Dmitri Moskovskikh

List of Publications by Year
in descending order

72 papers	1,391 citations	279701 23 h-index	395590 33 g-index
72 all docs	72 docs citations	72 times ranked	1189 citing authors

#	Article	IF	Citations
1	High-entropy (HfTaTiNbZr)C and (HfTaTiNbMo)C carbides fabricated through reactive high-energy ball milling and spark plasma sintering. Ceramics International, 2020, 46, 19008-19014.	2.3	82
2	Experimental investigation of milling regimes in planetary ball mill and their influence on structure and reactivity of gasless powder exothermic mixtures. Powder Technology, 2015, 274, 44-52.	2.1	73
3	Extremely hard and tough high entropy nitride ceramics. Scientific Reports, 2020, 10, 19874.	1.6	65
4	Direct Combustion Synthesis of Silicon Carbide Nanopowder from the Elements. Journal of the American Ceramic Society, 2013, 96, 111-117.	1.9	58
5	Bulk Cuâ€“Cr nanocomposites by high-energy ball milling and spark plasma sintering. Journal of Alloys and Compounds, 2014, 617, 39-46.	2.8	56
6	Optimization of ball-milling process for preparation of Siâ€“Ge nanostructured thermoelectric materials with a high figure of merit. Scripta Materialia, 2015, 96, 9-12.	2.6	45
7	Structure and properties of equiatomic CoCrFeNiMn alloy fabricated by high-energy ball milling and spark plasma sintering. Journal of Alloys and Compounds, 2019, 805, 1237-1245.	2.8	41
8	Mechanochemical synthesis of methylammonium lead iodide perovskite. Journal of Materials Science, 2016, 51, 9123-9130.	1.7	35
9	Bulk boron carbide nanostructured ceramics by reactive spark plasma sintering. Ceramics International, 2017, 43, 8190-8194.	2.3	35
10	Silicon carbide ceramics: Mechanical activation, combustion and spark plasma sintering. Ceramics International, 2016, 42, 12686-12693.	2.3	34
11	Thermal stability and strain sensitivity of nanostructured aluminum titanate (Al2TiO5). Materials Chemistry and Physics, 2019, 223, 202-208.	2.0	34
12	Fabrication of ultra-high-temperature nonstoichiometric hafnium carbonitride via combustion synthesis and spark plasma sintering. Ceramics International, 2020, 46, 16068-16073.	2.3	34
13	Spark plasma sintering of SiC powders produced by different combustion synthesis routes. Journal of the European Ceramic Society, 2015, 35, 477-486.	2.8	31
14	Enhanced thermoelectric figure of merit of p-type Si0.8Ge0.2 nanostructured spark plasma sintered alloys with embedded SiO2 nanoinclusions. Scripta Materialia, 2017, 127, 63-67.	2.6	31
15	Reactive, nonreactive, and flash spark plasma sintering of Al₂O₃/SiC compositesâ€"A comparative study. Journal of the American Ceramic Society, 2020, 103, 520-530.	1.9	30
16	Spark Plasma Sintering of Titanium Spherical Particles. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2016, 47, 2725-2731.	1.0	29
17	Reactive spark plasma sintering of exothermic systems: A critical review. Ceramics International, 2022, 48, 2988-2998.	2.3	28
18	Refractory High-Entropy HfTaTiNbZr-Based Alloys by Combined Use of Ball Milling and Spark Plasma Sintering: Effect of Milling Intensity. Metals, 2020, 10, 1268.	1.0	26

