

Tomasz Czujko

List of Publications by Year in descending order

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91
papers

3,023
citations

185998

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91
all docs

91
docs citations

91
times ranked

2536
citing authors

#	ARTICLE	IF	CITATIONS
1	The microstructure, mechanical properties and corrosion resistance of 316L stainless steel fabricated using laser engineered net shaping. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 677, 1-10.	2.6	356
2	Particle size, grain size and δ -MgH ₂ effects on the desorption properties of nanocrystalline commercial magnesium hydride processed by controlled mechanical milling. <i>Nanotechnology</i> , 2006, 17, 3856-3865.	1.3	220
3	Nanomaterials for Solid State Hydrogen Storage. <i>Fuel Cells and Hydrogen Energy</i> , 2009, , .	0.6	170
4	Catalytic effect of halide additives ball milled with magnesium hydride. <i>International Journal of Hydrogen Energy</i> , 2010, 35, 1706-1712.	3.8	170
5	Particle size effects on the desorption properties of nanostructured magnesium dihydride (MgH ₂) synthesized by controlled reactive mechanical milling (CRMM). <i>Journal of Alloys and Compounds</i> , 2006, 424, 356-364.	2.8	132
6	A study of the ZrF ₄ , NbF ₅ , TaF ₅ , and TiCl ₃ influences on the MgH ₂ sorption properties. <i>International Journal of Hydrogen Energy</i> , 2011, 36, 12909-12917.	3.8	115
7	Thin wall tubes with Fe3Al/SS316L graded structure obtained by using laser engineered net shaping technology. <i>Materials & Design</i> , 2014, 63, 766-774.	5.1	89
8	Investigation of the hydrogen desorption properties of Mg+10wt.%X (X=V, Y, Zr) submicrocrystalline composites. <i>Journal of Alloys and Compounds</i> , 2006, 414, 240-247.	2.8	81
9	Characterization of Low-Symmetry Structures from Phase Equilibrium of Fe-Al System – Microstructures and Mechanical Properties. <i>Materials</i> , 2015, 8, 914-931.	1.3	75
10	The effects of time and temperature on the arrangement of anodic aluminum oxide nanopores. <i>Materials Characterization</i> , 2014, 91, 1-9.	1.9	69
11	Microstructures and hydrogen storage properties of Al-Ni-Fe-V-Mn alloys. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 27154-27164.	3.8	65
12	Fast Fourier transform based arrangement analysis of poorly organized alumina nanopores formed via self-organized anodization in chromic acid. <i>Materials Letters</i> , 2014, 117, 69-73.	1.3	62
13	Catalytic effects of various forms of nickel on the synthesis rate and hydrogen desorption properties of nanocrystalline magnesium hydride (MgH ₂) synthesized by controlled reactive mechanical milling (CRMM). <i>Journal of Alloys and Compounds</i> , 2007, 432, 217-231.	2.8	60
14	A new nanonickel catalyst for hydrogen storage in solid-state magnesium hydrides. <i>International Journal of Hydrogen Energy</i> , 2011, 36, 1159-1166.	3.8	53
15	Synthesis and hydrogen desorption properties of nanocomposite magnesium hydride with sodium borohydride (MgH ₂ +NaBH ₄). <i>Journal of Alloys and Compounds</i> , 2007, 427, 291-299.	2.8	51
16	Porous graded FeAl intermetallic foams fabricated by sintering process using NaCl space holders. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 636, 407-414.	2.6	48
17	The effects of nanonickel additive on the decomposition of complex metal hydride LiAlH ₄ (lithium) Tj ETQq1 1 0.784314 rgBT /Overlook	3.8	47
18	Static and Dynamic Loading Behavior of Ti6Al4V Honeycomb Structures Manufactured by Laser Engineered Net Shaping (LENSTM) Technology. <i>Materials</i> , 2019, 12, 1225.	1.3	46

