Tomasz Czujko

List of Publications by Year
in descending order

91 papers	3,023 citations	186265 28 h-index	175258 52 g-index
91 all docs	91 docs citations	91 times ranked	2536 citing authors

#	Article	IF	Citations
1	Magnesium-based complex hydride mixtures synthesized from stainless steel and magnesium hydride with subambient temperature hydrogen absorption capability. Journal of Alloys and Compounds, 2022, 901, 163489.	5.5	5
2	Superconducting Properties and Microstructure Changes after Heat Treatment of In Situ MgB2 Wires with Ex Situ MgB2 Barriers. Journal of Superconductivity and Novel Magnetism, 2022, 35, 1491-1497.	1.8	3
3	Mechanical and Electrical Properties of Epoxy Composites Modified by Functionalized Multiwalled Carbon Nanotubes. Materials, 2021, 14, 3325.	2.9	21
4	Influence of Amorphous Boron Grain Size, High Isostatic Pressure, Annealing Temperature, and Filling Density of Unreacted Material on Structure, Critical Parameters, n-Value, and Engineering Critical Current Density in MgB2 Wires. Materials, 2021, 14, 3600.	2.9	1
5	Effect of Heat Treatments under High Isostatic Pressure on the Transport Critical Current Density at 4.2 K and 20 K in Doped and Undoped MgB2 Wires. Materials, 2021, 14, 5152.	2.9	1
6	The significant influence of packing density of unreacted Mg+2B mixture and heat treatment conditions on some of critical parameters for MgB2/Fe wires. Journal of Alloys and Compounds, 2021, 889, 161665.	5.5	7
7	Microstructural characterization of laser-cladded NiCrAlY coatings on Inconel 625 Ni-based superalloy and 316L stainless steel. Surface and Coatings Technology, 2020, 387, 125317.	4.8	27
8	Mg2(Fe, Cr, Ni)HX complex hydride synthesis from austenitic stainless steel and magnesium hydride. International Journal of Hydrogen Energy, 2020, 45, 19440-19454.	7.1	16
9	Microstructure and Properties of Inconel 625 Fabricated Using Two Types of Laser Metal Deposition Methods. Materials, 2020, 13, 5050.	2.9	14
10	Nanostructured Anodic Copper Oxides as Catalysts in Electrochemical and Photoelectrochemical Reactions. Catalysts, 2020, 10, 1338.	3.5	25
11	Superelastic Behavior of Ti-Nb Alloys Obtained by the Laser Engineered Net Shaping (LENS) Technique. Materials, 2020, 13, 2827.	2.9	9
12	Superelastic Effect in NiTi Alloys Manufactured Using Electron Beam and Focused Laser Rapid Manufacturing Methods. Journal of Materials Engineering and Performance, 2020, 29, 4463-4473.	2.5	28
13	Nanoporous Anodic Aluminum-Iron Oxide with a Tunable Band Gap Formed on the FeAl3 Intermetallic Phase. Materials, 2020, 13, 3471.	2.9	3
14	New Aspects of MgH2 Morphological and Structural Changes during High-Energy Ball Milling. Materials, 2020, 13, 4550.	2.9	10
15	Hydrogenation Ability of Mg-Li Alloys. Energies, 2020, 13, 2080.	3.1	8
16	Formation of Nanoporous Mixed Aluminum-Iron Oxides by Self-Organized Anodizing of FeAl3 Intermetallic Alloy. Materials, 2019, 12, 2299.	2.9	7
17	The Tribaloy T-800 Coatings Deposited by Laser Engineered Net Shaping (LENSTM). Materials, 2019, 12, 1366.	2.9	19
18	Identification of Mechanical Properties for Titanium Alloy Ti-6Al-4V Produced Using LENS Technology. Materials, 2019, 12, 886.	2.9	18