#	Article	IF	Citations
19	Self-propagating high-temperature synthesis of silicon carbide nanopowders. Doklady Physical Chemistry, 2013, 449, 41-43.	0.2	25
20	Influence of high-energy ball milling on electrical resistance of Cu and Cu/Cr nanocomposite materials produced by Spark Plasma Sintering. Journal of Alloys and Compounds, 2016, 688, 468-474.	2.8	25
21	CO oxidation and organic dyes degradation over grapheneâ€"Cu and grapheneâ€"CuNi catalysts obtained by solution combustion synthesis. Scientific Reports, 2020, 10, 16104.	1.6	25
22	Molybdenum recovery from molybdenite concentrates by low-temperature roasting with sodium chloride. International Journal of Mineral Processing, 2017, 161, 13-20.	2.6	24
23	Graphene@Metal Nanocomposites by Solution Combustion Synthesis. Inorganic Chemistry, 2020, 59, 6550-6565.	1.9	24
24	Recycling of iron-rich sediment for surface modification of filters for underground water deironing. Journal of Environmental Chemical Engineering, 2021, 9, 105712.	3.3	24
25	The Solid Flame Phenomenon: A Novel Perspective. Advanced Engineering Materials, 2018, 20, 1701065.	1.6	23
26	Mechanical Behavior and Microstructure Evolution of a Ti-15Mo/TiB Titaniumâ€"Matrix Composite during Hot Deformation. Metals, 2019, 9, 1175.	1.0	22
27	Effect of Hot Rolling on the Microstructure and Mechanical Properties of a Ti-15Mo/TiB Metal-Matrix Composite. Metals, 2020, 10, 40.	1.0	22
28	Effect of the residual water content in gels on solution combustion synthesis temperature. Journal of Sol-Gel Science and Technology, 2020, 93, 251-261.	1.1	20
29	Phase stability and mechanical properties of carbide solid solutions with 2â€"5 principal metals. Computational Materials Science, 2022, 201, 110869.	1.4	20
30	Influence of high-energy ball milling on reaction kinetics in the Ni-Al system: An electrothermorgaphic study. International Journal of Self-Propagating High-Temperature Synthesis, 2015, 24, 21-28.	0.2	18
31	Mesoporous metal - silica materials: Synthesis, catalytic and thermal properties. Microporous and Mesoporous Materials, 2018, 257, 175-184.	2.2	18
32	Reactive spark plasma sintering and thermoelectric properties of Nd-substituted BiCuSeO oxyselenides. Journal of Alloys and Compounds, 2019, 785, 96-104.	2.8	18
33	Influence of pulsed direct current on the growth rate of intermetallic phases in the Niâ€"Al system during reactive spark plasma sintering. Scripta Materialia, 2022, 216, 114759.	2.6	18
34	High porous cellular materials by spray solution combustion synthesis and spark plasma sintering. Journal of Alloys and Compounds, 2019, 779, 557-565.	2.8	17
35	Comparison of Conventional and Flash Spark Plasma Sintering of Cuâ€"Cr Pseudo-Alloys: Kinetics, Structure, Properties. Metals, 2021, 11, 141.	1.0	17
36	Nickel sulphide concentrate processing via low-temperature calcination with sodium chloride. Part 1 â€" Identification of interaction products. Minerals Engineering, 2019, 134, 37-53.	1.8	16

#	Article	IF	Citations
37	Preparation and study of the thermoelectric properties of Fe2TiSn1â€“x Si x Heusler alloys. Semiconductors, 2017, 51, 891-893.	0.2	15
38	Thermoelectric properties and cost optimization of spark plasma sintered n-type Si0.9Ge0.1 - Mg2Si nanocomposites. Scripta Materialia, 2018, 146, 295-299.	2.6	15
39	Effect of mechanical activation on thermal and electrical conductivity of sintered Cu, Cr, and Cu/Cr composite powders. Doklady Physics, 2016, 61, 257-260.	0.2	13
40	Mechanochemical synthesis and spark plasma sintering of hafnium carbonitride ceramics. Advanced Powder Technology, 2021, 32, 385-389.	2.0	13
41	Preparation of copperâ€“molybdenum nanocrystalline pseudoalloys using a combination of mechanical activation and spark plasma sintering techniques. Russian Journal of Physical Chemistry B, 2017, 11, 173-179.	0.2	12
42	Simulation of Field Assisted Sintering of Silicon Germanium Alloys. Materials, 2019, 12, 570.	1.3	12
43	Ultra-high-temperature tantalum-hafnium carbonitride ceramics fabricated by combustion synthesis and spark plasma sintering. Ceramics International, 2021, 47, 30043-30050.	2.3	12
44	Influence of chromium in nanocrystalline copperâ€“chromium pseudoalloy on its structure and properties. Nanotechnologies in Russia, 2017, 12, 40-48.	0.7	11
45	Structure and transport properties of the spark plasma sintered barium cerate based proton conductor. Ceramics International, 2017, 43, 14905-14914.	2.3	11
46	Ceramics from self-sustained reactions: Recent advances. Journal of the European Ceramic Society, 2020, 40, 2512-2526.	2.8	11
47	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
48	Engineering of strong and hard in-situ Al-Al3Ti nanocomposite via high-energy ball milling and spark plasma sintering. Journal of Alloys and Compounds, 2022, 895, 162676.	2.8	10
49	WO3â€“grapheneâ€“Cu nanocomposites for CO, NO2 and acetone gas sensors. Nano Structures Nano Objects, 2022, 29, 100824.	1.9	10
50	Production of Rounded Reactive Composite Ti/Al Powders for Selective Laser Melting by High-Energy Ball Milling. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2019, 50, 1241-1247.	1.0	9
51	Thermoelectric Properties of n-Type Si0,8Ge0,2-FeSi2 Multiphase Nanostructures. Journal of Electronic Materials, 2016, 45, 3427-3432.	1.0	8
52	Structure and Thermal Properties of an Al-Based Metallic Glass-Polymer Composite. Metals, 2018, 8, 1037.	1.0	8
53	Mechanochemical synthesis and thermoelectric properties of TiFe2Sn Heusler alloy. Intermetallics, 2021, 133, 107195.	1.8	8
54	Two-Layer Nanocomposite TiC-Based Coatings Produced by a Combination of Pulsed Cathodic Arc Evaporation and Vacuum Electro-Spark Alloying. Materials, 2020, 13, 547.	1.3	7

