Filip PrÅ¯Å¡a

List of Publications by Year
in descending order

83	950	430754 18	580701 25
papers	citations	h-index	g-index

89	89	89	684
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	High-strength ultrafine-grained CoCrFeNiNb high-entropy alloy prepared by mechanical alloying: Properties and strengthening mechanism. Journal of Alloys and Compounds, 2020, 835, 155308.	2.8	56
2	Properties of a high-strength ultrafine-grained CoCrFeNiMn high-entropy alloy prepared by short-term mechanical alloying and spark plasma sintering. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 734, 341-352.	2.6	52
3	Preparation of Tiâ€“Alâ€“Si alloys by reactive sintering. Journal of Alloys and Compounds, 2009, 470, 123-126.	2.8	43
4	Structure and mechanical properties of Alâ€“Siâ€“Fe alloys prepared by short-term mechanical alloying and spark plasma sintering. Materials & Design, 2015, 75, 65-75.	5.1	38
5	Mechanical properties and thermal stability of Alâ€“Feâ€“Ni alloys prepared by centrifugal atomisation and hot extrusion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 603, 141-149.	2.6	37
6	Molecular-level fabrication of highly selective composite ZIF-8-CNT-PDMS membranes for effective CO2/N2, CO2/H2 and olefin/paraffin separations. Separation and Purification Technology, 2021, 274, 119003.	3.9	27
7	Synthesis of Intermetallics in Fe-Al-Si System by Mechanical Alloying. Metals, 2019, 9, 20.	1.0	26
8	Combination of reaction synthesis and Spark Plasma Sintering in production of Ti-Al-Si alloys. Journal of Alloys and Compounds, 2018, 752, 317-326.	2.8	25
9	Mechanical properties and thermal stability of Al-23Si-8Fe-1Cr and Al-23Si-8Fe-5Mn alloys prepared by powder metallurgy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 565, 13-20.	2.6	24
10	Preparation of nitinol by non-conventional powder metallurgy techniques. Materials Science and Technology, 2015, 31, 1886-1893.	0.8	23
11	Structure and Mechanical Properties of Al-Cu-Fe-X Alloys with Excellent Thermal Stability. Materials, 2017, 10, 1269.	1.3	23
12	Properties of the thermally stable Al95Cr3.1Fe1.1Ti0.8 alloy prepared by cold-compression at ultra-high pressure and by hot-extrusion. Materials Characterization, 2012, 66, 83-92.	1.9	22
13	Structure and properties of Tiâ€“Alâ€“Si-X alloys produced by SHS method. Intermetallics, 2013, 39, 11-19.	1.8	21
14	Net-Shape NiTi Shape Memory Alloy by Spark Plasma Sintering Method. Applied Sciences (Switzerland), 2021, 11, 1802.	1.3	21
15	High-temperature behaviour of Tiâ€“Alâ€“Si alloys produced by reactive sintering. Journal of Alloys and Compounds, 2010, 504, 320-324.	2.8	20
16	High-temperature oxidation of Tiâ€“Alâ€“Si alloys prepared by powder metallurgy. Journal of Alloys and Compounds, 2019, 810, 151895.	2.8	20
17	Mechanical Alloying: A Way How to Improve Properties of Aluminium Alloys. Manufacturing Technology, 2015, 15, 1036-1043.	0.2	19
18	Powder metallurgy Alâ€“6Crâ€“2Feâ€“1Ti alloy prepared by melt atomisation and hot ultra-high pressure compaction. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 560, 705-710.	2.6	18

