Vyacheslav I Mali

List of Publications by Year
in descending order

52 papers	568 citations	567144 15 h-index	713332 21 g-index
52 all docs	52 docs citations	52 times ranked	426 citing authors

#	Article	IF	Citations
1	Carbon uptake during Spark Plasma Sintering: investigation through the analysis of the carbide â€œfootprintâ€• in a Niâ€“W alloy. RSC Advances, 2015, 5, 80228-80237.	1.7	42
2	Microstructure and mechanical properties of Ti/Ta/Cu/Ni alloy laminate composite materials produced by explosive welding. International Journal of Advanced Manufacturing Technology, 2017, 93, 4285-4294.	1.5	38
3	Metal-Intermetallic Laminate Ti-Al3Ti Composites Produced by Spark Plasma Sintering of Titanium and Aluminum Foils Enclosed in Titanium Shells. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 4326-4334.	1.1	35
4	Numerical and experimental modeling of jet formation during a high-velocity oblique impact of metal plates. Combustion, Explosion and Shock Waves, 2012, 48, 214-225.	0.3	28
5	Influence of material viscosity on the jet formation process during collisions of metal plates. Combustion, Explosion and Shock Waves, 1976, 11, 1-13.	0.3	27
6	Nucleation and growth of titanium aluminide in an explosion-welded laminate composite. Physics of Metals and Metallography, 2012, 113, 947-956.	0.3	23
7	Formation of self-supporting porous graphite structures by Spark Plasma Sintering of nickelâ€“amorphous carbon mixtures. Journal of Physics and Chemistry of Solids, 2015, 76, 192-202.	1.9	22
8	Reactivity of materials towards carbon of graphite foil during Spark Plasma Sintering: A case study using Niâ€“W powders. Materials Letters, 2016, 168, 62-67.	1.3	22
9	Laser welding of stainless steel to titanium using explosively welded composite inserts. International Journal of Advanced Manufacturing Technology, 2017, 90, 3037-3043.	1.5	22
10	Formation and structure of vortex zones arising upon explosion welding of carbon steels. Physics of Metals and Metallography, 2012, 113, 233-240.	0.3	21
11	Smaller crystallites in sintered materials? A discussion of the possible mechanisms of crystallite size refinement during pulsed electric current-assisted sintering. Materials Letters, 2015, 144, 168-172.	1.3	21
12	Numerical and experimental simulation of wave formation during explosion welding. Proceedings of the Steklov Institute of Mathematics, 2013, 281, 12-26.	0.1	20
13	Spark Plasma Sintering of Mechanically Activated Ni and Al Powders. Advanced Materials Research, 2014, 1040, 772-777.	0.3	19
14	Microstructure and mechanical properties of materials obtained by spark plasma sintering of Ni3Alâ€“Ni powder mixtures. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 773, 138882.	2.6	18
15	Towards a better understanding of nickel/diamond interactions: the interface formation at low temperatures. RSC Advances, 2015, 5, 51799-51806.	1.7	17
16	Porous electrically conductive materials produced by Spark Plasma Sintering and hot pressing of nanodiamonds. Ceramics International, 2015, 41, 12459-12463.	2.3	16
17	Ti3SiC2-Cu composites by mechanical milling and spark plasma sintering: Possible microstructure formation scenarios. Metals and Materials International, 2013, 19, 1235-1241.	1.8	15
18	Structure and Microhardness of Cu-Ta Joints Produced by Explosive Welding. Scientific World Journal, The, 2013, 2013, 1-7.	0.8	14

