

# Pavla Roupcová

## List of Publications by Year in descending order

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Version: 2024-02-01

51  
papers

664  
citations

567281

15  
h-index

610901

24  
g-index

51  
all docs

51  
docs citations

51  
times ranked

889  
citing authors

#	ARTICLE	IF	CITATIONS
1	Oxide dispersion strengthened CoCrFeNiMn high-entropy alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 689, 252-256.	5.6	138
2	Effect of metallic dopants on the microstructure and mechanical properties of TiB <sub>2</sub> . <i>Journal of the European Ceramic Society</i> , 2015, 35, 2745-2754.	5.7	45
3	Mechanical properties of high niobium TiAl alloys doped with Mo and C. <i>Materials and Design</i> , 2016, 99, 284-292.	7.0	44
4	Synthesis of Ca,Y-zirconia/hydroxyapatite nanoparticles and composites. <i>Journal of the European Ceramic Society</i> , 2016, 36, 2903-2912.	5.7	40
5	Heat-induced spinodal decomposition of Ag@Cu nanoparticles. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 28277-28285.	2.8	26
6	Significantly decreased stability of MgH <sub>2</sub> in the Mg-In-C alloy system: Long-period-stacking-ordering as a new way how to improve performance of hydrogen storage alloys?. <i>Renewable Energy</i> , 2020, 150, 204-212.	8.9	23
7	Oxidation performance of cold spray Ti-Al barrier coated $\beta$ -TiAl intermetallic substrates. <i>Surface and Coatings Technology</i> , 2015, 268, 85-89.	4.8	22
8	Influence of Processing Techniques on Microstructure and Mechanical Properties of a Biodegradable Mg-3Zn-2Ca Alloy. <i>Materials</i> , 2016, 9, 880.	2.9	21
9	Towards near-permanent CoCrMo prosthesis surface by combining micro-texturing and low temperature plasma carburising. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2016, 55, 215-227.	3.1	21
10	Non-aqueous template-assisted synthesis of mesoporous nanocrystalline silicon orthophosphate. <i>RSC Advances</i> , 2015, 5, 73670-73676.	3.6	18
11	Chemical synthesis of nickel ferrite spinel designed as an insulating bilayer coating on ferromagnetic particles. <i>Surface and Coatings Technology</i> , 2015, 270, 66-76.	4.8	17
12	Changes in phase composition of Zr-Fe-V getter after hydriding and vacuum dehydriding cycles. <i>Journal of Alloys and Compounds</i> , 2010, 492, 160-165.	5.5	16
13	Effect of Phase Structure on Sintering Behavior of Zirconia Nanopowders. <i>Journal of the American Ceramic Society</i> , 2013, 96, 3720-3727.	3.8	16
14	Solvothermal hot injection synthesis of core-shell AgNi nanoparticles. <i>Journal of Alloys and Compounds</i> , 2019, 770, 377-385.	5.5	16
15	Improvement of hydrogen storage kinetics in ball-milled magnesium doped with antimony. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 6144-6151.	7.1	15
16	The Influence of Aluminum Content on Oxidation Resistance of New-Generation ODS Alloy at 1200 Å°C. <i>Metals</i> , 2020, 10, 1478.	2.3	15
17	Structural transformations of Fe <sub>81</sub> B <sub>13</sub> Si <sub>4</sub> C <sub>2</sub> amorphous alloy induced by heating. <i>Journal of Magnetism and Magnetic Materials</i> , 2011, 323, 400-404.	2.3	14
18	Cobalt-induced structural modulation in multiferroic Aurivillius-phase oxides. <i>Journal of Materials Chemistry C</i> , 2020, 8, 8466-8483.	5.5	14