#	ARTICLE	IF	CITATIONS
19	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.	1.7	46
20	Structure and properties of the Fe ₃ Al-type intermetallic alloy fabricated by laser engineered net shaping (LENS). Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 650, 374-381.	2.6	40
21	Mechano-chemical activation synthesis (MCAS) of nanocrystalline magnesium alanate hydride [Mg(AlH ₄) ₂] and its hydrogen desorption properties. Journal of Alloys and Compounds, 2007, 439, 302-311.	2.8	39
22	Overview of processing of nanocrystalline hydrogen storage intermetallics by mechanical alloying/milling. Materials and Manufacturing Processes, 2002, 17, 129-156.	2.7	38
23	Hydrogen desorption properties of MgH ₂ nanocomposites with nano-oxides and Inco micrometric- and nanometric-Ni. Journal of Alloys and Compounds, 2007, 446-447, 63-66.	2.8	38
24	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.	1.9	37
25	Microstructural evolution during controlled ball milling of (Mg ₂ Ni+MgNi ₂) intermetallic alloy. Journal of Alloys and Compounds, 2003, 350, 332-339.	2.8	33
26	Mechanochemical synthesis of nanostructured chemical hydrides in hydrogen alloying mills. Journal of Alloys and Compounds, 2007, 434-435, 743-746.	2.8	33
27	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.	1.9	31
28	The effect of MgNi ₂ intermetallic compound on nanostructurization and amorphization of Mg-Ni alloys processed by controlled mechanical milling. Journal of Alloys and Compounds, 2003, 354, 281-295.	2.8	29
29	Thermal stability of Vale Inco nanonometric nickel as a catalytic additive for magnesium hydride (MgH ₂). International Journal of Hydrogen Energy, 2009, 34, 8603-8610.	3.8	29
30	Fracture toughness of intermetallic compacts consolidated from nanocrystalline powders. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2001, 300, 1-11.	2.6	28
31	Synthesis of nanocomposite hydrides for solid-state hydrogen storage by controlled mechanical milling techniques. Journal of Alloys and Compounds, 2009, 483, 252-255.	2.8	28
32	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.	1.2	28
33	Microstructural characterization of laser-cladded NiCrAlY coatings on Inconel 625 Ni-based superalloy and 316L stainless steel. Surface and Coatings Technology, 2020, 387, 125317.	2.2	27
34	Feasibility study of the direct mechano-chemical synthesis of nanostructured magnesium tetrahydroaluminate (alanate) [Mg(AlH ₄) ₂] complex hydride. Nanotechnology, 2005, 16, 2261-2274.	1.3	26
35	The effect of ball milling under hydrogen and argon on the desorption properties of MgH ₂ covered with a layer of Mg(OH) ₂ . Journal of Alloys and Compounds, 2010, 493, L29-L32.	2.8	26
36	Nanostructured Anodic Copper Oxides as Catalysts in Electrochemical and Photoelectrochemical Reactions. Catalysts, 2020, 10, 1338.	1.6	25

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37	Microstructure and hydrogen storage capacity of magnesium hydride with zirconium and niobium fluoride additives after cyclic loading. <i>Journal of Alloys and Compounds</i> , 2011, 509, S616-S620.	2.8	23
38	Cold-work induced phenomena in B2 FeAl intermetallics. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2002, 329-331, 213-221.	2.6	21
39	Processing by controlled mechanical milling of nanocomposite powders Mg + X (X = Co, Cr, Mo, V, Y.) <i>Tj ETQq1 1 0,784314 rgBT /Over</i>	2.8	21
40	Mechanical and Electrical Properties of Epoxy Composites Modified by Functionalized Multiwalled Carbon Nanotubes. <i>Materials</i> , 2021, 14, 3325.	1.3	21
41	Anodization of FeAl intermetallic alloys for bandgap tunable nanoporous mixed aluminum-iron oxide. <i>Journal of Electroanalytical Chemistry</i> , 2016, 771, 37-44.	1.9	20
42	Multi-axial forging of Fe ₃ Al-base intermetallic alloy and its mechanical properties. <i>Journal of Materials Science</i> , 2017, 52, 2902-2914.	1.7	20
43	The critical parameters in <i>in-situ</i> MgB ₂ wires and tapes with <i>ex-situ</i> MgB ₂ barrier after hot isostatic pressure, cold drawing, cold rolling and doping. <i>Journal of Applied Physics</i> , 2015, 117, .	1.1	19
44	The Tribaloy T-800 Coatings Deposited by Laser Engineered Net Shaping (LENSTM). <i>Materials</i> , 2019, 12, 1366.	1.3	19
45	The composites of magnesium hydride and iron-titanium intermetallic. <i>International Journal of Hydrogen Energy</i> , 2011, 36, 1177-1183.	3.8	18
46	Identification of Mechanical Properties for Titanium Alloy Ti-6Al-4V Produced Using LENS Technology. <i>Materials</i> , 2019, 12, 886.	1.3	18
47	Fabrication and geometric characterization of highly-ordered hexagonally arranged arrays of nanoporous anodic alumina. <i>Polish Journal of Chemical Technology</i> , 2014, 16, 63-69.	0.3	17
48	Hot isostatic pressing of multifilamentary MgB ₂ wires in solid state media for large scale application. <i>Superconductor Science and Technology</i> , 2015, 28, 045009.	1.8	17
49	Mg ₂ (Fe, Cr, Ni)HX complex hydride synthesis from austenitic stainless steel and magnesium hydride. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 19440-19454.	3.8	16
50	Characterization of arrangement and geometry of porous anodic alumina formed by one-step anodization of Al-1 wt% Si thin films. <i>Surface and Coatings Technology</i> , 2016, 307, 359-365.	2.2	15
51	The influence of ball milling process on hydrogenation properties of MgH ₂ â€“FeTiH _x composites. <i>Journal of Alloys and Compounds</i> , 2011, 509, S608-S611.	2.8	14
52	Microstructure and Properties of Inconel 625 Fabricated Using Two Types of Laser Metal Deposition Methods. <i>Materials</i> , 2020, 13, 5050.	1.3	14
53	Quantitative fast Fourier transform based arrangement analysis of porous anodic oxide formed by self-organized anodization of FeAl intermetallic alloy. <i>Materials Letters</i> , 2016, 164, 176-179.	1.3	13
54	Fabrication and Characterization of Highly Porous FeAlâ€“Based Intermetallics by Thermal Explosion Reaction. <i>Advanced Engineering Materials</i> , 2019, 21, 1801110.	1.6	12

