Sergey Kondrat'ev

List of Publications by Year
in descending order

60 papers	639 citations	516710 16 h-index	677142 22 g-index
60 all docs	60 docs citations	60 times ranked	132 citing authors

#	Article	IF	Citations
1	Experimental observation and crystallographic description of M7C3 carbide transformation in Feâ€“Crâ€“Niâ€“C HP type alloy. Acta Materialia, 2015, 100, 275-281.	7.9	64
2	Fragmented structure of niobium carbide particles in as-cast modified HP alloys. Acta Materialia, 2017, 127, 267-276.	7.9	33
3	New Approach to Synthesis of Powder and Composite Materials by Electron Beam. Part 1. Technological Features of the Process. Metal Science and Heat Treatment, 2016, 58, 27-32.	0.6	31
4	Simulation of the layer-by-layer synthesis of articles with an electron beam. Technical Physics, 2015, 60, 1663-1669.	0.7	27
5	New additive technologies based on ion beams. Russian Engineering Research, 2016, 36, 1012-1016.	0.6	27
6	Transformation of the Structure of Refractory Alloy 0.45C â€“ 26Cr â€“ 33Ni â€“ 2Si â€“ 2Nb During a Long-Term High-Temperature Hold. Metal Science and Heat Treatment, 2014, 55, 517-525.	0.6	26
7	Analysis of Transformations of Carbide Phases in Alloy 25Cr35Ni by the Method of Quantitative Electron Microscopy. Metal Science and Heat Treatment, 2015, 57, 402-409.	0.6	26
8	Mechanism and Kinetics of Phase Transformations in Refractory Alloy 45Kh26N33S2B2 Under Long-Term High-Temperature Holds. Part 2. Metal Science and Heat Treatment, 2014, 56, 124-130.	0.6	24
9	Effect of electron factor (number of electron holes) on kinetics of nucleation, growth, and dissolution of phases during long-term high-temperature holdings of 0.45C-26Cr-33Ni-2Si-2Nb superalloy. Physics of Metals and Metallography, 2014, 115, 1-11.	1.0	23
10	Classification of high-damping metallic materials. Strength of Materials, 1986, 18, 1325-1329.	0.5	22
11	Raising the Resistance of Pearlitic and Martensitic Steels to Brittle Fracture Under Thermal Action on the Morphology of the Carbide Phase. Metal Science and Heat Treatment, 2014, 55, 533-539.	0.6	22
12	Special Features of Structure and Long-Term Strength of Cast Refractory Alloy 45Kh26N33S2B2. Metal Science and Heat Treatment, 2013, 55, 209-215.	0.6	21
13	Mechanisms and Kinetics of Phase Transformations in Refractory Alloy 45Kh26N33S2B2 in Long-Term High-Temperature Holds. Part 1. Metal Science and Heat Treatment, 2014, 56, 3-8.	0.6	21
14	Microstructure and Mechanical Properties of Welds of Al â€“ Mg â€“ Si Alloys After Different Modes of Impulse Friction Stir Welding. Metal Science and Heat Treatment, 2018, 59, 697-702.	0.6	20
15	A Concept of Carbide Design of Steels with Improved Cold Resistance. Metal Science and Heat Treatment, 2015, 56, 548-554.	0.6	19
16	Non-crystallographic symmetry of liquid metal, flat crystallographic faults and polymorph transformation of the M₇C₃carbide. Acta Crystallographica Section A: Foundations and Advances, 2017, 73, 209-217.	0.1	19
17	Kinetics of the Formation of Intermetallic Phases in HP-Type Heat-Resistant Alloys at Long-Term High-Temperature Exposure. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 482-492.	2.2	17
18	Effect of High-Temperature Heating on the Structure and Properties of Aluminum Alloys in the Production of Drill Pipes. Metal Science and Heat Treatment, 2013, 55, 191-196.	0.6	16

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19	Optimization of the parameters of the surface-hardened layer in laser quenching of components. Welding International, 2012, 26, 629-632.	0.7	15
20	Nanostructure Mechanism of Formation of Oxide Film in Heat-Resistant Fe â€“ 25Cr â€“ 35Ni Superalloys. Metal Science and Heat Treatment, 2015, 56, 531-536.	0.6	15
21	Technological and Operational Features of Drill Pipes from Aluminum Alloys 2024 and 1953. Metal Science and Heat Treatment, 2018, 60, 32-38.	0.6	15
22	Carbon Nanostructured Implants for Substituting Bone Defects and Process of Their Production. Metal Science and Heat Treatment, 2018, 60, 18-23.	0.6	12
23	Effect of alloying and quenching practice on the mechanical properties and microstructure of alloy Br. A10. Strength of Materials, 1981, 13, 916-920.	0.5	11
24	Structural Stability and Variation of Properties of Aluminum Alloys D16 and 1953 in Production and Operation of Drill Pipes. Metal Science and Heat Treatment, 2014, 55, 526-532.	0.6	11
25	Selective High-Temperature Oxidation of Phases in a Cast Refractory Alloy of the 25Cr â€“ 35Ni â€“ Si â€“ Nb â€“ C System. Metal Science and Heat Treatment, 2014, 56, 403-408.	0.6	10
26	Crystallography of in-situ transformations of the M 7C3 carbide in the cast Feâ€“Crâ€“Ni alloy. Physics of Metals and Metallography, 2017, 118, 233-240.	1.0	10
27	Kinetics of the High-Temperature Oxidation of Heat-Resistant Statically and Centrifugally Cast HP40NbTi Alloys. Oxidation of Metals, 2019, 91, 33-53.	2.1	9
28	Evolution of the microstructure and phase composition of a subsurface of cast HP-type alloy during a long-term high-temperature aging. Materials Characterization, 2019, 150, 166-173.	4.4	9
29	New Approach to Electron Beam Synthesis of Powder and Composite Materials. Part 2. Practical Results for Alloy VT6. Metal Science and Heat Treatment, 2016, 58, 165-169.	0.6	8
30	Experimental investigation of in-situ transformations of the M 7C3 carbide in the cast Feâ€“Crâ€“Ni alloy. Physics of Metals and Metallography, 2017, 118, 227-232.	1.0	8
31	Importance of Thermokinetic Diagrams of Transformation of Supercooled Austenite for Development of Heat Treatment Modes for Critical Steel Parts. Metal Science and Heat Treatment, 2017, 58, 656-661.	0.6	8
32	Morphological Characteristics of Chromium Carbides in HP40NbTi Refractory Alloys in Cast Condition and after High-Temperature Holds. Metal Science and Heat Treatment, 2016, 58, 19-26.	0.6	7
33	Effect of alloying and quenching practice on the damping capacity of alloy Br.a10. Strength of Materials, 1981, 13, 1388-1392.	0.5	5
34	Interrelationship of the damping capacity to the mechanical properties and morphology of martensite in alloys with a reversible martensite transformation. Strength of Materials, 1983, 15, 1130-1134.	0.5	5
35	Effect of static tensile stresses on the dissipative properties of copper-aluminum-zinc alloys. Strength of Materials, 1982, 14, 1271-1275.	0.5	3
36	The mechanisms of scale and subsurface diffusion zone formation of heat-resistant HP40NbTi alloy at long-term high-temperature exposure. Materialia, 2019, 7, 100427.	2.7	3

