

Sergey Konovalov

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

255
papers

1,216
citations

20
h-index

25
g-index

290
ext. papers

1,600
ext. citations

1.3
avg, IF

5.1
L-index

#	Paper	IF	Citations
255	Cold Metal Transfer (CMT) Based Wire and Arc Additive Manufacture (WAAM) System. <i>Journal of Surface Investigation</i> , 2018 , 12, 1278-1284	0.5	46
254	The microstructure and properties of nanostructured Cr-Al alloying layer fabricated by high-current pulsed electron beam. <i>Vacuum</i> , 2019 , 167, 263-270	3.7	41
253	Additive Manufacturing Based on Welding Arc: A low-Cost Method. <i>Journal of Surface Investigation</i> , 2017 , 11, 1317-1328	0.5	38
252	Formation of surface gradient structural-phase states under electron-beam treatment of stainless steel. <i>Journal of Surface Investigation</i> , 2011 , 5, 974-978	0.5	35
251	The fabrication of NiTi shape memory alloy by selective laser melting: a review. <i>Rapid Prototyping Journal</i> , 2019 , 25, 1421-1432	3.8	31
250	In-situ wire-feed additive manufacturing of Cu-Al alloy by addition of silicon. <i>Applied Surface Science</i> , 2019 , 487, 1366-1375	6.7	30
249	Structure and properties changes of Al-Si alloy treated by pulsed electron beam. <i>Materials Letters</i> , 2018 , 229, 377-380	3.3	29
248	Effects of strain rate on the hot deformation behavior and dynamic recrystallization in China low activation martensitic steel. <i>Fusion Engineering and Design</i> , 2016 , 103, 21-30	1.7	28
247	Mathematical Modeling of the Concentrated Energy Flow Effect on Metallic Materials. <i>Metals</i> , 2017 , 7, 4	2.3	28
246	Multicyclic fatigue of stainless steel treated by a high-intensity electron beam: surface layer structure. <i>Russian Physics Journal</i> , 2011 , 54, 575-583	0.7	27
245	Microstructural evolution and mechanical properties of deep cryogenic treated Cu ₄₀ Al ₃₀ Si alloy fabricated by Cold Metal Transfer (CMT) process. <i>Materials Characterization</i> , 2020 , 159, 110011	3.9	27
244	Evolution of dislocation substructures in fatigue loaded and failed stainless steel with the intermediate electropulsing treatment. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2010 , 527, 3040-3043	5.3	26
243	Influence of contact potential difference and electric potential on the microhardness of metals. <i>Physics of the Solid State</i> , 2009 , 51, 1137-1141	0.8	25
242	Modification of Structure and Surface Properties of Hypoeutectic Silumin by Intense Pulse Electron Beams. <i>Progress in Physics of Metals</i> , 2018 , 19, 195-222	1.6	25
241	Structural and phase changes under electropulse treatment of fatigue-loaded titanium alloy VT1-0. <i>Journal of Materials Research and Technology</i> , 2019 , 8, 1300-1307	5.5	24
240	Formation features of structure-phase states of Cr ₂ Ni ₃ Co ₂ containing coatings on martensitic steel. <i>Journal of Surface Investigation</i> , 2016 , 10, 1119-1124	0.5	22
239	Evolution of the phase composition and defect substructure of rail steel subjected to high-intensity electron-beam treatment. <i>Journal of Surface Investigation</i> , 2013 , 7, 990-995	0.5	21

238	Control of austenite steel fatigue strength. <i>International Journal of Fatigue</i> , 2005 , 27, 1186-1191	5	21
237	Surface modification of Ti-based alloy by selective laser melting of Ni-based superalloy powder. <i>Journal of Materials Research and Technology</i> , 2020 , 9, 8796-8807	5.5	20
236	Increase in the fatigue durability of stainless steel by electron-beam surface treatment. <i>Journal of Surface Investigation</i> , 2013 , 7, 94-98	0.5	20
235	Fatigue life of silumin treated with a high-intensity pulsed electron beam. <i>Journal of Surface Investigation</i> , 2015 , 9, 1056-1059	0.5	20
234	Evolution of Al ₁₉ Zn ₄ Si alloy surface structure after electron beam treatment and high cycle fatigue. <i>Materials Science and Technology</i> , 2015 , 31, 1523-1529	1.5	20
233	On the influence of the electrical potential on the creep rate of aluminum. <i>Physics of the Solid State</i> , 2007 , 49, 1457-1459	0.8	20
232	Dislocation substructure evolution on Al creep under the action of the weak electric potential. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2010 , 527, 858-861	5.3	19
231	Improvement of copper alloy properties in electro-explosive spraying of ZnO-Ag coatings resistant to electrical erosion. <i>Journal of Materials Research and Technology</i> , 2019 , 8, 5515-5523	5.5	18
230	Effect of electron-plasma alloying on structure and mechanical properties of Al-Si alloy. <i>Applied Surface Science</i> , 2019 , 498, 143767	6.7	14
229	Structural phase states and properties of rails after long-term operation. <i>Materials Letters</i> , 2020 , 268, 127499	3.3	13
228	Microstructure and mechanical properties of doped and electron-beam treated surface of hypereutectic Al-11.1%Si alloy. <i>Journal of Materials Research and Technology</i> , 2019 , 8, 3835-3842	5.5	12
227	Research on the structure of Al _{2.1} Co _{0.3} Cr _{0.5} FeNi _{2.1} high-entropy alloy at submicro- and nano-scale levels. <i>Materials Letters</i> , 2021 , 294, 129717	3.3	12
226	Fatigue failure of stainless steel after electron-beam treatment. <i>Steel in Translation</i> , 2012 , 42, 486-488	0.4	11
225	Model of nanostructure formation in AlBi alloy at electron beam treatment. <i>Materials Research Express</i> , 2019 , 6, 026540	1.7	11
224	Influence of Local Inhomogeneity of Thermomechanical Treatment Conditions on Microstructure Evolution in Aluminum Alloys. <i>Journal of Materials Engineering and Performance</i> , 2018 , 27, 6780-6799	1.6	10
223	Formation Mechanism of Micro- and Nanocrystalline Surface Layers in Titanium and Aluminum Alloys in Electron Beam Irradiation. <i>Metals</i> , 2020 , 10, 1399	2.3	9
222	Defect substructure change in 100-m differentially hardened rails in long-term operation. <i>Materials Letters</i> , 2017 , 209, 224-227	3.3	9
221	Effect of the magnetic field on the surface morphology of copper upon creep fracture. <i>Journal of Surface Investigation</i> , 2015 , 9, 410-414	0.5	8