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55	Influence of the lamella structure and high isostatic pressure on the critical current density in in situ MgB ₂ wires without a barrier. <i>Journal of Alloys and Compounds</i> , 2019, 776, 636-645.	2.8	12
56	Iron fluorides assisted dehydrogenation and hydrogenation of MgH ₂ studied by Mössbauer spectroscopy. <i>Journal of Alloys and Compounds</i> , 2011, 509, 5368-5372.	2.8	11
57	The application of Pettifor structure maps to binary metal hydrides. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 398-405.	3.8	11
58	The effect of He + irradiation on hardness and elastic modulus of Fe-Cr 40 wt.% TiB ₂ composite rod designed for neutron absorbing. <i>Journal of Alloys and Compounds</i> , 2017, 711, 111-120.	2.8	11
59	The effect of atomic volume on the hydrogen storage capacity of hexagonal metals/intermetallics. <i>Scripta Materialia</i> , 2002, 46, 531-535.	2.6	10
60	Composite behaviour of MgH ₂ and complex hydride mixtures synthesized by ball milling. <i>Journal of Alloys and Compounds</i> , 2011, 509, S604-S607.	2.8	10
61	The kinetics of non-isothermal iron and aluminum powder mixtures sintering in protective atmosphere. <i>Journal of Alloys and Compounds</i> , 2013, 549, 92-99.	2.8	10
62	New Aspects of MgH ₂ Morphological and Structural Changes during High-Energy Ball Milling. <i>Materials</i> , 2020, 13, 4550.	1.3	10
63	Nanomaterials for Hydrogen Storage Produced by Ball Milling. <i>Canadian Metallurgical Quarterly</i> , 2009, 48, 11-25.	0.4	9
64	Superelastic Behavior of Ti-Nb Alloys Obtained by the Laser Engineered Net Shaping (LENS) Technique. <i>Materials</i> , 2020, 13, 2827.	1.3	9
65	Severe Plastic Deformation of Fe-22Al-5Cr Alloy by Cross-Channel Extrusion with Back Pressure. <i>Materials</i> , 2018, 11, 2214.	1.3	8
66	The Application of Globular Water-Atomized Iron Powders for Additive Manufacturing by a LENS Technique. <i>Materials</i> , 2018, 11, 843.	1.3	8
67	Investigation of oxide nanowires growth on copper via passivation in NaOH aqueous solution. <i>Surfaces and Interfaces</i> , 2019, 14, 15-18.	1.5	8
68	Hydrogenation Ability of Mg-Li Alloys. <i>Energies</i> , 2020, 13, 2080.	1.6	8
69	Formation of Nanoporous Mixed Aluminum-Iron Oxides by Self-Organized Anodizing of FeAl ₃ Intermetallic Alloy. <i>Materials</i> , 2019, 12, 2299.	1.3	7
70	The significant influence of packing density of unreacted Mg+2B mixture and heat treatment conditions on some of critical parameters for MgB ₂ /Fe wires. <i>Journal of Alloys and Compounds</i> , 2021, 889, 161665.	2.8	7
71	Quantitative measurements of the chemical composition of unprepared samples, using a reflectron mass analyzer with a microchannelplate detector assembly. <i>Review of Scientific Instruments</i> , 2000, 71, 1425-1428.	0.6	6
72	A novel Fe-Cr-Nb matrix composite containing the TiB ₂ neutron absorber synthesized by mechanical alloying and final hot isostatic pressing (HIP) in the Ti-tubing. <i>Journal of Alloys and Compounds</i> , 2016, 674, 425-434.	2.8	6

