Tony Spassov

List of Publications by Year
in descending order

106 papers	2,088 citations	257450 24 h-index	276875 41 g-index
110 all docs	110 docs citations	110 times ranked	1609 citing authors

#	Article	IF	Citations
1	Facilitated Synthesis of Mg2Ni Based Composites with Attractive Hydrogen Sorption Properties. Materials, 2021, 14, 1936.	2.9	11
2	Porous Sn obtained by selective electrochemical dissolution of melt-spun Zn70Sn30 alloys with lithium and sodium storage properties. Journal of Alloys and Compounds, 2021, 877, 160319.	5.5	3
3	Hydrogen Gas Phase and Electrochemical Hydriding of LaNi5â^'xMx (M = Sn, Co, Al) Alloys. Materials, 2021, 14, 14.	2.9	15
4	Structural and hydrogen storage characterization of nanocrystalline magnesium synthesized by ECAP and catalyzed by different nanotube additives. Reviews on Advanced Materials Science, 2021, 60, 884-893.	3.3	3
5	Microstructural and morphological investigations on Mg-Nb2O5-CNT nanocomposites processed by high-pressure torsion for hydrogen storage applications. International Journal of Hydrogen Energy, 2020, 45, 7917-7928.	7.1	21
6	Microstructural Investigation of Nanocrystalline Hydrogen-Storing Mg-Titanate Nanotube Composites Processed by High-Pressure Torsion. Energies, 2020, 13, 563.	3.1	12
7	Water inside Î²-cyclodextrin cavity: amount, stability and mechanism of binding. Beilstein Journal of Organic Chemistry, 2019, 15, 1592-1600.	2.2	43
8	Influence of Milling Conditions on the Behavior of AB₅-Type Materials as Metal Hydride Electrodes. Journal of Nanomaterials, 2019, 2019, 1-5.	2.7	1
9	Static and Dynamic Thermal Properties of a Pd40Ni40Si20 Glassy Alloy. Metals, 2019, 9, 1157.	2.3	0
10	LiMnPO₄-olivine deposited on a nanoporous alloy as an additive-free electrode for lithium ion batteries. Dalton Transactions, 2019, 48, 17037-17044.	3.3	2
11	Ibuprofen/Î²-CD complexation by controlled annealing of their mechanical mixture. Bulgarian Chemical Communications, 2019, 51, 326-331.	0.2	0
12	Nanoporous metallic structures by de-alloying bulk glass forming Zr-based alloys. Intermetallics, 2018, 98, 148-153.	3.9	7
13	Room-temperature fabrication of core-shell nano-ZnO/pollen grain biocomposite for adsorptive removal of organic dye from water. Applied Surface Science, 2017, 400, 481-491.	6.1	26
14	Î±-Cyclodextrin: How Effectively Can Its Hydrophobic Cavity Be Hydrated?. Journal of Physical Chemistry B, 2017, 121, 9260-9267.	2.6	20
15	Mesoporous cellular-structured carbons derived from glucoseâ€“fructose syrup and their adsorption properties towards acetaminophen. Functional Materials Letters, 2017, 10, 1750080.	1.2	5
16	Thermo-mechanical study of bulk glass forming Zr-Cu-Ni-Al alloys. Journal of Non-Crystalline Solids, 2016, 443, 103-107.	3.1	0
17	Microstructural investigations of carbon foams derived from modified coal-tar pitch. Micron, 2016, 89, 34-42.	2.2	18
18	The mechanism of generating nanoporous Au by de-alloying amorphous alloys. Acta Materialia, 2016, 119, 177-183.	7.9	44

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19	Mechanochemical and chemical activation of lignocellulosic material to prepare powdered activated carbons for adsorption applications. Powder Technology, 2016, 299, 41-50.	4.2	60
20	Influence of Milling Conditions on the Hydriding Properties of Mg-C Nanocomposites. Journal of Nanomaterials, 2015, 2015, 1-6.	2.7	4