220	Wave instability on the interface coating/substrate material under heterogeneous plasma flows. <i>Journal of Materials Research and Technology</i> , 2020 , 9, 539-550	5.5	8
219	Structure and phase states modification of AL-11SI-2CU alloy processed by ion-plasma jet and pulsed electron beam. <i>Surface and Coatings Technology</i> , 2020 , 383, 125246	4.4	8
218	Fatigue-Induced Evolution of AISI 310S Steel Microstructure after Electron Beam Treatment. <i>Materials</i> , 2020 , 13,	3.5	8
217	Strengthening Mechanisms in CoCrFeNiX (Al, Nb, Ta) High Entropy Alloys Fabricated by Powder Plasma Arc Additive Manufacturing. <i>Nanomaterials</i> , 2021 , 11,	5.4	8
216	Structural evolution of silumin treated with a high-intensity pulse electron beam and subsequent fatigue loading up to failure. <i>Bulletin of the Russian Academy of Sciences: Physics</i> , 2015 , 79, 1169-1172	0.4	7
215	Macrolocalization of plastic strain in creep of fine-grain aluminum. <i>Technical Physics</i> , 2005 , 50, 376-379	0.5	7
214	Corrosion of Materials after Advanced Surface Processing, Joining, and Welding. <i>International Journal of Corrosion</i> , 2018 , 2018, 1-3	2	7
213	Effect of electron beam energy densities on the surface morphology and tensile property of additively manufactured Al-Mg alloy. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2021 , 498, 15-22	1.2	7
212	Study of recrystallization kinetics in AA5182 aluminium alloy after deformation of the as-cast structure. <i>Materials Research Express</i> , 2019 , 6, 066552	1.7	6
211	Modification of Al-10Si-2Cu alloy surface by intensive pulsed electron beam. <i>Journal of Materials Research and Technology</i> , 2020 , 9, 5591-5598	5.5	6
210	Morphology and development dynamics of rolled steel products manufacturing defects during long-term operation in main gas pipelines. <i>Engineering Failure Analysis</i> , 2020 , 109, 104359	3.2	6
209	Specific Features of Microstructural Evolution During Hot Rolling of the As-Cast Magnesium-Rich Aluminum Alloys with Added Transition Metal Elements. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2019 , 50, 5782-5799	2.3	6
208	Evolution of the phase composition and defect substructure in the surface layer of rail steel under fatigue. <i>Steel in Translation</i> , 2013 , 43, 724-727	0.4	6
207	Fractography of the fatigue fracture surface of silumin irradiated by high-intensity pulsed electron beam. <i>IOP Conference Series: Materials Science and Engineering</i> , 2015 , 81, 012011	0.4	6
206	Prospects for the Application of Surface Treatment of Alloys by Electron Beams in State-of-the-Art Technologies. <i>Progress in Physics of Metals</i> , 2020 , 21, 345-362	1.6	6
205	Structure of titanium alloy, modified by electron beams and destroyed during fatigue. <i>Letters on Materials</i> , 2017 , 7, 266-271	0.9	6
204	The Influence of Electron Beam Treatment on Al-Si Alloy Structure Destroyed at High-Cycle Fatigue. <i>Key Engineering Materials</i> , 2016 , 675-676, 655-659	0.4	6
203	An increase in fatigue service life of eutectic silumin by electron-beam treatment. <i>Russian Journal of Non-Ferrous Metals</i> , 2016 , 57, 236-242	0.8	6

202	Effect of Deposition Strategies on the Microstructure and Tensile Properties of Wire Arc Additive Manufactured Al-5Si Alloys. <i>Journal of Materials Engineering and Performance</i> , 2021 , 30, 2136-2146	1.6	6
201	Effect of pulsed electron beam treatment on microstructure and functional properties of Al-5.4Si-1.3Cu alloy. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2021 , 488, 23-29	1.2	6
200	Multilayer structure of Al-Si alloy after electro-explosion alloying with yttrium oxide powder. <i>Materials Research Express</i> , 2018 , 5, 116520	1.7	6
199	Evolution of Structure in AlCoCrFeNi High-Entropy Alloy Irradiated by a Pulsed Electron Beam. <i>Metals</i> , 2021 , 11, 1228	2.3	6
198	Phase composition prediction of Al-Co-Cr-Fe-Ni high entropy alloy system based on thermodynamic and electronic properties calculations. <i>Materials Today: Proceedings</i> , 2021 , 46, 961-965	1.4	6
197	Gradient structural phase states formed in steel 08Kh18N10T in the course of high-cycle fatigue to failure. <i>Physics of Metals and Metallography</i> , 2011 , 112, 81-89	1.2	5
196	Ways of the dislocation substructure evolution in austenite steel under low and multicycle fatigue. <i>Procedia Engineering</i> , 2010 , 2, 83-90		5
195	Microstructural and mechanical characterisation of non-equiatomic Al _{2.1} Co _{0.3} Cr _{0.5} FeNi _{2.1} high-entropy alloy fabricated via wire-arc additive manufacturing. <i>Philosophical Magazine Letters</i> , 2021 , 101, 353-359	1	5
194	Structural and phase states in high-quality rail. <i>Steel in Translation</i> , 2016 , 46, 260-263	0.4	5
193	Increase in fatigue life of steels by electron-beam processing. <i>Journal of Surface Investigation</i> , 2016 , 10, 83-87	0.5	5
192	Metallographic Examination of Forming Improved Mechanical Properties via Surfacing of Steel HARDOX 450 with Flux Cored Wire. <i>Materials Science Forum</i> , 2016 , 870, 159-162	0.4	5
191	Microstructure and wear properties of Hardox 450 steel surface modified by Fe-C-Cr-Nb-W powder wire surfacing and electron beam treatment. <i>IOP Conference Series: Materials Science and Engineering</i> , 2018 , 411, 012024	0.4	5
190	The Analysis of the Influence of Various Factors on the Development of Stress Corrosion Defects in the Main Gas Pipeline Walls in the Conditions of the European Part of the Russian Federation. <i>International Journal of Corrosion</i> , 2018 , 2018, 1-10	2	5
189	Modification of high-entropy alloy AlCoCrFeNi by electron beam treatment. <i>Journal of Materials Research and Technology</i> , 2021 , 13, 787-797	5.5	5
188	Generation of increased mechanical properties of Cantor high-entropy alloy. <i>Izvestiya Vysshikh Uchebnykh Zavedenij Chernaya Metallurgiya</i> , 2021 , 64, 599-605	0.4	5
187	Research on Cu-6.6%Al-3.2%Si Alloy by Dual Wire Arc Additive Manufacturing. <i>Journal of Materials Engineering and Performance</i> , 2021 , 30, 1694-1702	1.6	5
186	Defect formation during dissimilar aluminium friction stir welded T-joints. <i>Mechanics and Industry</i> , 2020 , 21, 205	0.8	4
185	Increase of Fatigue Life of Titanium VT1-0 after Electron Beam Treatment. <i>Key Engineering Materials</i> , 2016 , 704, 15-19	0.4	4

