Boris B Straumal

List of Publications by Year
in descending order

275 papers	10,822 citations	13865 67 h-index	43889 91 g-index
283 all docs	283 docs citations	283 times ranked	5357 citing authors

#	Article	IF	Citations
1	Magnetization study of nanograined pure and Mn-doped ZnO films: Formation of a ferromagnetic grain-boundary foam. Physical Review B, 2009, 79, .	3.2	343
2	The Î± â†' Ï‰ Transformation in Titanium-Cobalt Alloys under High-Pressure Torsion. Metals, 2018, 8, 1.	2.3	281
3	Formation of nanograined structure and decomposition of supersaturated solid solution during high pressure torsion of Alâ€“Zn and Alâ€“Mg alloys. Acta Materialia, 2004, 52, 4469-4478.	7.9	247
4	Silicon carbide and diamond for high temperature device applications. Journal of Materials Science: Materials in Electronics, 2006, 17, 1-25.	2.2	227
5	Nanomaterials by severe plastic deformation: review of historical developments and recent advances. Materials Research Letters, 2022, 10, 163-256.	8.7	215
6	Regions of existence of special and non-special grain boundaries. Acta Metallurgica, 1985, 33, 1735-1749.	2.1	163
7	Softening of nanostructured Alâ€“Zn and Alâ€“Mg alloys after severe plastic deformation. Acta Materialia, 2006, 54, 3933-3939.	7.9	161
8	Microstructure evolution and mechanical behavior of ultrafine Ti 6Al 4V during low-temperature superplastic deformation. Acta Materialia, 2016, 121, 152-163.	7.9	148
9	Increase of Mn solubility with decreasing grain size in ZnO. Journal of the European Ceramic Society, 2009, 29, 1963-1970.	5.7	142
10	Increase of Co solubility with decreasing grain size in ZnO. Acta Materialia, 2008, 56, 6246-6256.	7.9	125
11	Unusual super-ductility at room temperature in an ultrafine-grained aluminum alloy. Journal of Materials Science, 2010, 45, 4718-4724.	3.7	125
12	The Î±â†'Ï‰ and Î²â†'Ï‰ phase transformations in Tiâ€“Fe alloys under high-pressure torsion. Acta Materialia, 2018, 144, 337-351.	7.9	118
13	Accelerated Diffusion and Phase Transformations in Co–Cu Alloys Driven by the Severe Plastic Deformation. Materials Transactions, 2012, 53, 63-71.	1.2	117
14	Phase transitions in metallic alloys driven by the high pressure torsion. Archives of Civil and Mechanical Engineering, 2014, 14, 242-249.	3.8	112
15	Grain boundary films in Alâ€“Zn alloys after high pressure torsion. Scripta Materialia, 2014, 70, 59-62.	5.2	110
16	Ferromagnetism of zinc oxide nanograined films. JETP Letters, 2013, 97, 367-377.	1.4	109
17	Ferromagnetic properties of the Mn-doped nanograined ZnO films. Journal of Applied Physics, 2010, 108, .	2.5	108
18	Thermodynamic aspects of the grain boundary segregation in Cu(Bi) alloys. Acta Materialia, 1999, 47, 4041-4046.	7.9	105

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19	Grain-boundary melting phase transition in theCuâˆ'Bisystem. Physical Review B, 2005, 71, .	3.2	104
20	Grain boundary wetting by a solid phase; microstructural development in a Znâ€"5 wt% Al alloy. Acta Materialia, 2004, 52, 4537-4545.	7.9	103
21	Complete and Incomplete Wetting of Ferrite Grain Boundaries by Austenite in the Low-Alloyed Ferritic Steel. Journal of Materials Engineering and Performance, 2012, 21, 667-670.	2.5	102
22	Grain boundaries as the controlling factor for the ferromagnetic behaviour of Co-doped ZnO. Philosophical Magazine, 2013, 93, 1371-1383.	1.6	100
23	Competition between precipitation and dissolution in Cuâ€"Ag alloys under high pressure torsion. Acta Materialia, 2017, 122, 60-71.	7.9	100
24	Ferromagnetic behaviour of ZnO: the role of grain boundaries. Beilstein Journal of Nanotechnology, 2016, 7, 1936-1947.	2.8	99
25	Grain boundary complexions and pseudopartial wetting. Current Opinion in Solid State and Materials Science, 2016, 20, 247-256.	11.5	99
26	Strengthening zones in the Co matrix of WCâ€"Co cemented carbides. Scripta Materialia, 2014, 83, 17-20.	5.2	98
27	Interfacial dominated ferromagnetism in nanograined ZnO: a Î¼SR and DFT study. Scientific Reports, 2015, 5, 8871.	3.3	97
28	Review: grain boundary facetingâ€"roughening phenomena. Journal of Materials Science, 2016, 51, 382-404.	3.7	97
29	Phase Transformations in Tiâ€"Fe Alloys Induced by Highâ€Pressure Torsion. Advanced Engineering Materials, 2015, 17, 1835-1841.	3.5	95
30	Strain rate sensitivity studies in an ultrafine-grained Alâ€"30wt.% Zn alloy using micro- and nanoindentation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 543, 117-120.	5.6	92
31	Ferromagnetic behaviour of Fe-doped ZnO nanograined films. Beilstein Journal of Nanotechnology, 2013, 4, 361-369.	2.8	92
32	Grain Boundary Phenomena in an Ultrafineâ€Grained Alâ€"Zn Alloy with Improved Mechanical Behavior for Microâ€Devices. Advanced Engineering Materials, 2014, 16, 1000-1009.	3.5	92
33	Gradual softening of Alâ€"Zn alloys during high-pressure torsion. Materials Letters, 2012, 84, 63-65.	2.6	90
34	Thermal evolution and grain boundary phase transformations in severely deformed nanograined Alâ€"Zn alloys. Acta Materialia, 2008, 56, 6123-6131.	7.9	89
35	Amorphous interlayers between crystalline grains in ferromagnetic ZnO films. Materials Letters, 2012, 71, 21-24.	2.6	89
36	Effect of composition, annealing temperature, and high pressure torsion on structure and hardness of Tiâ€"V and Tiâ€"Vâ€"Al alloys. Journal of Applied Physics, 2019, 125, .	2.5	88