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37	Effect of alloying with silicon on the damping capacity, physicomechanical properties, and microstructure of quenched alloys in the copper-aluminum system. Strength of Materials, 1983, 15, 1509-1513.	0.5	2
38	Determination of the stress concentration in a metric thread. Strength of Materials, 1986, 18, 1164-1168.	0.5	2
39	Mechanical properties of alloys with reversible martensitic transformation. Strength of Materials, 1992, 24, 262-269.	0.5	2
40	Structure of strengthening particles of niobium carbide in Feâ€“Crâ€“Ni cast refractory alloys. Physics of Metals and Metallography, 2017, 118, 659-670.	1.0	2
41	Effect of silicon on the mechanical properties and damping capacity of two-phase aluminum bronzes in the hardened state. Strength of Materials, 1980, 12, 1175-1179.	0.5	2
42	Study of the dependence of strength characteristics, ductility, and damping capacity on electron concentration in copper-aluminum-tin alloys. Strength of Materials, 1981, 13, 1035-1039.	0.5	1
43	Change of the damping ability upon aging of the ? alloy of the system Cu?Al?Zn with reversible martensite in the structure. Strength of Materials, 1983, 15, 1447-1451.	0.5	1
44	Effect of aging in martensite condition on mechanical properties of ?-alloy of the Cu?Al?Zn system. Strength of Materials, 1983, 15, 1291-1294.	0.5	1
45	Effect of tempering the austenitic phase on the structure and properties of quenched alloy of the Cu?Al?Zn system. Strength of Materials, 1985, 17, 1232-1235.	0.5	1
46	Correlation of phase yield point with other physicomechanical properties of ?-alloys of the system Cu-Al-An. Strength of Materials, 1990, 22, 575-579.	0.5	1
47	Effect of thermal cycling treatment on the structure of cast high-speed steel R6M5-Sh. Metal Science and Heat Treatment, 2011, 53, 299-303.	0.6	1
48	Physicomechanical properties of hardened copper-aluminum-zincÎ²-alloys with an intermediate structure. Strength of Materials, 1992, 24, 685-688.	0.5	1
49	Preliminary heat treatment of high-speed steel R6M5. Metal Science and Heat Treatment, 1979, 21, 161-163.	0.6	0
50	Effect of manganese and nickel on the mechanical properties and structure of A Cu?Al?Zn alloy in the martensitic state. Strength of Materials, 1983, 15, 202-206.	0.5	0
51	Damping capacity and mechanical properties of hardened ?-alloys in the copper-aluminum-nickel system. Strength of Materials, 1984, 16, 1623-1626.	0.5	0
52	Damping capacity of copper-aluminum alloys under the action of static tension. Strength of Materials, 1985, 17, 657-661.	0.5	0
53	Amplitude dependence of the damping capacity for alloys of the Cu-Al-Zn-Cd system. Strength of Materials, 1985, 17, 1576-1578.	0.5	0
54	Amplitude dependence of damping capacity for quenched copper-aluminum-zinc alloys with different martensite transformation characteristics. Strength of Materials, 1985, 17, 544-548.	0.5	0

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55	Effect of quenching rate on the physicomechanical properties of copper-aluminum-zinc alloys with reversible martensite in the structure. Strength of Materials, 1986, 18, 60-65.	0.5	0
56	Damping capacity of the Cu?Al?Zn alloy. Report 1. Effect of chemical composition. Strength of Materials, 1989, 21, 395-401.	0.5	0
57	Damping capacity of Cu?Al?Zn alloy. Report 2. Effect of diffusion processes. Strength of Materials, 1989, 21, 401-406.	0.5	0
58	Thermal cycling of damping Cu?Al?Zn ?-alloys. Strength of Materials, 1989, 21, 512-518.	0.5	0
59	Change in the properties of high-damping copper-aluminum-zinc ?-alloys after HTMT. Strength of Materials, 1990, 22, 548-554.	0.5	0
60	Characterization of Microstructure and Chemical Microinhomogeneity of HP40NbTi Cast Alloy After Different Crystallization Rates. Metallography, Microstructure, and Analysis, 2021, 10, 675-683.	1.0	0