Vladislav Zadorozhnyy

List of Publications by Year
in descending order

64	1,509	304602	345118
papers	citations	22 h-index	36 g-index

65	65	65	1320
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Experimental and theoretical study of Ti20Zr20Hf20Nb20X20 (X = V or Cr) refractory high-entropy alloys. International Journal of Refractory Metals and Hard Materials, 2014, 47, 131-138.	1.7	212
2	Al-Ti2O6 a mixed metal oxide based composite membrane: A unique membrane for removal of heavy metals. Chemical Engineering Journal, 2018, 348, 678-684.	6.6	90
3	Hydrogen storage nanocrystalline TiFe intermetallic compound: Synthesis by mechanical alloying and compacting. International Journal of Hydrogen Energy, 2012, 37, 17131-17136.	3.8	65
4	Mechanical alloying of nanocrystalline intermetallic compound TiFe doped by aluminum and chromium. Journal of Alloys and Compounds, 2014, 586, S56-S60.	2.8	61
5	Preparation and hydrogen storage properties of nanocrystalline TiFe synthesized by mechanical alloying. Progress in Natural Science: Materials International, 2017, 27, 149-155.	1.8	55
6	Influence of composition and heat treatment on damping and magnetostrictive properties of Feâ€“18%(Ga + Al) alloys. Acta Materialia, 2014, 78, 93-102.	3.8	45
7	Formation of intermetallic Niâ€“Al coatings by mechanical alloying on the different hardness substrates. Journal of Alloys and Compounds, 2014, 586, S373-S376.	2.8	43
8	On room-temperature quasi-elastic mechanical behaviour of bulk metallic glasses. Acta Materialia, 2017, 129, 343-351.	3.8	43
9	Effect of iron content on the structure and mechanical properties of Al25Ti25Ni25Cu25 and (AlTi)60-xNi20Cu20Fex (x=15, 20) high-entropy alloys. Applied Surface Science, 2015, 358, 549-555.	3.1	41
10	Evaluation of hydrogen storage performance of ZrTiVNiCrFe in electrochemical and gas-solid reactions. International Journal of Hydrogen Energy, 2020, 45, 5347-5355.	3.8	40
11	Coating of metals with intermetallics by mechanical alloying. Journal of Alloys and Compounds, 2011, 509, S507-S509.	2.8	38
12	Evidence of the existence of two deformation stages in bulk metallic glasses. Journal of Non-Crystalline Solids, 2014, 396-397, 20-24.	1.5	35
13	Hydrogen storage properties of TiFe-based ternary mechanical alloys with cobalt and niobium. AÂthermochemical approach. International Journal of Hydrogen Energy, 2019, 44, 29159-29165.	3.8	35
14	Hydrogen storage performance of the multi-principal-component CoFeMnTiVZr alloy in electrochemical and gasâ€“solid reactions. RSC Advances, 2020, 10, 24613-24623.	1.7	34
15	Synthesis of the Ni-Al coatings on different metallic substrates by mechanical alloying and subsequent laser treatment. Journal of Alloys and Compounds, 2017, 707, 351-357.	2.8	31
16	Mechanical alloying of nanocrystalline intermetallic compound TiFe doped with sulfur and magnesium. Journal of Alloys and Compounds, 2014, 615, S569-S572.	2.8	27
17	Hydrogen sorption properties of nanostructured bulk Mg2Ni intermetallic compound. Journal of Alloys and Compounds, 2014, 586, S400-S404.	2.8	27
18	Novel process for preparation of metal-polymer composite membranes for hydrogen separation. International Journal of Hydrogen Energy, 2018, 43, 12146-12152.	3.8	27