21	Selective dissolution of amorphous Zrâ€“Cuâ€“Niâ€“Al alloys. Corrosion Science, 2015, 94, 350-358.	6.6	21
22	Cyclodextrin-Based Solidâ€“Gas Clathrates. Journal of Agricultural and Food Chemistry, 2015, 63, 6603-6613.	5.2	14
23	Hydrogen spillover on Rh/TiO₂: the FTIR study of donated electrons, co-adsorbed CO and H/D exchange. Physical Chemistry Chemical Physics, 2015, 17, 20563-20573.	2.8	37
24	Hydrogen sorption properties of 90Âwt% MgH2â€“10Âwt% MeSi2 (MeÂ=ÂTi, Cr). Journal of Materials Science, 2014, 49, 2647-2652.	3.7	7
25	Hydrogen storage of nanocrystalline Mgâ€“Ni alloy processed by equal-channel angular pressing and cold rolling. International Journal of Hydrogen Energy, 2014, 39, 9911-9917.	7.1	44
26	High glass forming ability correlated with microstructure and hydrogen storage properties of a Mgâ€“Cuâ€“Agâ€“Y glass. International Journal of Hydrogen Energy, 2014, 39, 9230-9240.	7.1	21
27	High-pressure DSC study on the hydriding and dehydriding of Mg/C nanocomposites. Journal of Thermal Analysis and Calorimetry, 2014, 116, 265-272.	3.6	3
28	Spectral evidence for hydrogen-induced reversible segregation of CO adsorbed on titania-supported rhodium. Physical Chemistry Chemical Physics, 2014, 16, 13136-13144.	2.8	14
29	Liquid crystal nanocomposites produced by mixtures of hydrogen bonded achiral liquid crystals and functionalized carbon nanotubes. Journal of Physics: Conference Series, 2014, 558, 012024.	0.4	4
30	Phases and properties of nanocomposites of hydrogen-bonded liquid crystals and carbon nanotubes. Physical Review E, 2013, 88, 042503.	2.1	21
31	Selective dissolution of amorphous and nanocrystalline Zr2Ni. Corrosion Science, 2013, 74, 308-313.	6.6	16
32	Microstructural evolution of ball-milled Mgâ€“Ni powder during hydrogen sorption. International Journal of Hydrogen Energy, 2013, 38, 8342-8349.	7.1	27
33	Influence of boron on the hydriding of nanocrystalline Mg2Ni. Intermetallics, 2013, 34, 63-68.	3.9	8
34	Effect of microstructure on the electrocatalytic activity for hydrogen evolution of amorphous and nanocrystalline Zrâ€“Ni alloys. International Journal of Hydrogen Energy, 2012, 37, 10499-10506.	7.1	46
35	Hydrogen storage of melt-spun amorphous Mg65Ni20Cu5Y10 alloy deformed by high-pressure torsion. International Journal of Hydrogen Energy, 2012, 37, 5769-5776.	7.1	40
36	Electrocatalytic behavior of Ni-based amorphous alloys for hydrogen evolution. Journal of Materials Science, 2011, 46, 7068-7073.	3.7	21

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37	Synthesis and hydriding/dehydriding properties of Mg2Niâ€“AB (ABÂ=ÂTiNi or TiFe) nanocomposites. International Journal of Hydrogen Energy, 2011, 36, 7559-7566.	7.1	18
38	Hydroxyapatite Reinforced Coatings with Incorporated Detonationally Generated Nanodiamonds. , 2010, , .		1
39	Study of Organosilicon Plasma Polymer Used in Composite Layers with Biomedical Application. , 2010, , .		3
40	Microstructure and electrochemical hydriding/dehydriding properties of ball-milled TiFe-based alloys. International Journal of Hydrogen Energy, 2010, 35, 6332-6337.	7.1	37
41	Hydrogen sorption properties of ball-milled Mgâ€“C nanocomposites. International Journal of Hydrogen Energy, 2010, 35, 10396-10403.	7.1	31
42	Hydrogen storage in Mgâ€“10at.% LaNi5 nanocomposites, synthesized by ball milling at different conditions. Journal of Alloys and Compounds, 2010, 495, 149-153.	5.5	21