#	Article	IF	Citations
19	The effect of powder size on the mechanical and corrosion properties and the ignition temperature of WE43 alloy prepared by spark plasma sintering. Journal of Magnesium and Alloys, 2021, 9, 1349-1362.	5.5	18
20	Properties Comparison of Ti-Al-Si Alloys Produced by Various Metallurgy Methods. Materials, 2019, 12, 3084.	1.3	17
21	Structure and Properties of Feâ€"Alâ€"Si Alloy Prepared by Mechanical Alloying. Materials, 2019, 12, 2463.	1.3	16
22	Characterization of Newly Developed Zinc Composite with the Content of 8 wt.% of Hydroxyapatite Particles Processed by Extrusion. Materials, 2020, 13, 1716.	1.3	16
23	Characterization of a Zn-Ca5(PO4)3(OH) Composite with a High Content of the Hydroxyapatite Particles Prepared by the Spark Plasma Sintering Process. Metals, 2020, 10, 372.	1.0	15
24	Preparation of WE43 Using Powder Metallurgy Route. Manufacturing Technology, 2016, 16, 680-687.	0.2	15
25	Structural and mechanical characteristics of the Alâ€"23Siâ€"8Feâ€"5Mn alloy prepared by combination of centrifugal spraying and hot die forging. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 610, 197-202.	2.6	14
26	Preparation of TiAl15Si15 intermetallic alloy by mechanical alloying and the spark plasma sintering method. Powder Metallurgy, 2019, 62, 54-60.	0.9	14
27	High Strength X3NiCoMoTi 18-9-5 Maraging Steel Prepared by Selective Laser Melting from Atomized Powder. Materials, 2019, 12, 4174.	1.3	14
28	Influence of Heat Treatment on Microstructure and Properties of NiTi46 Alloy Consolidated by Spark Plasma Sintering. Materials, 2019, 12, 4075.	1.3	14
29	Properties of Mg-based materials for hydrogen storage. Journal of Physics and Chemistry of Solids, 2007, 68, 813-817.	1.9	13
30	High-Strength Ultra-Fine-Grained Hypereutectic Al-Si-Fe-X (X = Cr, Mn) Alloys Prepared by Short-Term Mechanical Alloying and Spark Plasma Sintering. Materials, 2016, 9, 973.	1.3	13
31	Finding the energy source for self-propagating high-temperature synthesis production of NiTi shape memory alloy. Materials Chemistry and Physics, 2016, 181, 295-300.	2.0	13
32	Preparation and properties of plasma sprayed NiAl10 and NiAl40 coatings on AZ91 substrate. Surface and Coatings Technology, 2017, 319, 145-154.	2.2	12
33	Synergistic effect of hybridized TNT@GO fillers in CTA-based mixed matrix membranes for selective CO2/CH4 separation. Separation and Purification Technology, 2022, 282, 120128.	3.9	12
34	Dense ceramics of lanthanide-doped Lu2O3 prepared by spark plasma sintering. Journal of the European Ceramic Society, 2021, 41, 741-751.	2.8	11
35	Effect of alloying elements on the properties of Ti-Al-Si alloys prepared by powder metallurgy. Journal of Alloys and Compounds, 2021, 868, 159251.	2.8	11
36	CeO2-Blended Cellulose Triacetate Mixed-Matrix Membranes for Selective CO2 Separation. Membranes, 2021, 11, 632.	1.4	11

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37	Effect of Heating Rate on the Formation of Intermetallics during SHS Process. Acta Physica Polonica A, 2015, 128, 561-564.	0.2	11
38	Preparation of Ti-Al-Si Alloys by Powder Metallurgy. Manufacturing Technology, 2016, 16, 1274-1278.	0.2	11
39	Application of Mechanical Alloying in Synthesis of Intermetallics. Acta Physica Polonica A, 2018, 134, 720-723.	0.2	10
40	Phase Composition of Al-Si Coating from the Initial State to the Hot-Stamped Condition. Materials, 2021, 14, 1125.	1.3	9
41	Structural and mechanical characterization of rapidly solidified Al95Ni5 and Al93Ni5Mm2 alloys prepared by centrifugal atomization. Journal of Alloys and Compounds, 2010, 506, 581-588.	2.8	8
42	The Influence of Milling and Spark Plasma Sintering on the Microstructure and Properties of the Al7075 Alloy. Materials, 2018, 11, 547.	1.3	8
43	Thermal analysis of FeAl intermetallic compound sintered at heating rate of 300ÂÂ°C/min. Journal of Alloys and Compounds, 2020, 819, 152978.	2.8	7
44	Influence of Ceramic Particles Character on Resulted Properties of Zinc-Hydroxyapatite/Monetite Composites. Metals, 2021, 11, 499.	1.0	7
45	Preparation of Fe-Al-Si Intermetallic Compound by Mechanical Alloying and Spark Plasma Sintering. Acta Physica Polonica A, 2018, 134, 724-728.	0.2	7
46	Formation of Ni-Ti intermetallics during reactive sintering at 800â€“900 Â°C. Materiali in Tehnologije, 2017, 51, 679-685.	0.3	6
47	The Optimization of Sintering Conditions for the Preparation of Ti-Al-Si Alloys. Manufacturing Technology, 2017, 17, 483-488.	0.2	6
48	An Al-17Fe alloy with high ductility and excellent thermal stability. Materials and Design, 2017, 132, 459-466.	3.3	5
49	Nanocrystalline Al7075 + 1 wt % Zr Alloy Prepared Using Mechanical Milling and Spark Plasma Sintering. Materials, 2017, 10, 1105.	1.3	5
50	Application of SPS consolidation and its influence on the properties of the FeAl20Si20 alloys prepared by mechanical alloying. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 761, 138020.	2.6	5
51	Effect of Nickel and Titanium on Properties of Fe-Al-Si Alloy Prepared by Mechanical Alloying and Spark Plasma Sintering. Materials, 2020, 13, 800.	1.3	5
52	Role of Si on lamellar formation and mechanical response of two SPS Tiâ€“15Alâ€“15Si and Tiâ€“10Alâ€“20Si intermetallic alloys. Intermetallics, 2021, 131, 107099.	1.8	5
53	The Effect of Production Process on Properties of FeAl20Si20. Manufacturing Technology, 2018, 18, 295-298.	0.2	5
54	Processing of Al-Fe Scraps by Powder Metallurgy. Manufacturing Technology, 2016, 16, 726-732.	0.2	5