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73	The Microstructure Evolution of a Fe3Al Alloy during the LENS Process. <i>Materials</i> , 2018, 11, 390.	1.3	6
74	The Characterization of Stress Corrosion Cracking in the AE44 Magnesium Casting Alloy Using Quantitative Fractography Methods. <i>Materials</i> , 2019, 12, 4125.	1.3	6
75	Formation of nanoporous oxide by self-organized anodizing of FeAl intermetallic alloy in oxalic acid solution containing glycol. <i>Materials Letters</i> , 2018, 224, 9-12.	1.3	5
76	The Effect of the Traverse Feed Rate on the Microstructure and Mechanical Properties of Laser Deposited Fe3Al (Zr,B) Intermetallic Alloy. <i>Materials</i> , 2018, 11, 792.	1.3	5
77	Fabrication of highly porous TiAl3 intermetallics using titanium hydride as a reactant in the thermal explosion reaction. <i>Journal of Materials Research</i> , 2018, 33, 2680-2688.	1.2	5
78	Magnesium-based complex hydride mixtures synthesized from stainless steel and magnesium hydride with subambient temperature hydrogen absorption capability. <i>Journal of Alloys and Compounds</i> , 2022, 901, 163489.	2.8	5
79	Applications of cluster analysis in the quantitative estimation of similarities in geometrical characteristics of grains in polycrystalline materials. <i>Materials Characterization</i> , 1994, 32, 105-118.	1.9	3
80	Structural and mechanical properties of CO ₂ laser welded joints in difficult-to-weld metals. <i>Welding International</i> , 1996, 10, 257-261.	0.3	3
81	Mechanochemical Activation and Synthesis of Nanomaterials for Hydrogen Storage and Conversion in Electrochemical Power Sources. <i>Journal of Nanoscience and Nanotechnology</i> , 2009, 9, 4048-4055.	0.9	3
82	Nanoporous Anodic Aluminum-Iron Oxide with a Tunable Band Gap Formed on the FeAl3 Intermetallic Phase. <i>Materials</i> , 2020, 13, 3471.	1.3	3
83	Superconducting Properties and Microstructure Changes after Heat Treatment of In Situ MgB2 Wires with Ex Situ MgB2 Barriers. <i>Journal of Superconductivity and Novel Magnetism</i> , 2022, 35, 1491-1497.	0.8	3
84	Mechanical and Thermal Dehydrogenation of the Mechano-Chemically Synthesized Calcium Alanate (Ca(AlH4)2) and Lithium Chloride (LiCl) Composite. <i>Materials</i> , 2015, 8, 3479-3490.	1.3	2
85	Mechanosynthesis of Nanocrystalline Mg₂ Ceramic Powders in Hydrogen Alloying Mills via Amorphous Hydride Intermediate. <i>Advances in Science and Technology</i> , 2006, 45, 309.	0.2	1
86	Nanonickel Catalyst for Kinetic Destabilization of LiAlH ₄ (Lithium Alanate) for Facile Discharge of Hydrogen. <i>Advances in Science and Technology</i> , 2010, 72, 182-187.	0.2	1
87	The role of Mg2FeH6 formation on the hydrogenation properties of MgH2-Fe _x composites. <i>Open Chemistry</i> , 2011, 9, 701-705.	1.0	1
88	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. <i>Materials</i> , 2021, 14, 3600.	1.3	1
89	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. <i>Materials</i> , 2021, 14, 5152.	1.3	1
90	Evaluation of the Possibility of Applying Spatial 3D Imaging Using X-Ray Computed Tomography Reconstruction Methods for Quantitative Analysis of Multiphase Materials / Rentgenowska Analiza Ilościowa Materiałów Wielofazowych Z Wykorzystaniem Przestrzennego Obrazowania (3D) Przy Użyciu Metod Rekonstrukcji Tomografii Komputerowej. <i>Archives of Metallurgy and Materials</i> , 2015, 60, 2663-2670.	0.6	0

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91	Nanostructured Hydrides for Solid State Hydrogen Storage for Vehicular Applications. Progress in Green Energy, 2011, , 223-286.	0.0	0