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19	Static and Dynamic Loading Behavior of Ti6Al4V Honeycomb Structures Manufactured by Laser Engineered Net Shaping (LENSTM) Technology. Materials, 2019, 12, 1225.	2.9	46
20	The Characterization of Stress Corrosion Cracking in the AE44 Magnesium Casting Alloy Using Quantitative Fractography Methods. Materials, 2019, 12, 4125.	2.9	6
21	Fabrication and Characterization of Highly Porous FeAlâ€Based Intermetallics by Thermal Explosion Reaction. Advanced Engineering Materials, 2019, 21, 1801110.	3.5	12
22	Influence of the lamella structure and high isostatic pressure on the critical current density in in situ MgB2 wires without a barrier. Journal of Alloys and Compounds, 2019, 776, 636-645.	5.5	12
23	Investigation of oxide nanowires growth on copper via passivation in NaOH aqueous solution. Surfaces and Interfaces, 2019, 14, 15-18.	3.0	8
24	Deformation of honeycomb cellular structures manufactured with Laser Engineered Net Shaping (LENS) technology under quasi-static loading: Experimental testing and simulation. Additive Manufacturing, 2019, 25, 307-316.	3.0	46
25	Formation of nanoporous oxide by self-organized anodizing of FeAl intermetallic alloy in oxalic acid solution containing glycol. Materials Letters, 2018, 224, 9-12.	2.6	5
26	Fabrication of copper nanowires via electrodeposition in anodic aluminum oxide templates formed by combined hard anodizing and electrochemical barrier layer thinning. Journal of Electroanalytical Chemistry, 2018, 809, 59-66.	3.8	31
27	Severe Plastic Deformation of Fe-22Al-5Cr Alloy by Cross-Channel Extrusion with Back Pressure. Materials, 2018, 11, 2214.	2.9	8
28	The Microstructure Evolution of a Fe3Al Alloy during the LENS Process. Materials, 2018, 11, 390.	2.9	6
29	The Effect of the Traverse Feed Rate on the Microstructure and Mechanical Properties of Laser Deposited Fe3Al (Zr,B) Intermetallic Alloy. Materials, 2018, 11, 792.	2.9	5
30	The Application of Globular Water-Atomized Iron Powders for Additive Manufacturing by a LENS Technique. Materials, 2018, 11, 843.	2.9	8
31	Fabrication of highly porous TiAl3 intermetallics using titanium hydride as a reactant in the thermal explosion reaction. Journal of Materials Research, 2018, 33, 2680-2688.	2.6	5
32	The effect of He + irradiation on hardness and elastic modulus of Fe-Crâ€“40Âwt.% TiB 2 composite rod designed for neutron absorbing. Journal of Alloys and Compounds, 2017, 711, 111-120.	5.5	11
33	Microstructures and hydrogen storage properties ofÂLa Ni Fe V Mn alloys. International Journal of Hydrogen Energy, 2017, 42, 27154-27164.	7.1	65
34	Multi-axial forging of Fe3Al-base intermetallic alloy and its mechanical properties. Journal of Materials Science, 2017, 52, 2902-2914.	3.7	20
35	Anodization of FeAl intermetallic alloys for bandgap tunable nanoporous mixed aluminum-iron oxide. Journal of Electroanalytical Chemistry, 2016, 771, 37-44.	3.8	20
36	Characterization of arrangement and geometry of porous anodic alumina formed by one-step anodization of Al-1 wt% Si thin films. Surface and Coatings Technology, 2016, 307, 359-365.	4.8	15