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19	Ti-based nanostructured low-alloy with high strength and ductility. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 551, 82-86.	2.6	26
20	Mechanochemical synthesis and hydrogen sorption properties of nanocrystalline TiFe. Inorganic Materials, 2011, 47, 1081-1086.	0.2	24
21	Deposition of polymer coating on metallic powder through ball milling: Application to hydrogen storage intermetallics. International Journal of Energy Research, 2016, 40, 273-279.	2.2	23
22	Phase transformations in Zr-based bulk metallic glass cyclically loaded before plastic yielding. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 550, 358-362.	2.6	22
23	Electrochemical behavior and biocompatibility of Ti-Fe-Cu alloy with high strength and ductility. Journal of Alloys and Compounds, 2017, 707, 291-297.	2.8	22
24	Tensile properties of a dual-axial forged Tiâ€“Feâ€“Cu alloy containing boron. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 614, 238-242.	2.6	19
25	Microstructural evolution and corrosion behavior of Al₂₅Ti₂₅Ga₂₅Be₂₅ equiâ€molar composition alloy. Materials and Corrosion - Werkstoffe Und Korrosion, 2014, 65, 691-695.	0.8	18
26	Synthesis of the hydroxyapatite coatings on the Ti substrates by mechanical alloying. Surface and Coatings Technology, 2015, 281, 157-163.	2.2	18
27	Review of the Recent Development in Metallic Glass and Its Composites. Metals, 2021, 11, 1933.	1.0	18
28	Production of intermetallic compound of FeTi by means of mechanical-chemical synthesis and its interaction with hydrogen. Inorganic Materials: Applied Research, 2010, 1, 41-45.	0.1	17
29	Tiâ€“Agâ€“Pd alloy with good mechanical properties and high potential for biological applications. Scientific Reports, 2016, 6, 25142.	1.6	17
30	Investigation of contact surfaces between polymer matrix and metallic glasses in composite materials based on high-density polyethylene. Materials and Design, 2016, 92, 306-312.	3.3	16
31	Mechanochemical synthesis and hydrogenation behavior of (TiFe)100-xNix alloys. Journal of Alloys and Compounds, 2019, 796, 42-46.	2.8	16
32	Transition metal-based high entropy alloy microfiber electrodes: Corrosion behavior and hydrogen activity. Corrosion Science, 2021, 193, 109880.	3.0	16
33	Atomic structure changes and phase transformation behavior in Pdâ€“Si bulk glass-forming alloy. Intermetallics, 2012, 20, 135-140.	1.8	15
34	Effect of mechanical activation on compactibility of metal hydride materials. Journal of Alloys and Compounds, 2017, 707, 214-219.	2.8	14
35	Composition design, synthesis and hydrogen storage ability of multi-principal-component alloy TiVZrNbTa. Journal of Alloys and Compounds, 2022, 901, 163638.	2.8	14
36	Investigation of transparent magnetic material formed by selective oxidation of a metallic glass. Thin Solid Films, 2013, 531, 471-475.	0.8	13