184	Microstructure and micro-hardness behavior of Ti ₂ O ₃ /AlSi composite coatings prepared in electron-plasma alloying. <i>Materials Characterization</i> , 2019 , 158, 109934	3.9	4
183	Structure and properties of strengthening layer on Hardox 450 steel. <i>Materials Science and Technology</i> , 2017 , 33, 2040-2045	1.5	4
182	Variations in defect substructure and fracture surface of commercially pure aluminum under creep in weak magnetic field. <i>Chinese Physics B</i> , 2017 , 26, 126203	1.2	4
181	Physical nature of surface structure degradation in long term operated rails 2017 ,		4
180	Structure-phase states evolution in Al-Si alloy under electron-beam treatment and high-cycle fatigue 2015 ,		4
179	Effect of the electric potential of the aluminum surface on stress relaxation. <i>Technical Physics</i> , 2011 , 56, 877-880	0.5	4
178	On the effect of electric potential on resistance of metals surface to microindentation. <i>Journal of Surface Investigation</i> , 2010 , 4, 157-161	0.5	4
177	Investigation of Co-Cr-Fe-Mn-Ni Non-Equiatomic High-Entropy Alloy Fabricated by Wire Arc Additive Manufacturing. <i>Metals</i> , 2022 , 12, 197	2.3	4
176	Microstructure and Properties of Hypoeutectic Silumin Treated by High-Current Pulsed Electron Beams. <i>Progress in Physics of Metals</i> , 2019 , 20, 447-484	1.6	4
175	Research of heat resistance of the multilayer coating after electro-spark alloying of C45 steel Cr-Ni alloys. <i>Letters on Materials</i> , 2018 , 8, 140-145	0.9	4
174	Investigation of the Intermetallic Compounds Fragmentation Impact on the Formation of Texture during the as Cast Structure Thermomechanical Treatment of Aluminum Alloys. <i>Metals</i> , 2021 , 11, 507	2.3	4
173	Influence of Mg Content on Texture Development during Hot Plain-Strain Deformation of Aluminum Alloys. <i>Metals</i> , 2021 , 11, 865	2.3	4
172	Effect of Melt Overheating on Structure and Mechanical Properties of Al-Mg-Si Cast Alloy. <i>Metals</i> , 2021 , 11, 1353	2.3	4
171	Thermocapillary model of formation of nanostructures on the surface irradiated by low-energy high-current electron beams. <i>Materials Research Express</i> , 2019 , 6, 076551	1.7	3
170	Study of the recrystallization behaviour of the aluminium 1565ch alloy during hot rolling of the as cast structures. <i>Materials Research Express</i> , 2019 , 6, 076524	1.7	3
169	Effect of La Addition on Solidification Behavior and Phase Composition of Cast Al-Mg-Si Alloy. <i>Metals</i> , 2020 , 10, 1673	2.3	3
168	Test beam studies of possibilities to separate particles with gamma factors above 10 ³ with straw based Transition Radiation Detector. <i>Journal of Physics: Conference Series</i> , 2017 , 934, 012053	0.3	3
167	Mathematical Model of Nanostructure Formation in Binary Alloys at Electron Beam Treatment. <i>Materials Science Forum</i> , 2016 , 870, 34-39	0.4	3