43	The effect of high-pressure torsion on the microstructure and hydrogen absorption kinetics of ball-milled Mg70Ni30. Journal of Alloys and Compounds, 2010, 504, 83-88.	5.5	74
44	Effect of SEM electron beam on the hydrogen desorption of pre-charged amorphous Cu33Ti67 alloys. Materials Characterization, 2009, 60, 26-29.	4.4	2
45	Hydrogen in amorphous TM33Zr67 (TM=Fe, Co, Ni) alloys. Journal of Thermal Analysis and Calorimetry, 2009, 96, 347-351.	3.6	4
46	Kinetics of Mg6Ni nanocrystallization in amorphous Mg83Ni17. Journal of Non-Crystalline Solids, 2009, 355, 1-5.	3.1	5
47	Mg6Ni formation in rapidly quenched amorphous Mgâ€“Ni alloys. Journal of Alloys and Compounds, 2009, 469, 193-196.	5.5	24
48	Influence of B substitution for Ti and Ni on the electrochemical hydriding of TiNi. Journal of Alloys and Compounds, 2009, 474, 527-530.	5.5	6
49	Mechanochemical synthesis, thermal stability and selective electrochemical dissolution of Cuâ€“Ag solid solutions. Journal of Alloys and Compounds, 2009, 478, 232-236.	5.5	25
50	Đ•lectrochemical hydriding/dehydriding of nanocrystalline Mg2â^'x Sn x Ni (xÂ=Â0, 0.1, 0.3). Journal of Applied Electrochemistry, 2008, 38, 197-202.	2.9	2
51	Influence of alloying and microstructure on the electrochemical hydriding of TiNi-based ternary alloys. Journal of Applied Electrochemistry, 2008, 38, 437-444.	2.9	11
52	Linearly polarized IR-spectroscopy of partially oriented solids as a colloid suspension in nematic host: a tool for spectroscopic and structural elucidation of the embedded chemicals. Journal of Inclusion Phenomena and Macrocyclic Chemistry, 2008, 61, 319-333.	1.6	37
53	Synthesis, spectroscopic, thermal and structural elucidation of 5-amino-2-methoxypyridine ester amide of squaric acid ethyl ester: A new material with an infinite pseudo-layered structure and manifested NLO application. Journal of Molecular Structure, 2008, 875, 372-381.	3.6	14
54	Synthesis and hydrogen adsorption in Cu-based coordination framework materials. Scripta Materialia, 2008, 58, 118-121.	5.2	4

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55	Synthesis and study of structural, morphological and electrochemical properties of TiFe_{1-x}Co_xhydrogen storage alloys. Journal of Physics: Conference Series, 2008, 113, 012049.	0.4	0
56	Influence of tin on the electrochemical and gas phase hydrogen sorption in Mg2â^'xSnxNi (x=0, 0.1, 0.3). Journal of Alloys and Compounds, 2008, 450, 288-292.	5.5	6
57	METAL HYDRIDE ALLOYS FOR ELECTROCHEMICAL ENERGY SOURCE APPLICATIONS. Materials Research Society Symposia Proceedings, 2007, 1042, 1.	0.1	0
58	Peculiarities of hydroxyapatite/nanodiamond composites as novel implants. Journal of Physics: Conference Series, 2007, 93, 012049.	0.4	10
59	Hydrogen sorption properties of ternary intermetallic Mgâ€"(Ir,Rh,Pd)â€"Si compounds. Journal of Alloys and Compounds, 2007, 429, 306-310.	5.5	2
60	Microstructure and hydrogen sorption kinetics of Mg nanopowders with catalyst. Journal of Alloys and Compounds, 2007, 434-435, 725-728.	5.5	20
61	Electrochemical hydrogen insertion in Mgâ€"La(Mm)Ni5 nanocomposites. Journal of Alloys and Compounds, 2007, 434-435, 760-763.	5.5	6
62	Electrochemical hydriding of amorphous and nanocrystalline TiNi-based alloys. Journal of Alloys and Compounds, 2007, 441, 197-201.	5.5	29