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19	Comparison of low cycle fatigue of ductile cast irons with different matrix alloyed with nickel. <i>Procedia Engineering</i> , 2010, 2, 2307-2316.	1.2	13
20	Thermally induced microstructural transformations and anti-corrosion properties of Co <sub>70</sub> Fe <sub>5</sub> Si <sub>10</sub> B <sub>15</sub> amorphous alloy. <i>Journal of Non-Crystalline Solids</i> , 2018, 500, 326-335.	3.1	12
21	Influence of iridium (Ir) doping on the structural, electrical, and dielectric properties of LuFeO <sub>3</sub> perovskite compound. <i>Journal of Alloys and Compounds</i> , 2021, 877, 160282.	5.5	12
22	Magnetic Properties and Mössbauer spectroscopy of NdFe <sub>1-x</sub> Mn <sub>x</sub> O <sub>3</sub> . <i>Journal of Physics: Conference Series</i> , 2015, 592, 012117.	0.4	10
23	Temperature stability of AgCu nanoparticles. <i>Journal of Nanoparticle Research</i> , 2015, 17, 1.	1.9	9
24	Experimental Study of the Sb-Sn-Zn Alloy System. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2014, 45, 1181-1188.	2.2	8
25	Effect of shock wave on microstructure of silicon steel. <i>Surfaces and Interfaces</i> , 2020, 20, 100415.	3.0	7
26	A Novel Composite Material Designed from FeSi Powder and Mn <sub>0.8</sub> Zn <sub>0.2</sub> Fe <sub>2</sub> O <sub>4</sub> Ferrite. <i>Advances in Materials Science and Engineering</i> , 2015, 2015, 1-8.	1.8	6
27	Rapid pressure-less and spark plasma sintering of (Ba <sub>0.85</sub> Ca <sub>0.15</sub> Zr <sub>0.1</sub> Ti <sub>0.9</sub> )O <sub>3</sub> lead-free piezoelectric ceramics. <i>Journal of the European Ceramic Society</i> , 2021, 41, 2514-2523.	5.7	6
28	Magnetic properties of 42CrMo4 steel. <i>IOP Conference Series: Materials Science and Engineering</i> , 2017, 179, 012010.	0.6	5
29	Magneto-crystalline anisotropy of NdFe <sub>0.9</sub> Mn <sub>0.1</sub> O <sub>3</sub> single crystal. <i>Physica B: Condensed Matter</i> , 2018, 536, 89-92.	2.7	5
30	Magnetism in NdMn <sub>0.1</sub> Fe <sub>0.9</sub> O <sub>3</sub> compound. <i>Journal of Magnetism and Magnetic Materials</i> , 2020, 502, 166539.	2.3	5
31	FeSiBAlNiMo High Entropy Alloy Prepared by Mechanical Alloying. <i>Acta Physica Polonica A</i> , 2017, 131, 771-773.	0.5	5
32	Exchange Bias Effect in NdFeO <sub>3</sub> System of Nanoparticles. <i>Acta Physica Polonica A</i> , 2017, 131, 869-871.	0.5	5
33	Hydrogenation of nanocrystalline Zr-Fe-H powder. <i>Journal of Alloys and Compounds</i> , 2005, 404-406, 537-540.	5.5	4
34	Iron precipitation in basalt fibres embedded in partially pyrolysed methylsiloxane matrix. <i>Composites Part A: Applied Science and Manufacturing</i> , 2019, 123, 286-292.	7.6	4
35	Improved hydrogen sorption kinetics in Mg modified by chosen catalysts. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 8315-8324.	7.1	4
36	Creep Resistance of S304H Austenitic Steel Processed by High-Pressure Sliding. <i>Materials</i> , 2022, 15, 331.	2.9	4

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37	Thermally Induced Structural Transformations of Fe <sub>40</sub> Ni <sub>40</sub> P <sub>14</sub> B <sub>6</sub> Amorphous Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 260-267.	2.2	3
38	Low-temperature consolidation of high-strength TiB <sub>2</sub> ceramic composites via grain-boundary engineering using Ni-W alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 738, 194-202.	5.6	3
39	Thin high-strength zirconia tapes with extreme flexibility. Journal of Asian Ceramic Societies, 2021, 9, 964-974.	2.3	3
40	On thermal stability of nanocrystalline Ag-Cu-S powders. Journal of Nanoparticle Research, 2021, 23, 1.	1.9	3
41	High temperature corrosion of Fe-6wt% Si steel in various atmospheres. Materials and Corrosion - Werkstoffe Und Korrosion, 2019, 70, 593-604.	1.5	2
42	Hydrogen desorption from alloys Mg-Cu(KCl): Cu catalysis in detail. International Journal of Hydrogen Energy, 2021, 46, 14494-14507.	7.1	2
43	Analysis of stresses in FeSi sheets induced by laser cutting. IOP Conference Series: Materials Science and Engineering, 2018, 461, 012009.	0.6	1
44	Preparation and characterization of novel environmentally friendly Al <sub>2</sub> O <sub>3</sub> /SiO <sub>2</sub> /CaO ceramic foams. Ceramics International, 2018, 44, 19063-19069.	4.8	1
45	Crystal growth and characterization of (Dy <sub>x</sub> La <sub>1-x</sub> ) <sub>2</sub> Ti <sub>2</sub> O <sub>7</sub> crystals. Metallic Materials, 2020, 58, 59-70.	0.3	1
46	Preparation and properties of Fe and Fe <sub>3</sub> O <sub>4</sub> nanoparticles in ZrO <sub>2</sub> matrix. European Physical Journal D, 2006, 56, E93-E99.	0.4	0
47	Changes in Phase Composition of NaAlH <sub>4</sub> +FeCl <sub>2</sub> Complex Hydride Exposed to Air. , 2010, , .		0
48	Structural and compositional stability of the mechanically alloyed (Fe, Mo)-Al at elevated temperatures. Materials Chemistry and Physics, 2015, 168, 108-116.	4.0	0
49	Influence of long-term ageing upon the capacity of hydrogen storage in two novel Mg-Ni-In-C alloys. Metallic Materials, 2016, 54, 389-396.	0.3	0
50	HYDROGEN SORPTION IN ORDERED Mg-In ALLOYS. , 2019, , .		0
51	Significant decrease of hydride decomposition enthalpy in ordered Mg-In alloys induced by growing hydrogen concentration. Metallic Materials, 2020, 58, 161-167.	0.3	0