166	Investigation of subgrain and fine intermetallic particles size impact on grain boundary mobility in aluminum alloys with transitional metal addition. <i>Materials Today: Proceedings</i> , 2019 , 19, 2183-2188	1.4	3
165	Electron-beam modification of a surface layer deposited on low-carbon steel by means of arc spraying. <i>Bulletin of the Russian Academy of Sciences: Physics</i> , 2017 , 81, 1353-1359	0.4	3
164	Thermocapillary model of formation of surface nanostructure in metals at electron beam treatment. <i>IOP Conference Series: Materials Science and Engineering</i> , 2015 , 91, 012028	0.4	3
163	Gradient Structural-Phase States in the Thermostrengthened Low-Carbon Steel Reinforcement. <i>Materials and Manufacturing Processes</i> , 2011 , 26, 144-146	4.1	3
162	Microstructure evolution of additively manufactured CoCrFeNiAl _{0.4} high-entropy alloy under thermo-mechanical processing. <i>Journal of Materials Research and Technology</i> , 2022 , 16, 442-450	5.5	3
161	TRANSFORMATION OF CARBIDE PHASE IN RAILS AT LONG-TERM OPERATION. <i>Izvestiya Vysshikh Uchebnykh Zavedenij Chernaya Metallurgiya</i> , 2018 , 61, 140-148	0.4	3
160	REDISTRIBUTION OF CARBON ATOMS IN DIFFERENTIALLY CHARGED RAILS FOR LONG-TERM OPERATION. <i>Izvestiya Vysshikh Uchebnykh Zavedenij Chernaya Metallurgiya</i> , 2018 , 61, 454-459	0.4	3
159	Electron-beam processing of the hardened layer formed on Hardox 450 steel electric-wire welding system Fe-C-V-Cr-Nb-W. <i>Letters on Materials</i> , 2016 , 6, 350-354	0.9	3
158	Electroexplosive hafnium coating on titanium implant modified by nitrogen ions and electron beam processing. <i>Surface and Coatings Technology</i> , 2021 , 409, 126895	4.4	3
157	High-entropy alloys: Structure, mechanical properties, deformation mechanisms and application. <i>Izvestiya Vysshikh Uchebnykh Zavedenij Chernaya Metallurgiya</i> , 2021 , 64, 249-258	0.4	3
156	Change of deformation characteristics and dislocation substructure of nonferrous metals under influence of magnetic field. <i>IOP Conference Series: Materials Science and Engineering</i> , 2016 , 150, 012038	0.4	3
155	Effect of electron beam treatment on structural change in titanium alloy VT-0 at high-cycle fatigue. <i>IOP Conference Series: Materials Science and Engineering</i> , 2016 , 150, 012037	0.4	3
154	Location dependence of microstructure and mechanical properties of CuAl alloy fabricated by dual wire CMT. <i>Materials Research Express</i> , 2019 , 6, 126567	1.7	3
153	The Effect of Wire Feeding Speed on Solidification Cracking of CMT Welding for Al-Si Alloys. <i>Metals</i> , 2021 , 11, 267	2.3	3
152	Contributions of Various Mechanisms to the Hardening of Differentially Quenched Rails during Long-Term Operation. <i>Russian Metallurgy (Metally)</i> , 2018 , 2018, 985-989	0.5	3
151	Study of the surface relief, structure and phase composition of the silumin composite layer obtained by the method of electric explosion alloying by Al-Y ₂ O ₃ system. <i>Journal of Physics: Conference Series</i> , 2018 , 1115, 032021	0.3	3
150	Structural-Phase State and the Properties of Silumin after Electron-Beam Surface Treatment. <i>Russian Metallurgy (Metally)</i> , 2019 , 2019, 398-402	0.5	2
149	Evolution of structure-phase states of hypoeutectic silumin irradiated by intensive pulse electron beams. <i>Materials Research Express</i> , 2019 , 6, 076574	1.7	2

148	Fractography of Fatigue Fracture Surface in Silumin Subjected to Electron-Beam Processing. <i>IOP Conference Series: Materials Science and Engineering</i> , 2016 , 142, 012080	0.4	2
147	Formation Wear Resistant Coatings on Martensite Steel Hardox 450 by Welding Methods. <i>IOP Conference Series: Materials Science and Engineering</i> , 2016 , 142, 012079	0.4	2
146	Nanolayer formation during hydrodynamic instability under external stimuli. <i>Steel in Translation</i> , 2016 , 46, 679-685	0.4	2
145	Electric arc surfacing on low carbon steel: Structure and properties 2016 ,		2
144	Increase in Wear Resistance of the Surface Layers of AK10M2N Silumin at Electron-Beam Treatment. <i>Inorganic Materials: Applied Research</i> , 2019 , 10, 622-628	0.6	2
143	Structure of low-carbon steel sheet after scale removal. <i>Steel in Translation</i> , 2014 , 44, 264-267	0.4	2
142	Formation of gradients of structure, phase composition, and dislocation substructure in differentially hardened rails. <i>Nanotechnologies in Russia</i> , 2014 , 9, 288-292	0.6	2
141	Variation of Strength Characteristics of Titanium Surface Layers Under Magnetic Field Effect. <i>Journal of Surface Investigation</i> , 2017 , 11, 1338-1341	0.5	2
140	Regularities of varying the dislocation substructure of copper under creep in the magnetic field. <i>Russian Journal of Non-Ferrous Metals</i> , 2015 , 56, 441-448	0.8	2
139	Fatigue life of silumin irradiated by high intensity pulsed electron beam. <i>IOP Conference Series: Materials Science and Engineering</i> , 2015 , 91, 012029	0.4	2
138	Structure-phase states of silumin surface layer after electron beam and high cycle fatigue. <i>Journal of Physics: Conference Series</i> , 2015 , 652, 012028	0.3	2
137	Mathematical model of nanostructure formation in rail steel under high intensive mechanical loading 2015 ,		2
136	Formation of structure and mechanical properties in the accelerated cooling of an H beam. <i>Steel in Translation</i> , 2010 , 40, 114-118	0.4	2
135	Formation of structural-phase states of the surface of Hadfield steel. <i>Steel in Translation</i> , 2007 , 37, 989-990	0.4	2
134	Gradient structure-phase states formed in Hadfield steel during dry sliding wear. <i>Russian Physics Journal</i> , 2008 , 51, 1168-1173	0.7	2
133	Microstructure and mechanical properties of non-equiatomic Co _{25.4} Cr ₁₅ Fe _{37.9} Mn _{3.5} Ni _{16.8} Si _{1.4} high-entropy alloy produced by wire-arc additive manufacturing. <i>Materials Letters</i> , 2022 , 312, 131675	3.3	2
132	Structure and Properties of the Wear-Resistant Facing Modified by Electron-Beam Processing. <i>Progress in Physics of Metals</i> , 2017 , 18, 111-139	1.6	2
131	Effect of Electron-Plasma Treatment on the Microstructure of Al-11wt%Si Alloy. <i>Materials Research</i> , 2020 , 23,	1.5	2