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37	The microstructure, mechanical properties and corrosion resistance of 316L stainless steel fabricated using laser engineered net shaping. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 677, 1-10.	5.6	356
38	Quantitative fast Fourier transform based arrangement analysis of porous anodic oxide formed by self-organized anodization of FeAl intermetallic alloy. Materials Letters, 2016, 164, 176-179.	2.6	13
39	A novel Feâ€“Crâ€“Nb matrix composite containing the TiB2 neutron absorber synthesized by mechanical alloying and final hot isostatic pressing (HIP) in the Ti-tubing. Journal of Alloys and Compounds, 2016, 674, 425-434.	5.5	6
40	Structure and properties of the Fe3Al-type intermetallic alloy fabricated by laser engineered net shaping (LENS). Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 650, 374-381.	5.6	40
41	Mechanical and Thermal Dehydrogenation of the Mechano-Chemically Synthesized Calcium Alanate (Ca(AlH4)2) and Lithium Chloride (LiCl) Composite. Materials, 2015, 8, 3479-3490.	2.9	2
42	Evaluation of the Possibility of Applying Spatial 3D Imaging Using X-Ray Computed Tomography Reconstruction Methods for Quantitative Analysis of Multiphase Materials / Rentgenowska Analiza IloÅ›ciowa MateriaÅ‚Ã³w Wielofazowych Z Wykorzystaniem Przestrzennego Obrazowania (3D) Przy UÅ¼yciu Metod Rekonstrukcji Tomografii Komputerowej. Archives of Metallurgy and Materials, 2015, 60, 2663-2670.	0.6	0
43	A comparative study of electrochemical barrier layer thinning for anodic aluminum oxide grown on technical purity aluminum. Journal of Electroanalytical Chemistry, 2015, 741, 80-86.	3.8	37
44	Hot isostatic pressing of multifilamentary MgB2wires in solid state media for large scale application. Superconductor Science and Technology, 2015, 28, 045009.	3.5	17
45	Porous graded FeAl intermetallic foams fabricated by sintering process using NaCl space holders. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 636, 407-414.	5.6	48
46	Characterization of Low-Symmetry Structures from Phase Equilibrium of Fe-Al Systemâ€”Microstructures and Mechanical Properties. Materials, 2015, 8, 914-931.	2.9	75
47	The critical parameters in in-situ MgB2 wires and tapes with ex-situ MgB2 barrier after hot isostatic pressure, cold drawing, cold rolling and doping. Journal of Applied Physics, 2015, 117, .	2.5	19
48	Thin wall tubes with Fe3Al/SS316L graded structure obtained by using laser engineered net shaping technology. Materials & Design, 2014, 63, 766-774.	5.1	89
49	Fast Fourier transform based arrangement analysis of poorly organized alumina nanopores formed via self-organized anodization in chromic acid. Materials Letters, 2014, 117, 69-73.	2.6	62
50	The effects of time and temperature on the arrangement of anodic aluminum oxide nanopores. Materials Characterization, 2014, 91, 1-9.	4.4	69
51	Fabrication and geometric characterization of highly-ordered hexagonally arranged arrays of nanoporous anodic alumina. Polish Journal of Chemical Technology, 2014, 16, 63-69.	0.5	17
52	The application of Pettifor structure maps to binary metal hydrides. International Journal of Hydrogen Energy, 2014, 39, 398-405.	7.1	11
53	The kinetics of non-isothermal iron and aluminum powder mixtures sintering in protective atmosphere. Journal of Alloys and Compounds, 2013, 549, 92-99.	5.5	10
54	Composite behaviour of MgH2 and complex hydride mixtures synthesized by ball milling. Journal of Alloys and Compounds, 2011, 509, S604-S607.	5.5	10

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55	The influence of ball milling process on hydrogenation properties of MgH2â€“FeTiHx composites. Journal of Alloys and Compounds, 2011, 509, S608-S611.	5.5	14
56	Microstructure and hydrogen storage capacity of magnesium hydride with zirconium and niobium fluoride additives after cyclic loading. Journal of Alloys and Compounds, 2011, 509, S616-S620.	5.5	23
57	Iron fluorides assisted dehydrogenation and hydrogenation of MgH2 studied by MÃ¶ssbauer spectroscopy. Journal of Alloys and Compounds, 2011, 509, 5368-5372.	5.5	11
58	A study of the ZrF4, NbF5, TaF5, and TiCl3 influences on the MgH2 sorption properties. International Journal of Hydrogen Energy, 2011, 36, 12909-12917.	7.1	115
59	The role of Mg2FeH6 formation on the hydrogenation properties of MgH2-FeFx composites. Open Chemistry, 2011, 9, 701-705.	1.9	1
60	A new nanonickel catalyst for hydrogen storage in solid-state magnesium hydrides. International Journal of Hydrogen Energy, 2011, 36, 1159-1166.	7.1	53
61	The effects of nanonickel additive on the decomposition of complex metal hydride LiAlH4 (lithium) Tj ETQq1 1 0.784314 rgBT /Overlo	7.1	47
62	The composites of magnesium hydride and iron-titanium intermetallic. International Journal of Hydrogen Energy, 2011, 36, 1177-1183.	7.1	18
63	Nanostructured Hydrides for Solid State Hydrogen Storage for Vehicular Applications. Progress in Green Energy, 2011, , 223-286.	0.0	0
64	Catalytic effect of halide additives ball milled with magnesium hydride. International Journal of Hydrogen Energy, 2010, 35, 1706-1712.	7.1	170
65	Nanonickel Catalyst for Kinetic Destabilization of LiAlH₄ (Lithium Alanate) for Facile Discharge of Hydrogen. Advances in Science and Technology, 2010, 72, 182-187.	0.2	1
66	The effect of ball milling under hydrogen and argon on the desorption properties of MgH2 covered with a layer of Mg(OH)2. Journal of Alloys and Compounds, 2010, 493, L29-L32.	5.5	26
67	Nanomaterials for Hydrogen Storage Produced by Ball Milling. Canadian Metallurgical Quarterly, 2009, 48, 11-25.	1.2	9
68	Thermal stability of Vale Inco nanonometric nickel as a catalytic additive for magnesium hydride (MgH2). International Journal of Hydrogen Energy, 2009, 34, 8603-8610.	7.1	29
69	Synthesis of nanocomposite hydrides for solid-state hydrogen storage by controlled mechanical milling techniques. Journal of Alloys and Compounds, 2009, 483, 252-255.	5.5	28
70	Nanomaterials for Solid State Hydrogen Storage. Fuel Cells and Hydrogen Energy, 2009, , .	0.6	170
71	Mechanochemical Activation and Synthesis of Nanomaterials for Hydrogen Storage and Conversion in Electrochemical Power Sources. Journal of Nanoscience and Nanotechnology, 2009, 9, 4048-4055.	0.9	3
72	Synthesis and hydrogen desorption properties of nanocomposite magnesium hydride with sodium borohydride (MgH2+NaBH4). Journal of Alloys and Compounds, 2007, 427, 291-299.	5.5	51