63	Hydriding kinetics of ball-milled nanocrystalline MgH2 powders. Journal of Materials Research, 2007, 22, 3144-3151.	2.6	7
64	Electrochemical hydriding of nanocrystalline TiFe alloys. Journal of Applied Electrochemistry, 2007, 37, 871-875.	2.9	7
65	NO Reduction with CO on Copper and Ceria Oxides Supported on Alumina. Catalysis Letters, 2007, 119, 79-86.	2.6	15
66	Microstructural development in nanocrystalline MgH2MgH2 during H-absorption/desorption cycling. International Journal of Hydrogen Energy, 2007, 32, 2914-2919.	7.1	32
67	Microstructure and hydriding properties of ball-milled Mgâ€"10at.%MmNi5 (Mm=La, Ce-rich mischmetal) composites. Journal of Alloys and Compounds, 2006, 417, 85-91.	5.5	14
68	Influence of Particle Size on the Hydrogen Sorption Properties of Ball-Milled MgH₂ with Nb₂O₅ as Catalyst. Journal of Metastable and Nanocrystalline Materials, 2005, 24-25, 447-450.	0.1	3
69	Direct hydriding of Mg87Al7Ni3Mn3 by reactive mechanical milling in hydrogen atmosphere and influence of particle size on the dehydriding reaction. Journal of Alloys and Compounds, 2005, 388, 98-103.	5.5	20
70	Electrochemical properties of nanocrystalline Mg2Ni-type alloys prepared by mechanical alloying. Journal of Alloys and Compounds, 2005, 404-406, 682-686.	5.5	17
71	Hydriding/dehydriding properties of nanocrystalline Mg87Ni3Al3M7 (M=Ti, Mn, Ce, La) alloys prepared by ball milling. Journal of Alloys and Compounds, 2005, 398, 139-144.	5.5	30
72	Particle size and catalytic effect on the dehydriding of MgH2. Journal of Alloys and Compounds, 2005, 399, 237-241.	5.5	94

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73	Thermodynamic properties and absorptionâ€“desorption kinetics of Mg87Ni10Al3 alloy synthesised by reactive ball milling under H2 atmosphere. Journal of Alloys and Compounds, 2005, 404-406, 27-30.	5.5	20
74	Hydriding/dehydriding of Mg87Ni3Al3Mm7 (Mm=La, Ce-rich mischmetal) alloy produced by mechanical milling. Journal of Alloys and Compounds, 2005, 403, 363-367.	5.5	5
75	Nanocrystallization of hydrogen-charged Mg76Ni19Y5amorphous alloy. Journal of Thermal Analysis and Calorimetry, 2004, 75, 373-378.	3.6	4
76	Mgâ€“Niâ€“RE nanocrystalline alloys for hydrogen storage. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 375-377, 794-799.	5.6	139
77	Evolution of amorphous and nanocrystalline phases in mechanically alloyed Mg1.9M0.1Ni (M=Ti,Zr,V). Journal of Alloys and Compounds, 2004, 381, 66-71.	5.5	17
78	Optimisation of the ball-milling and heat treatment parameters for synthesis of amorphous and nanocrystalline Mg2Ni-based alloys. Journal of Alloys and Compounds, 2003, 349, 242-254.	5.5	36
79	Synthesis and hydrogen sorption properties of nanocrystalline Mg1.9M0.1Ni (M=Ti, Zr, V) obtained by mechanical alloying. Journal of Alloys and Compounds, 2003, 356-357, 639-643.	5.5	19
80	High-temperature oxidation of Cuâ€“Ti-based rapidly solidified alloys. International Journal of Materials Research, 2003, 94, 134-138.	0.8	2
81	Nanocrystallization and hydrogen storage in rapidly solidified Mgâ€“Niâ€“RE alloys. Journal of Alloys and Compounds, 2002, 334, 219-223.	5.5	100
82	Oxidation of rapidly solidified Mg87Ni12Y1 alloy. Journal of Alloys and Compounds, 2002, 336, 163-169.	5.5	9
83	Nanocrystallization in Mg83Ni17â^'xYx (x=0, 7.5) amorphous alloys. Journal of Alloys and Compounds, 2002, 345, 123-129.	5.5	27