130	Evolution of Structure and Properties of Differentially Quenched Rails During Long-Term Operation. <i>Metallofizika I Noveishie Tekhnologii</i> , 2018 , 39, 1599-1646	0.5	2
129	The Role of Lattice Curvature in Structural Degradation of the Metal Surface Layer of a Rail under Long-term Operation. <i>Doklady Physics</i> , 2020 , 65, 376-378	0.8	2
128	Evaluation of strength and microstructure of welded pipes with wall lamination. <i>Engineering Failure Analysis</i> , 2021 , 122, 105235	3.2	2
127	Investigation of Microstructure and Fracture Mechanism of Al-5.0Mg Alloys Fabricated by Wire Arc Additive Manufacturing. <i>Journal of Materials Engineering and Performance</i> , 2021 , 30, 7406-7416	1.6	2
126	Electro-Explosive Doping of VT6 Titanium Alloy Surface by Boron Carbide. <i>IOP Conference Series: Materials Science and Engineering</i> , 2016 , 150, 012042	0.4	2
125	Influence of hydrogen on the localization of plastic strain in low-carbon steel. <i>Steel in Translation</i> , 2016 , 46, 851-854	0.4	2
124	The surface modification of aluminum by mechanical milling of Pb coating and high current pulsed electron beam irradiation. <i>Materials Research Express</i> , 2019 , 6, 1265g3	1.7	2
123	Combined Rayleigh-Taylor-Kelvin-Helmholtz instability and its role in the formation of the surface relief of the coating/substrate 2019 ,		2
122	Role of Matrix Microstructure in Governing the Mechanical Behavior and Corrosion Response of Two Magnesium Alloy Metal Matrix Composites. <i>Jom</i> , 2020 , 72, 2882-2891	2.1	2
121	Evolution of the Structure and Properties of AK10M2N Silumin under Irradiation with a High-Intensity Pulsed Electron Beam. <i>Inorganic Materials</i> , 2018 , 54, 1308-1314	0.9	2
120	Structure-property correlation in magnesium nanocomposites synthesized by disintegrated melt deposition technique. <i>Materials Today: Proceedings</i> , 2018 , 5, 16280-16285	1.4	2
119	Tribological characteristics of magnesium nanocomposites. <i>Materials Today: Proceedings</i> , 2018 , 5, 16575-16579		2
118	Modeling of the initial stages of the formation of heterogeneous plasma flows in the electric explosion of conductors. <i>Current Applied Physics</i> , 2018 , 18, 1101-1107	2.6	2
117	Structural phase states and properties of the layer surfaced on low-carbon steel with Fe-C-Cr-Nb-W powder-core wire followed by electron-beam processing. <i>Journal of Surface Investigation</i> , 2017 , 11, 933-939	0.5	1
116	Disintegration mechanism of second phase particles under electron beams. <i>Materials Research Express</i> , 2019 , 6, 106556	1.7	1
115	Steel fatigue life extension by pulsed electron beam irradiation. <i>Journal of Surface Investigation</i> , 2015 , 9, 599-603	0.5	1
114	Layer-by-Layer Analysis of the Cr-NiTi Coating Substructure Obtained via Selective Laser Melting. <i>Journal of Surface Investigation</i> , 2020 , 14, 1022-1028	0.5	1
113	Structure and properties of H-beams after accelerated water cooling. <i>Steel in Translation</i> , 2017 , 47, 369-373		1

112	Impact of the Chemical Elements Upon the Convective Flows in the Molten Metal of the Weld Pool. <i>IOP Conference Series: Earth and Environmental Science</i> , 2017 , 66, 012017	0.3	1
111	Effect of the Density of Electron Beam Energy on the Structure and Mechanical Characteristics of Surface Layers of Hypoeutectic Silumin. <i>Bulletin of the Russian Academy of Sciences: Physics</i> , 2019 , 83, 1282-1288	0.4	1
110	Formation and Evolution of Structure and Phase Composition of Hypoeutectoid Silumin on Electron Beam Processing. <i>Journal of Surface Investigation</i> , 2019 , 13, 809-813	0.5	1
109	Inhomogeneity of the hot deformation of austenitic steel. <i>Steel in Translation</i> , 2014 , 44, 255-257	0.4	1
108	Evolution of the structure and phase composition of low-carbon ferrite steel under conditions of hydrogen saturation and deformation. <i>Bulletin of the Russian Academy of Sciences: Physics</i> , 2014 , 78, 237-240	0.4	1
107	Nanohardness of wear-resistant surfaces after electron-beam treatment. <i>Steel in Translation</i> , 2017 , 47, 245-249	0.4	1
106	Structure and properties of Hardox 450 steel with arc welded coatings 2017 ,		1
105	Gradient structure formed in commercially pure titanium irradiated with a pulsed electron beam 2017 ,		1
104	Intense Pulsed Electron Beam Modification of Surface Layer Facing Formed on Hardox 450 Steel by Electrocontact Method. <i>Journal of Surface Investigation</i> , 2017 , 11, 1342-1347	0.5	1
103	Synthesising nanostructural wear-resistant coatings on martensite steel by welding methods. <i>International Journal of Nanotechnology</i> , 2017 , 14, 627	1.5	1
102	Increasing the fatigue life of steel and alloys by electron-beam treatment. <i>Steel in Translation</i> , 2015 , 45, 322-325	0.4	1
101	Strain localization parameters of AlCu4MgSi processed by high-energy electron beams 2015 ,		1
100	Superior Quality Rails: Structure-Phase States and Defect Substructure. <i>Advanced Materials Research</i> , 2014 , 1013, 127-132	0.5	1
99	Plastic Deformation Localization of Low Carbon Steel: Hydrogen Effect. <i>Advanced Materials Research</i> , 2014 , 1013, 77-83	0.5	1
98	Formation of structure-phase states and dislocation substructures during thermomechanical hardening of Fe0.09C0.2Mn0.1Si steel. <i>Russian Physics Journal</i> , 2012 , 54, 1034-1045	0.7	1
97	Effect of the electric potential on the surface tension of iron. <i>Russian Metallurgy (Metally)</i> , 2011 , 2011, 89-90	0.5	1
96	Dislocation Substructure Gradient Formation in Aluminum by Creep under Weak Potential. <i>Arabian Journal for Science and Engineering</i> , 2011 , 36, 649-653		1
95	Role of the electric potential in the creep acceleration and formation of Al fracture surface. <i>Bulletin of the Russian Academy of Sciences: Physics</i> , 2009 , 73, 1245-1248	0.4	1