#	Article	IF	Citations
55	Fabrication and oxidation resistance of the hafnium carbonitride â€“ Silicon carbide composites. Ceramics International, 2022, 48, 23870-23877.	2.3	7
56	Nickel sulphide concentrate processing via low-temperature calcination with sodium chloride: Part 2 â€“ Chemistry and mechanism of interaction. Minerals Engineering, 2019, 143, 106029.	1.8	6
57	TiAl-Based Materials by In Situ Selective Laser Melting of Ti/Al Reactive Composites. Metals, 2020, 10, 1505.	1.0	5
58	Bulk Nb3Al intermetallic compound: Synthesis and high-temperature properties. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 790, 139715.	2.6	5
59	Microstructure and Hardness Evolution of Al8Zn7Ni3Mg Alloy after Casting at very Different Cooling Rates. Metals, 2020, 10, 762.	1.0	5
60	Investigation of Thermophysical Properties of Zr-Based Metallic Glass-Polymer Composite. Metals, 2021, 11, 1412.	1.0	5
61	Thermophysical properties of tantalum carbide (TaC) within 2000â€“5500ÂK temperature range. Ceramics International, 2022, 48, 19655-19661.	2.3	5
62	Low-temperature synthesis of ultra-high-temperature HfC and HfCN nanoparticles. Materialia, 2022, 22, 101415.	1.3	5
63	Chemistry and Mechanism of Interaction Between Molybdenite Concentrate and Sodium Chloride When Heated in the Presence of Oxygen. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2017, 48, 878-888.	1.0	4
64	Cu-Matrix Composites by Reactive Spark Plasma Sintering of Mechanoactivated Cuâ€“Siâ€“C Powder Mixtures. International Journal of Self-Propagating High-Temperature Synthesis, 2020, 29, 233-236.	0.2	2
65	Shock compressibility of polycrystalline nickel aluminide. High Pressure Research, 2019, 39, 471-479.	0.4	1
66	Study of structure of copper-based composite materials during the spark plasma sintering. IOP Conference Series: Materials Science and Engineering, 2019, 558, 012024.	0.3	1
67	Self-propagating high-temperature synthesis of Fe2TiSn based Heusler alloys with following spark plasma sintering. IOP Conference Series: Materials Science and Engineering, 2019, 558, 012042.	0.3	1
68	Structural Features of High-Entropy HfTaTiNbZr Alloy Fabricated by High-Energy Ball Milling. Russian Journal of Non-Ferrous Metals, 2020, 61, 421-428.	0.2	1
69	Thermal Properties of Si Mechanically Alloyed with FeSi₂ and CrSi₂. Applied Mechanics and Materials, 0, 799-800, 207-211.	0.2	0
70	Experimental studies of the fundamental mechanism for phase formation in reactive solutions toward creation of the functional materials. IOP Conference Series: Materials Science and Engineering, 2019, 558, 012039.	0.3	0
71	Structural features of HfTaTiNbZr high-entropy alloy fabricated by high energy ball milling. Russian Journal of Non-Ferrous Metals, 2020, , 42-50.	0.0	0
72	Synthesis of TaNbHfZrW-Based Nanopowders by Thermolysis of Transition Metal Halides in the Form of Dry Mixtures and Gels. Physical Mesomechanics, 2021, 24, 684-691.	1.0	0