and Crystallization Kinetics of Ti₄₀Zr₁₀Cu₃₄Pd₁₄Sn<sub>2</su Bulk Metallic Glass. Solid State Phenomena, 0, 188, 3-10.	0.1	4
227	Investigations on the Electrochemical Behavior of Zr-Al-Cu-Ni Bulk Metallic Glass. Materials Research Society Symposia Proceedings, 1998, 554, 161.	0.1	3
228	Corrosion Behaviour of Bulk Amorphous and Crystalline Zr₅₅Al₁₀Cu₃₀Ni₅ Alloys at Ambient and Elevated Temperature. Materials Science Forum, 2000, 343-346, 213-220.	0.3	3
229	Electrochemical Reactivity of Zirconium-Based Bulk Metallic Glasses. Materials Research Society Symposia Proceedings, 2003, 806, 30.	0.1	3
230	Corrosion Behavior of NdFeB-Based Nanocrystalline Permanent Magnets. Journal of Metastable and Nanocrystalline Materials, 2005, 24-25, 631-634.	0.1	3
231	Hydrogen and Zr-based metallic glasses: Gas/solid absorption process and structure evolution. Journal of Alloys and Compounds, 2011, 509, 1636-1643.	2.8	3
232	Catechol Containing Polyelectrolyte Complex Nanoparticles as Local Drug Delivery System for Bortezomib at Bone Substitute Materials. Pharmaceutics, 2020, 12, 799.	2.0	3
233	Calciothermic Synthesis of Very Fine, Hydrogenated Ti and Tiâ€“Nb Powder for Biomedical Applications. Advanced Engineering Materials, 2020, 22, 1901210.	1.6	3
234	Improved corrosion behavior of a novel Fe85Cr4Mo8V2C1 tool steel processed by laser powder bed fusion. Journal of Alloys and Compounds, 2021, 867, 158887.	2.8	3

#	Article	IF	Citations
235	NMR Investigations of the Bulk Metallic Glass Zr55Cu30Al10Ni5. Materials Research Society Symposia Proceedings, 1998, 554, 95.	0.1	2
236	The Effect of Nanosized Y₂O₃ as a Second Phase in Mechanically Alloyed Mg-Y-Cu Glass Matrix Composites. Journal of Metastable and Nanocrystalline Materials, 2003, 15-16, 37-42.	0.1	2
237	Effect of hydrogen on the amorphous structure of the alloy Mg65Cu25Y10 under electrochemical saturation. Powder Metallurgy and Metal Ceramics, 2004, 43, 513-519.	0.4	2
238	Dilute Magnetic Semiconductors: ab initio Studies of V doped ZnO. ECS Transactions, 2012, 45, 97-108.	0.3	2
239	Electrodeposition of Separated Metallic Structures in Superimposed Magnetic Gradient Fields. ECS Transactions, 2012, 41, 9-16.	0.3	2
240	Functionalization of Ti-40Nb implant material with strontium by reactive sputtering. Biomaterials Research, 2017, 21, 18.	3.2	2
241	MECHANICAL BEHAVIOR OF BULK GLASSY Fe65.5Cr4Mo4Ga4P12C5B5.5. Materials Research Society Symposia Proceedings, 2003, 806, 368.	0.1	1
242	Microstructural and Nano-Mechanical Characterisation of Multicomponent Composites Nanocrystalline Matrix. Advanced Engineering Materials, 2005, 7, 197-201.	1.6	1
243	Phase Formation in Quinary Ti-Based Nanocomposites and an Analogous Ternary System with a View to Thermodynamic Modelling. Journal of Metastable and Nanocrystalline Materials, 2005, 24-25, 53-56.	0.1	1
244	In Situ Formed Bulk Nanostructured Ti-Base Composites. Journal of Metastable and Nanocrystalline Materials, 2005, 24-25, 31-36.	0.1	1
245	Corrosion behaviour of magnesium (Mg)-based bulk metallic glasses. , 2011, , 207-233.		1
246	Studies on Stress Corrosion Cracking of Vit 105 Bulk Metallic Glass. Frontiers in Materials, 2020, 7, .	1.2	1
247	Corrosion behaviour of textured and isotropic nanocrystalline NdFeB-based magnets. , 0, , .		0
248	Nano-Mechanical Study of Mechanically Alloyed Zr-Cu-Al-Ni Glass Composite Containing Second-Phase ZrC Particles. Materials Research Society Symposia Proceedings, 2003, 806, 362.	0.1	0
249	Effect of Hydrogen on the amorphous structure of the alloy Mg65Cu25Y10 under electrochemical saturation. Powder Metallurgy and Metal Ceramics, 2004, 43, 513-519.	0.4	0
250	Electrochemical Hydrogenation of Mg65Cu25Y10 Metallic Glass.. ChemInform, 2004, 35, no.	0.1	0
251	Pitting Corrosion of Bulk Glass-Forming Zirconium-Based Alloys.. ChemInform, 2004, 35, no.	0.1	0
252	Environmental Stability of Zr-Based Glass-Matrix Composites. Journal of Metastable and Nanocrystalline Materials, 2005, 24-25, 387-390.	0.1	0

#	Article	IF	Citations
253	Formation of Quasicrystals in Zr-Ti-Nb-Cu-Ni-Al Alloys by Casting or Annealing. Journal of Metastable and Nanocrystalline Materials, 2005, 24-25, 511-514.	0.1	0
254	Mechanical Characterization of Cu₆₀Zr₂₂Ti₁₈ Bulk Metallic Glasses. Journal of Metastable and Nanocrystalline Materials, 2005, 24-25, 669-672.	0.1	0
255	Hydrogenation and Electrochemical Characteristics of Amorphous-nanostructured Mg-based Alloys. Journal of Korean Powder Metallurgy Institute, 2006, 13, 327-335.	0.2	0
256	Investigation of Hydrogen Influence on Structure of Amorphous Alloys Mg-Cu-Y and Mg-Ni-Y by New Method of Diffraction from Atomic Coordinate Spheres. , 2005, , 295-300.		0