94	Acoustic emission in steel failure. <i>Steel in Translation</i> , 2010 , 40, 1041-1046	0.4	1
93	Modification of steel surface layer by electron beam treatment. <i>Metal Science and Heat Treatment</i> , 2008 , 50, 569-574	0.6	1
92	Nanocrystalline grains and phase composition in the plasma hardening of cast-iron rollers. <i>Steel in Translation</i> , 2008 , 38, 603-607	0.4	1
91	Influence of weak energy stimuli on metal creep. <i>Steel in Translation</i> , 2008 , 38, 976-978	0.4	1
90	Structure and hot-rolled reinforcement rods properties evolution in the process of long service life. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2006 , 430, 125-131	5.3	1
89	Computer Simulation of the Process of Crack Propagation in a Brittle Porous Material. <i>Journal of Surface Investigation</i> , 2021 , 15, 1212-1216	0.5	1
88	The Casting Rate Impact on the Microstructure in AlMgSi Alloy with Silicon Excess and Small Zr, Sc Additives. <i>Metals</i> , 2021 , 11, 2056	2.3	1
87	Influence of the Small Sc and Zr Additions on the As-Cast Microstructure of AlMgSi Alloys with Excess Silicon. <i>Metals</i> , 2021 , 11, 1797	2.3	1
86	Microstructure and Mechanical Properties of Cu-6.5%Al Alloy Deposited by Wire Arc Additive Manufacturing. <i>Metallography, Microstructure, and Analysis</i> , 2021 , 10, 634	1.1	1
85	Deformation Behavior of Cu-6.5 wt.% Al Alloy Under Quasi-Static Tensile Loading. <i>Journal of Materials Engineering and Performance</i> , 2021 , 30, 5086-5092	1.6	1
84	Fatigue variation of surface properties of silumin subjected to electron-beam treatment. <i>IOP Conference Series: Materials Science and Engineering</i> , 2016 , 110, 012012	0.4	1
83	Formation of the Increased Wear-Resistant Properties of Hardox 450 Steel by Deposited Coatings. <i>IOP Conference Series: Materials Science and Engineering</i> , 2016 , 150, 012041	0.4	1
82	Viscous flow analysis of the Kelvin-Helmholtz instability for short waves 2016 ,		1
81	Wear Resistance of the Surface Layers in Silumin after Electron-Beam Treatment. <i>Russian Metallurgy (Metally)</i> , 2019 , 2019, 981-985	0.5	1
80	Microstructural characterization and tribological behavior of surface composites fabricated on AA7050-T7451 alloy via friction stir processing. <i>Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology</i> , 2021 , 235, 351-359	1.4	1
79	Deformation behavior of high-entropy alloy system Al-Co-Cr-Fe-Ni achieved by wire-arc additive manufacturing. <i>Izvestiya Vysshikh Uchebnykh Zavedenij Chernaya Metallurgiya</i> , 2021 , 64, 68-74	0.4	1
78	The structure of the surface layer in titanium VT1-0 after high-cycle fatigue tests. <i>IOP Conference Series: Materials Science and Engineering</i> , 2018 , 447, 012075	0.4	1
77	Gradient Structure Generated in Hardox 450 Steel with Built-Up Layer. <i>Inorganic Materials: Applied Research</i> , 2018 , 9, 427-432	0.6	1

76	Replacement of Ta with equi-atomic radius Nb atoms in CoCrFeNiTa high entropy alloys: Effect on microstructure and mechanical properties. <i>Materials Letters</i> , 2021 , 297, 129966	3.3	1
75	The mechanism of formation of surface micro- and nanostructures in the AlCoCrFeNi high-entropy alloy during electron-beam treatment. <i>Letters on Materials</i> , 2021 , 11, 309-314	0.9	1
74	Mechanical Properties and Tribological Behavior of Magnesium Metal Matrix Composites With Micron-Sized and Nano-Sized Reinforcements 2022 , 26-45		1
73	Surface modification of sub-eutectic silumin by a pulsed electron beam. <i>Surfaces and Interfaces</i> , 2022 , 29, 101810	4.1	1
72	Friction and Wear Study of Fe-Cu-C-CaF ₂ Self-lubricating Composite at High Speed and High Temperature. <i>IOP Conference Series: Materials Science and Engineering</i> , 2020 , 834, 012010	0.4	0
71	Influence of hydrogen on the localization of plastic strain in low-carbon steel during electrolytic saturation. <i>Steel in Translation</i> , 2016 , 46, 107-111	0.4	0
70	Influence of constant magnetic field on plastic characteristics of paramagnetic metals. <i>Materials Research Express</i> , 2019 , 6, 096523	1.7	0
69	Magnetic Field Effect on Creep of Polycrystalline Copper. <i>Advanced Materials Research</i> , 2015 , 1120-1121, 962-966	0.5	0
68	Change of dislocation substructures upon high-cycle fatigue of stainless steel. <i>Russian Physics Journal</i> , 2009 , 52, 265-268	0.7	0
67	Forming structural-phase states of the surface layer of steel by electron-beam treatment. <i>Steel in Translation</i> , 2007 , 37, 670-672	0.4	0
66	Modification of the defect substructure in a quenched steel by a low-energy high-current pulsed electron beam. <i>Bulletin of the Russian Academy of Sciences: Physics</i> , 2008 , 72, 1213-1216	0.4	0
65	Modeling and Optimization of Solidification Cracking of 4043 Aluminum Alloys Produced by Cold Metal Transfer Welding. <i>Journal of Materials Engineering and Performance</i> , 1	1.6	0
64	Ultrafast microstructure modification by pulsed electron beam to enhance surface performance. <i>Surface and Coatings Technology</i> , 2022 , 434, 128226	4.4	0
63	Subsurface Corrosion as the Main Degradation Process of 17GS Pipeline Steel after 50 Years of Operation. <i>Journal of Surface Investigation</i> , 2021 , 15, 872-876	0.5	0
62	Nanostructure formation of hypoeutectic silumin by electron-ion-plasma methods. <i>Journal of Physics: Conference Series</i> , 2019 , 1393, 012091	0.3	0
61	Formation of Structure and Properties of Silumin on Electron-Beam Processing. <i>Journal of Surface Investigation</i> , 2019 , 13, 1040-1044	0.5	0
60	Structural Changes in the Surface of AK5M2 Alloy under the Influence of an Intense Pulsed Electron Beam. <i>Journal of Surface Investigation</i> , 2021 , 15, 183-189	0.5	0
59	Approach to oriented grain growth accounting during aluminum alloys recrystallization simulation. <i>Materials Today: Proceedings</i> , 2021 , 46, 957-960	1.4	0