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73	Catalytic effects of various forms of nickel on the synthesis rate and hydrogen desorption properties of nanocrystalline magnesium hydride (MgH2) synthesized by controlled reactive mechanical milling (CRMM). Journal of Alloys and Compounds, 2007, 432, 217-231.	5.5	60
74	Mechanochemical synthesis of nanostructured chemical hydrides in hydrogen alloying mills. Journal of Alloys and Compounds, 2007, 434-435, 743-746.	5.5	33
75	Hydrogen desorption properties of MgH2 nanocomposites with nano-oxides and Inco micrometric- and nanometric-Ni. Journal of Alloys and Compounds, 2007, 446-447, 63-66.	5.5	38
76	Mechano-chemical activation synthesis (MCAS) of nanocrystalline magnesium alanate hydride [Mg(AlH4)2] and its hydrogen desorption properties. Journal of Alloys and Compounds, 2007, 439, 302-311.	5.5	39
77	Particle size, grain size and Î³-MgH2effects on the desorption properties of nanocrystalline commercial magnesium hydride processed by controlled mechanical milling. Nanotechnology, 2006, 17, 3856-3865.	2.6	220
78	Investigation of the hydrogen desorption properties of Mg+10wt.%X (X=V, Y, Zr) submicrocrystalline composites. Journal of Alloys and Compounds, 2006, 414, 240-247.	5.5	81
79	Particle size effects on the desorption properties of nanostructured magnesium dihydride (MgH2) synthesized by controlled reactive mechanical milling (CRMM). Journal of Alloys and Compounds, 2006, 424, 356-364.	5.5	132
80	Mechanosynthesis of Nanocrystalline MgB₂ Ceramic Powders in Hydrogen Alloying Mills via Amorphous Hydride Intermediate. Advances in Science and Technology, 2006, 45, 309.	0.2	1
81	Feasibility study of the direct mechano-chemical synthesis of nanostructured magnesium tetrahydroaluminate (alanate) [Mg(AlH4)2] complex hydride. Nanotechnology, 2005, 16, 2261-2274.	2.6	26
82	Processing by controlled mechanical milling of nanocomposite powders Mg + X (X = Co, Cr, Mo, V, Y,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	5.5	21
83	Microstructural evolution during controlled ball milling of (Mg2Ni+MgNi2) intermetallic alloy. Journal of Alloys and Compounds, 2003, 350, 332-339.	5.5	33
84	The effect of MgNi2 intermetallic compound on nanostructurization and amorphization of Mgâ€“Ni alloys processed by controlled mechanical milling. Journal of Alloys and Compounds, 2003, 354, 281-295.	5.5	29
85	Overview of processing of nanocrystalline hydrogen storage intermetallics by mechanical alloying/milling. Materials and Manufacturing Processes, 2002, 17, 129-156.	4.7	38
86	The effect of atomic volume on the hydrogen storage capacity of hexagonal metals/intermetallics. Scripta Materialia, 2002, 46, 531-535.	5.2	10
87	Cold-work induced phenomena in B2 FeAl intermetallics. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2002, 329-331, 213-221.	5.6	21
88	Fracture toughness of intermetallic compacts consolidated from nanocrystalline powders. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2001, 300, 1-11.	5.6	28
89	Quantitative measurements of the chemical composition of unprepared samples, using a reflectron mass analyzer with a microchannelplate detector assembly. Review of Scientific Instruments, 2000, 71, 1425-1428.	1.3	6
90	Structural and mechanical properties of CO₂â€laser welded joints in difficultâ€toâ€weld metals. Welding International, 1996, 10, 257-261.	0.7	3

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91	Applications of cluster analysis in the quantitative estimation of similarities in geometrical characteristics of grains in polycrystalline materials. Materials Characterization, 1994, 32, 105-118.	4.4	3