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37	Investigation of the structure and mechanical properties of as-cast Ti-Cu-based alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 573, 175-182.	2.6	13
38	Pd40Ni40Si5P15 bulk metallic glass properties variation as a function of sample thickness. Intermetallics, 2013, 33, 67-72.	1.8	13
39	Mechanical plating of Al/CNT composite coatings on aluminum substrates. Journal of Alloys and Compounds, 2017, 707, 238-244.	2.8	13
40	Investigation of structureâ€“mechanical properties relations of dual-axially forged Ti-based low-alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 632, 88-95.	2.6	12
41	Deposition of the Ti-Al coatings on different metallic substrates by mechanical alloying and subsequent laser treatment. Journal of Alloys and Compounds, 2018, 731, 1295-1302.	2.8	12
42	Discrete element method simulations of mechanical plating of composite coatings on aluminum substrates. Surface and Coatings Technology, 2018, 349, 949-958.	2.2	12
43	Mechanical spectroscopy of metal/polymer composite membranes for hydrogen separation. Journal of Alloys and Compounds, 2021, 866, 159014.	2.8	12
44	Influence of cyclic loading on the onset of failure in a Zr-based bulk metallic glass. Journal of Materials Science, 2014, 49, 6716-6721.	1.7	11
45	Mechanical properties, electrochemical behavior and biocompatibility of the Ti-based low-alloys containing a minor fraction of noble metals. Journal of Alloys and Compounds, 2018, 732, 915-921.	2.8	11
46	Investigation of Zr55Cu30Al10Ni5 bulk amorphous alloy crystallization. Journal of Alloys and Compounds, 2019, 791, 477-482.	2.8	11
47	Surface-governed electrochemical hydrogenation in FeNi-based metallic glass. Journal of Power Sources, 2020, 475, 228700.	4.0	11
48	Formation of Intermetallic Ni-Al Coatings by Mechanical Alloying with Different Intensities. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 1779-1784.	1.1	10
49	Investigation of structure and thermal properties in composite materials based on metallic glasses with small addition of polytetrafluoroethylene. Journal of Alloys and Compounds, 2017, 707, 264-268.	2.8	10
50	Mg-Based Metallic Glass-Polymer Composites: Investigation of Structure, Thermal Properties, and Biocompatibility. Metals, 2020, 10, 867.	1.0	10
51	Internal friction in a Niâ€“Ti-based glassy-crystal alloy. Journal of Alloys and Compounds, 2013, 579, 633-637.	2.8	9
52	Formation and investigation of the structure and mechanical properties of bulk metallic glassy composite (Tiâ€“Zr)â€“(Cuâ€“Niâ€“Co) alloys. Intermetallics, 2012, 31, 173-176.	1.8	8
53	Structure and Thermal Properties of an Al-Based Metallic Glass-Polymer Composite. Metals, 2018, 8, 1037.	1.0	8
54	Roomâ€temperature dynamic quasiâ€elastic mechanical behavior of a Zrâ€“Cuâ€“Feâ€“Al bulk metallic glass. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 450-456.	0.8	7

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55	Formation and investigation of the structure and mechanical properties of bulk metallic glassy composite (Tiâ€“Zr)â€“(Cuâ€“Niâ€“Co) alloys with the addition of Boron. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 558, 472-477.	2.6	6
56	Mechanical properties, structure, and biocompatibility of dual-axially forged Ti 94 Fe 3 Au 3 , Ti 94 Fe 3 Nb 3 , and Ti 94 Au 3 Nb 3 alloys. Journal of Alloys and Compounds, 2017, 707, 269-274.	2.8	6
57	Structure and hydrogenation features of mechanically activated LaNi5-type alloys. International Journal of Hydrogen Energy, 2021, 46, 13638-13646.	3.8	6
58	Analysis of the Background Temperature During the Mechanical Alloying of Metal Powders in the Planetary Ball Mill. Inorganic Materials: Applied Research, 2018, 9, 559-565.	0.1	5
59	Structure and mechanical properties of Ti-Based alloys containing Ag subjected to a thermomechanical treatment. Journal of Alloys and Compounds, 2019, 781, 1182-1188.	2.8	5
60	Enhanced Oxygen Evolution Reaction of Zr-Cu-Ni-Al Metallic Glass with an Oxide Layer in Alkaline Media. ACS Catalysis, 2022, 12, 9190-9200.	5.5	4
61	Relaxation and hysteresis internal friction in ultra-fine-grained copper at temperatures of up to 400Â°C. Bulletin of the Russian Academy of Sciences: Physics, 2011, 75, 1290-1299.	0.1	3
62	Novel Î± + Î² Type Ti-Fe-Cu Alloys Containing Sn with Pertinent Mechanical Properties. Metals, 2020, 10, 34.	1.0	3
63	Comparative microstructural and corrosion development of VCrNiCoFeCu equiatomic multicomponent alloy produced by induction melting and spark plasma sintering. IOP Conference Series: Materials Science and Engineering, 2018, 329, 012016.	0.3	1
64	Synthesis of Ni-Ti Coatings on Different Metallic Substrates by Mechanical Alloying and Subsequent Laser Treatment. Metals, 2018, 8, 490.	1.0	0