58	Mechanisms of nanoscale structure formation during electron beam treatment of silumin. <i>IOP Conference Series: Materials Science and Engineering</i> , 2018 , 447, 012061	0.4	o
57	Wire arc additive manufacturing Al-5.0Mg alloy: Microstructures and phase composition. <i>Materials Characterization</i> , 2022 , 187, 111875	3.9	o
56	Texture Development in Aluminum Alloys with High Magnesium Content. <i>Metals</i> , 2022 , 12, 723	2.3	o
55	Modeling hydrodynamic flows in plasma fluxes when depositing metal layer on the surface of catalyst converters. <i>IOP Conference Series: Earth and Environmental Science</i> , 2017 , 50, 012050	0.3	
54	Structure and properties of a low-carbon steel surface modified by electric arc surfacing. <i>Journal of Surface Investigation</i> , 2017 , 11, 1050-1055	0.5	
53	Change in Plasticity of Copper under Weak Electrical Potentials. <i>IOP Conference Series: Materials Science and Engineering</i> , 2019 , 472, 012011	0.4	
52	Strain-stress simulation and comparison of different welding sequences during manufacturing of packing vacuum cover. <i>IOP Conference Series: Materials Science and Engineering</i> , 2016 , 150, 012036	0.4	
51	Effect of Electron-Beam Treatment on the Structure of Commercial-Purity Titanium Subjected to Fatigue Failure. <i>Russian Metallurgy (Metally)</i> , 2020 , 2020, 401-407	0.5	
50	Transformation of Carbides in Prolonged Rail Operation. <i>Steel in Translation</i> , 2018 , 48, 97-103	0.4	
49	Formation of Gradient StructurePhase States in the Surface Layers of 100-m Differentially Quenched Rails. <i>Russian Metallurgy (Metally)</i> , 2019 , 2019, 710-715	0.5	
48	A Study of Texture Component Distribution Over the Cross Section of an Aluminum Alloy 8011 Billet with Hot Rolling in a Four-Stand Continuous Group. <i>Metal Science and Heat Treatment</i> , 2019 , 61, 300-304	0.6	
47	Influence of scale removal on the mechanical properties of low-carbon steel. <i>Steel in Translation</i> , 2014 , 44, 123-125	0.4	
46	Structure, Phase Composition, and Defective Substructure of Rails of the Highest Quality Grade. <i>Russian Physics Journal</i> , 2014 , 57, 259-265	0.7	
45	Formation and evolution of the structure and phase composition of stainless steel during electron-beam treatment and multiple-cycle fatigue. <i>Inorganic Materials: Applied Research</i> , 2017 , 8, 521-527	0.6	
44	Phase composition and defect substructure of double surfacing, formed with VCrNbW powder wire on steel. <i>Inorganic Materials: Applied Research</i> , 2017 , 8, 313-317	0.6	
43	Research into the Structure of Aluminum Matrix Composite $\text{Al}_{12}+2.38\%Cu+0.06\%SiC$ with a Scanning Probe Microscope. <i>Solid State Phenomena</i> , 2017 , 265, 723-727	0.4	
42	Model of convection mass transfer in titanium alloy at low energy high current electron beam action. <i>IOP Conference Series: Materials Science and Engineering</i> , 2017 , 168, 012031	0.4	
41	Mathematical modelling of convective processes in a weld pool under electric arc surfacing. <i>IOP Conference Series: Materials Science and Engineering</i> , 2017 , 168, 012039	0.4	