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19	Nanocomposites TiB2-Cu: Consolidation and erosion behavior. Journal of Materials Science, 2005, 40, 3491-3495.	1.7	13
20	Structure and Properties of Explosively Compacted Copperâ€"Molybdenum. Combustion, Explosion and Shock Waves, 2002, 38, 473-477.	0.3	12
21	Laser welding of stainless steel with a titanium alloy with the use of a multilayer insert obtained in an explosion. Combustion, Explosion and Shock Waves, 2014, 50, 483-487.	0.3	12
22	The Structural Particularities of Multilayered Metal-Intermetallic Composites Fabricated by the Spark Plasma Sintering Technology. Advanced Materials Research, 2014, 1040, 800-804.	0.3	11
23	Ceramic-Reinforced Î³-TiAl-Based Composites: Synthesis, Structure, and Properties. Materials, 2019, 12, 629.	1.3	11
24	Influence of the explosively welded composites structure on the diffusion processes occurring during annealing. , 2013, , .		10
25	Structural Transformations Occurring upon Explosive Welding of Alloy Steel and High-Strength Titanium. Physics of Metals and Metallography, 2018, 119, 469-476.	0.3	10
26	Investigation of the breakdown of flat jets. Combustion, Explosion and Shock Waves, 1974, 10, 676-682.	0.3	7
27	Structure and Properties of Multilayered Composite Materials â€œNickel - Nickel Aluminideâ€•Obtained Using SPS Method. Advanced Materials Research, 2014, 1040, 161-165.	0.3	7
28	Specific Features of Sheet Acceleration under Conditions of Magnetic Pulse Welding. Combustion, Explosion and Shock Waves, 2018, 54, 113-118.	0.3	6
29	Crystallization of Ti33Cu67 metallic glass under high-current density electrical pulses. Nanoscale Research Letters, 2011, 6, 512.	3.1	4
30	Effect of Heat-Treatment on the Interface Microstructure of Explosively Welded Stainless Steel â€" Bronze Composite. Applied Mechanics and Materials, 2014, 698, 495-500.	0.2	4
31	The influence of sintering temperature on microstructure and mechanical properties of Ni-Al intermetallics fabricated by SPS. AIP Conference Proceedings, 2015, , .	0.3	4
32	Crystallization of Fe83B17 amorphous alloy by electric pulses produced by a capacitor discharge. Applied Physics A: Materials Science and Processing, 2015, 120, 1565-1572.	1.1	4
33	The Effect of Preliminary Mechanical Activation on the Structure and Mechanical Properties of Ni₃Al+B Material Obtained by SPS. Key Engineering Materials, 2017, 743, 19-24.	0.4	4
34	Heat Conduction of Copperâ€"Molybdenum Explosive Compacts. Combustion, Explosion and Shock Waves, 2003, 39, 108-111.	0.3	3
35	Microstructure and mechanical properties of copper-tantalum joints produced by explosive welding. , 2013, , .		3
36	Explosive welding of titanium with stainless steel using bronze — Tantalum as interlayer. , 2014, , .		3

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37	Formation of Metal-Intermetallic Laminate Composites by Spark Plasma Sintering of Metal Plates and Powder Work Pieces. Applied Mechanics and Materials, 2014, 698, 277-282.	0.2	3
38	The Influence of Duration of Preliminary Mechanical Activation on Microhardness of Specimens of Ni3Al Intermetallide Synthesized Under Conditions of Spark Plasma Sintering. Russian Physics Journal, 2019, 61, 1947-1949.	0.2	3
39	Porous steel laser welding technology. AIP Conference Proceedings, 2020, , .	0.3	3
40	Effect of the metal structure on the loss of stability of a thin plate separating a powder compressed by a shock wave. Combustion, Explosion and Shock Waves, 2010, 46, 96-102.	0.3	2
41	Formation of Intermetallic Structures by Spark Plasma Sintering of Titanium and Aluminum Powders. Applied Mechanics and Materials, 0, 788, 177-181.	0.2	2
42	Spark Plasma Sintering of Diamond- and Nanodiamond-Metal Composites. , 2019, , 441-457.		2
43	Welding of titanium and nickel alloy by combination of explosive welding and spark plasma sintering technologies. AIP Conference Proceedings, 2015, , .	0.3	1
44	Welding of titanium and stainless steel using the composite insert. AIP Conference Proceedings, 2016, , .	0.3	1
45	Inter-particle interactions in partially densified compacts of electrically conductive materials during spark plasma sintering. , 2016, , .		1
46	Microstructure and Microhardness of a Multicomponent System After Mechanical Activation and Spark Plasma Sintering. Russian Physics Journal, 2020, 62, 1746-1748.	0.2	1
47	Effect of Preliminary Treatment on Microstructure, Mechanical Properties and Fracture of Ni3Al Samples Synthesized by Spark Plasma Sintering. Russian Physics Journal, 0, , 1.	0.2	1
48	Sergei Konstantinovich Godunov has turned 85 years old. Russian Mathematical Surveys, 2015, 70, 561-590.	0.2	0
49	Investigation of the structure and properties of a composite insert applied at laser welding of steel with titanium. AIP Conference Proceedings, 2017, , .	0.3	0
50	Welding of dissimilar alloys based on titanium and aluminum. AIP Conference Proceedings, 2018, , .	0.3	0
51	To the Technology of Laser Welding of Aluminum with Titanium. Materials Science Forum, 2018, 938, 70-74.	0.3	0
52	Laser welding of porous metals. AIP Conference Proceedings, 2020, , .	0.3	0