84	Primary crystallization kinetics in rapidly quenched Mg-based Mgâ€“Niâ€“Y alloys. Journal of Alloys and Compounds, 2002, 345, 148-154.	5.5	17
85	Kinetic analysis of the Î±-Î² HgI2 phase transition. Magyar AprÃ³vad KÃ¶zlemÃ©nyek, 2002, 70, 605-614.	1.4	4
86	Nanocrystalline Mg-Ni-Based Hydrogen Storage Alloys Produced by Nanocrystallization. Materials Science Forum, 1999, 307, 197-202.	0.3	11
87	Nanocrystalline Mg-Ni-Based Hydrogen Storage Alloys Produced by Nanocrystallization. Journal of Metastable and Nanocrystalline Materials, 1999, 1, 197-202.	0.1	1
88	Hydriding properties of amorphous Niâ€“B alloy studied by DSC and thermogravimetry. Thermochimica Acta, 1999, 326, 69-73.	2.7	1
89	Hydrogenation of amorphous and nanocrystalline Mg-based alloys. Journal of Alloys and Compounds, 1999, 287, 243-250.	5.5	173
90	New Gd-Al nanophase obtained by crystallization of Gd4Al3 metallic glass. Scripta Materialia, 1999, 12, 609-612.	0.5	3

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91	Thermal stability and hydriding properties of nanocrystalline melt-spun Mg63Ni30Y7 alloy. Journal of Alloys and Compounds, 1998, 279, 279-286.	5.5	130
92	Nanocrystallization of Co33Zr67 Glasses. Journal of Materials Science, 1997, 32, 1483-1486.	3.7	3
93	Oxidation Kinetics of Amorphous, Polycrystalline, and Nanocrystalline Co33Zr67 Alloys. Crystal Research and Technology, 1996, 31, 881-888.	1.3	6
94	Crystallization behaviour of Feâ^'(Nb,Cu)â^'Siâ^'B metallic glasses. Journal of Thermal Analysis, 1995, 45, 1557-1563.	0.6	5
95	Hydrogen in Cuï£¿Ti and Niï£¿Ti Metallic Glasses. Crystal Research and Technology, 1994, 29, 99-107.	1.3	4
96	Grain-growth in nanocrystalline zirconium-based alloys. Journal of Materials Science, 1993, 28, 2789-2794.	3.7	31
97	A modified Johnson-Mehl-Avrami kinetic model of overall crystallization of Feî—¸Coî—¸B metallic glasses. Journal of Alloys and Compounds, 1993, 198, 187-191.	5.5	3
98	Grain Growth Kinetics in Nanocrystalline ZR-Based Alloys. Key Engineering Materials, 1993, 81-83, 249-254.	0.4	1
99	A Study of the Nucleation Kinetics, Linear Growth and the Overall Crystallization Kinetics of Meltspun Pd80Si20 Amorphous alloy. Crystal Research and Technology, 1992, 27, 149-156.	1.3	3
100	Influence of chromium and silicon concentration on crystallization behaviour, electrical resistivity and magnetic properties of (FeCr)BSi amorphous alloys. Solid State Communications, 1991, 80, 89-94.	1.9	3
101	Investigation of the nucleation kinetics and the linear growth rate during the devitrification of Fe-B amorphous alloys with the aid of a thermomagnetic balance. Crystal Research and Technology, 1988, 23, 1225-1230.	1.3	3
102	Influence of copper additions on the crystallization of amorphous Feî—¸Bî—¸Si alloys. Materials Science and Engineering, 1988, 97, 361-364.	0.1	20
103	Some aspects of the thermal behaviour of In2Se3. Journal of Thermal Analysis, 1987, 32, 115-120.	0.6	3
104	Effects of non-steady state nucleation in the kinetics of crystallization of the amorphous alloy Fe80B20. Journal of Materials Science, 1987, 22, 3485-3490.	3.7	9
105	Hydrogen Storage, Microstructure and Mechanical Properties of Strained Mg₆₅Ni₂₀Cu₅Y₁₀Metallic Glass. Materials Science Forum, 0, 729, 74-79.	0.3	4
106	Hydrogenation of Nanocrystalline Mg₂Ni Alloy Prepared by High Energy Ball-Milling Followed by Equal-Channel Angular Pressing or Cold Rolling. Advances in Science and Technology, 0, , .	0.2	2