- 40 Structure and properties of the layer deposited onto a low-carbon steel and then irradiated by an electron beam. *Russian Metallurgy (Metally)*, **2017**, 2017, 579-584 0.5
- 39 The Increase in Wear Resistance of Low Carbon Steel by Flux-Cored Wire Surfacing Followed by Electron Beam Processing. *IOP Conference Series: Materials Science and Engineering*, **2017**, 253, 012019 0.4
- 38 Investigation of defect copper substructure disrupted in creep condition under the action of magnetic field. *IOP Conference Series: Materials Science and Engineering*, **2015**, 91, 012030 0.4
- 37 Dislocation substructures and internal stress fields in bulk- and differentially quenched rails. *Bulletin of the Russian Academy of Sciences: Physics*, **2014**, 78, 981-987 0.4
- 36 Estimation of Current Amplitude Pulse. *Advanced Materials Research*, **2014**, 1013, 166-169 0.5
- 35 Fatigue and corrosion resistance of bimetals after pulsed surface treatment. *Steel in Translation*, **2011**, 41, 969-973 0.4
- 34 Effect of an electric potential on the formation of a dislocation structure during creep of aluminum. *Russian Metallurgy (Metally)*, **2011**, 2011, 423-428 0.5
- 33 Evolution of the dislocation substructure in an annealed pro-eutectoid steel upon irradiation with a high-current electron beam. *Russian Physics Journal*, **2009**, 52, 511-518 0.7
- 32 Formation of stress field gradients during the high cycle fatigue of an austenitic corrosion-resistant steel. *Russian Metallurgy (Metally)*, **2010**, 2010, 268-272 0.5
- 31 Evolution of the structure and phase composition of an equiatomic Fe-Co alloy on quenching from the liquid state. *Steel in Translation*, **2008**, 38, 437-438 0.4
- 30 Deformation and Fracture of High Entropy AlCoCrFeNi Alloy. *Russian Physics Journal*, **2022**, 64, 1697-1702 0.7
- 29 The influence of electrical potential on the mechanical properties of commercially pure titanium. *Letters on Materials*, **2020**, 10, 512-516 0.9
- 28 Application of high-entropy alloys. *Izvestiya Vysshikh Uchebnykh Zavedenij Chernaya Metallurgiya*, **2021**, 64, 747-754 0.4
- 27 Investigating and Understanding the Mechanical and Tribological Properties of a Magnesium Hybrid Metal/Ceramic Nanocomposite. *Minerals, Metals and Materials Series*, **2019**, 85-94 0.3
- 26 Mechanism of Silicon Plate Decay in Aluminum Matrix under Electron Beam Effect. *Key Engineering Materials*, **2020**, 839, 32-36 0.4
- 25 The Effect of High-Intensity Electron Beam on the Crystal Structure, Phase Composition, and Properties of AlSi Alloys with Different Silicon Content. *Progress in Physics of Metals*, **2021**, 22, 129-157 1.6
- 24 Increase of alloys functional properties by electronic beam processing. *Izvestiya Vysshikh Uchebnykh Zavedenij Chernaya Metallurgiya*, **2021**, 64, 129-134 0.4
- 23 Pulsed-Electron-Beam Modification of The Surface of AlMg Alloy Samples Obtained by the Methods of Additive Technologies: Structure and Properties. *Journal of Surface Investigation*, **2021**, 15, 449-452 0.5

22	Influence of Silicon and Manganese on the Mechanical Properties of Additive Manufactured CuAl Alloys by Cold Metal Transfer Welding. <i>Metallography, Microstructure, and Analysis</i> , 2021 , 10, 314-320	1.1
21	Structure, Phase Composition and Properties of Rail Running Surface at Extremely Long Operation Time. <i>Russian Physics Journal</i> , 2021 , 64, 82-88	0.7
20	Effect of Pulsed-Electron-Beam Irradiation on the Surface Structure of a Non-Equiatomic High-Entropy Alloy of the AlCoCrFeNi System. <i>Journal of Surface Investigation</i> , 2021 , 15, 846-850	0.5
19	Increase in Reliability of Metal Articles with Impulse Current Effect. <i>MATEC Web of Conferences</i> , 2016 , 67, 06109	0.3
18	Mathematical Modelling Stress Distribution in a Metallic Plate with an Asymmetrical Notch. <i>MATEC Web of Conferences</i> , 2016 , 67, 03053	0.3
17	Numerical simulation of hydrodynamic flows in the jet electric. <i>IOP Conference Series: Materials Science and Engineering</i> , 2016 , 110, 012043	0.4
16	Study of the specific features, characterising homogenisation of the promising Al-Mg system aluminium alloys with transition elements addition. <i>International Journal of Nanotechnology</i> , 2019 , 16, 602	1.5
15	Microdiffraction analysis of structure of silumin high-velocity cellular crystallization. <i>Journal of Physics: Conference Series</i> , 2019 , 1393, 012114	0.3
14	Special Analysis Aspects of Modified Light Alloys 2021 , 53-73	
13	Structure and Properties of As-Cast Silumin and Processed by Intense Pulsed Electron Beam 2021 , 75-90	
12	Redistribution of Carbon Atoms in Differentially Quenched Rail on Prolonged Operation. <i>Steel in Translation</i> , 2018 , 48, 352-356	0.4
11	Physical and technical fundamentals of technology used to increase the wear resistance of working surfaces of large volume excavator buckets. <i>IOP Conference Series: Earth and Environmental Science</i> , 2018 , 206, 012029	0.3
10	The formation and control of porosity during laser DP780 dual-phase galvanized steels. <i>IOP Conference Series: Materials Science and Engineering</i> , 2018 , 411, 012085	0.4
9	Effect of applied load on welding stress at different time periods. <i>MATEC Web of Conferences</i> , 2018 , 224, 01069	0.3
8	AFM investigation of silumin structure modified by Al-Y2O3 coating using the method of electric explosive alloying. <i>IOP Conference Series: Materials Science and Engineering</i> , 2018 , 411, 012056	0.4
7	Effect of phase transition temperature and particle size on residual stresses and properties of laser cladding layer. <i>IOP Conference Series: Materials Science and Engineering</i> , 2018 , 411, 012084	0.4
6	Structure-phase state evolution of 100-m differentially hardened rails in long-term usage. <i>IOP Conference Series: Materials Science and Engineering</i> , 2018 , 411, 012089	0.4
5	Gradient Structure of the Layer Applied to Hardox 450 Steel by FeCrNiW Powder Wire after Electron-Beam Treatment. <i>Steel in Translation</i> , 2018 , 48, 229-232	0.4

4 Modifying of Structure-Phase States and Properties of Metals by Concentrated Energy Flows **2021**, 1-52

3 Effect of Electron-Beam Processing on Structure and Phase Composition of Titanium VT1-0 Fractured in Fatigue Tests **2021**, 171-217

2 Microstructure and Phase Composition of the Cr-Mn-Fe-Co-Ni High-Entropy Alloy Obtained by Wire-Arc Additive Manufacturing. *Key Engineering Materials*, 910, 748-753 0.4

1 Structural phase variations in high-entropy alloy at irradiation by pulsed electron beam. *Izvestiya Vysshikh Uchebnykh Zavedenij Chernaya Metallurgiya*, **2021**, 64, 846-854 0.4