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55	Preparation of Ti-Al and Fe-Al Alloys by Mechanical Alloying. Acta Physica Polonica A, 2018, 134, 733-737.	0.2	4
56	High-Temperature Behaviour of Ti-Al-Si Alloys Prepared by Spark Plasma Sintering. Manufacturing Technology, 2017, 17, 733-738.	0.2	4
57	Stimuli-responsive of magnetic metal-organic frameworks (MMOF): Synthesis, dispersion control, and its tunability into polymer matrix under the augmented-magnetic field for H2 separation and CO2 capturing applications. International Journal of Hydrogen Energy, 2022, 47, 20166-20175.	3.8	4
58	Structure and Properties of Magnesium-Based Hydrogen Storage Alloys. Materials Science Forum, 2008, 567-568, 217-220.	0.3	3
59	Bimodal Microstructure in an AlZrTi Alloy Prepared by Mechanical Milling and Spark Plasma Sintering. Materials, 2020, 13, 3756.	1.3	3
60	Mechanical properties of FeAlSi powders prepared by mechanical alloying from different initial feedstock materials. Materiaux Et Techniques, 2019, 107, 207.	0.3	3
61	MICROSTRUCTURE AND THERMAL STABILITY OF Al-Fe-X ALLOYS. Acta Metallurgica Slovaca, 2018, 24, 223-228.	0.3	3
62	Influence of Processing on the Microstructure and the Mechanical Properties of Zn/HA8 wt.% Biodegradable Composite. Manufacturing Technology, 2019, 19, 836-841.	0.2	3
63	Microstructure and Mechanical Properties of Ti-25Nb-4Ta-8Sn Alloy Prepared by Spark Plasma Sintering. Materials, 2022, 15, 2158.	1.3	3
64	Partial Substitution of Mn by Al in the Cocrfenimnxal20-X (X=5, 10, 15) High Entropy Alloy Prepared of Mechanical Alloying and Spark Plasma Sintering. Manufacturing Technology, 2022, 22, 342-346.	0.2	3
65	Aluminium alloys with transition metals prepared by powder metallurgy. IOP Conference Series: Materials Science and Engineering, 2017, 179, 012043.	0.3	2
66	Effect of Initial Powders on Properties of FeAlSi Intermetallics. Materials, 2019, 12, 2846.	1.3	2
67	Properties of FeAlSi-X-Y Alloys (X,Y=Ni, Mo) Prepared by Mechanical Alloying and Spark Plasma Sintering. Materials, 2020, 13, 292.	1.3	2
68	Compression stress strengthening modelling of a ultrafine-grained equiatomic SPS CoCrFeNiNb high-entropy alloy. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2021, 235, 1432-1442.	1.1	2
69	Structure and Mechanical Properties of the 18Ni300 Maraging Steel Produced by Spark Plasma Sintering. Metals, 2021, 11, 748.	1.0	2
70	PREPARATION OF TiAl15Si15 ALLOY BY HIGH PRESSURE SPARK PLASMA SINTERING. Acta Metallurgica Slovaca, 2018, 24, 174-180.	0.3	2
71	Microstructure of TiAl15Si15 Alloy Prepared by Powder Metallurgy. Manufacturing Technology, 2018, 18, 593-596.	0.2	2
72	Processing of Aluminium Alloys with High Content of Iron by Methods of Powder Metallurgy. Manufacturing Technology, 2016, 16, 978-984.	0.2	2

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73	The Influence of SPS Compaction Pressure onto Mechanical Properties of Al-20Si-16Fe Alloy Prepared by Mechanical Alloying. Manufacturing Technology, 2017, 17, 936-940.	0.2	2
74	Alloying of Fe-Al-Si Alloys by Nickel and Titanium. Manufacturing Technology, 2018, 18, 645-649.	0.2	2
75	Highly Thermally Stable Light-Weight Al Based Alloys Prepared by Centrifugal Atomization and Powder Compaction. Materials Science Forum, 0, 782, 347-352.	0.3	1
76	Ternary Fe-Al-Si Alloys Prepared by Mechanical Alloying and Spark Plasma Sintering. Microscopy and Microanalysis, 2019, 25, 2618-2619.	0.2	1
77	Cu phthalocyanine, Cu and Fe@Au nanoparticles grafted polyethylene: From structural to magnetic properties. Materials Chemistry and Physics, 2020, 239, 122104.	2.0	1
78	Specific interface prepared by the SPS of chemically treated Mg-based powder. Materials Chemistry and Physics, 2021, 261, 124197.	2.0	1
79	Pickling of Ti-Al-Si alloy powders â€" a method for improving compaction with spark-plasma sintering. Materiali in Tehnologije, 2018, 52, 681-686.	0.3	1
80	Indentation Size Effect in CoCrFeMnNi HEA Prepared by Various Techniques. Materials, 2021, 14, 7246.	1.3	1
81	Fe-Al-Si Alloys for Applications in Internal Combustion Engines. Defect and Diffusion Forum, 0, 403, 57-65.	0.4	0
82	Sintering Problems during Preparation of Ti-Al-Si Alloys. Defect and Diffusion Forum, 0, 403, 37-45.	0.4	0
83	Annealing Response of Additively Manufactured High-Strength 1.2709 Maraging Steel Depending on Elevated Temperatures. Materials, 2022, 15, 3753.	1.3	0