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37	Grain Boundary Phase Transitions and their Influence on Properties of Polycrystals. Journal of Materials Science, 2004, 12, 147-155.	1.2	87
38	Wetting of grain boundaries in Al by the solid Al3Mg2 phase. Journal of Materials Science, 2010, 45, 2057-2061.	3.7	87
39	Grain boundary layers in nanocrystalline ferromagnetic zinc oxide. JETP Letters, 2010, 92, 396-400.	1.4	87
40	Grain Boundary Wetting by a Second Solid Phase in Ti-Fe Alloys. Journal of Materials Engineering and Performance, 2018, 27, 4989-4992.	2.5	87
41	Amorphous grain boundary layers in the ferromagnetic nanograined ZnO films. Thin Solid Films, 2011, 520, 1192-1194.	1.8	86
42	Ultrafine Grained Structures Resulting from SPDâ€Induced Phase Transformation in Alâ€"Zn Alloys. Advanced Engineering Materials, 2015, 17, 1821-1827.	3.5	86
43	Wetting transition of grain-boundary triple junctions. Acta Materialia, 2008, 56, 925-933.	7.9	85
44	Instabilities of interfaces between dissimilar metals induced by high pressure torsion. Materials Letters, 2018, 222, 172-175.	2.6	85
45	Ferromagnetism of nanostructured zinc oxide films. Physics of Metals and Metallography, 2012, 113, 1244-1256.	1.0	82
46	Grain Boundary Wetting by a Second Solid Phase in the Zr-Nb Alloys. Journal of Materials Engineering and Performance, 2012, 21, 721-724.	2.5	82
47	Influence of texture on the ferromagnetic properties of nanograined ZnO films. Physica Status Solidi (B): Basic Research, 2011, 248, 1581-1586.	1.5	81
48	Temperature influence on the faceting of 3 and 9 grain boundaries in Cu. Acta Materialia, 2006, 54, 167-172.	7.9	80
49	Continuous and discontinuous grain-boundary wetting in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Zn</mml:mtext></mml:mrow><mml:mi>x</mml:mi></mml:msu Physical Review B, 2008, 78, .	3.2	80
50	Grain boundary phase transitions and phase diagrams. Solid State Sciences, 2001, 3, 1113-1115.	0.7	77
51	Inversed solid-phase grain boundary wetting in the Alâ€"Zn system. Journal of Materials Science, 2011, 46, 4349-4353.	3.7	77
52	Increase of Fe solubility in ZnO induced by the grain boundary adsorption. Journal of Materials Science, 2014, 49, 4490-4498.	3.7	77
53	Contact angles by the solid-phase grain boundary wetting (coverage) in the Coâ€"Cu system. Journal of Materials Science, 2010, 45, 4271-4275.	3.7	76
54	Phase transitions induced by severe plastic deformation: steady-state and equifinality. International Journal of Materials Research, 2015, 106, 657-664.	0.3	76

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55	Faceting of Î£3 and Î£9 Grain Boundaries in Copper. Journal of Materials Science, 2001, 9, 287-292.	1.2	75
56	Penetration of tin and zinc along tilt grain boundaries 43Â° [100] in Fe-5 at.% Si alloy: Premelting phase transition?. Acta Metallurgica Et Materialia, 1991, 39, 627-639.	1.8	74
57	The wetting transition in high and low energy grain boundaries in the Cu(In) system. Acta Metallurgica Et Materialia, 1992, 40, 939-945.	1.8	74
58	Feâ€"C nanograined alloys obtained by high-pressure torsion: Structure and magnetic properties. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 503, 185-189.	5.6	74
59	Structure and Properties of Nanograined Feâ€"C Alloys after Severe Plastic Deformation. Advanced Engineering Materials, 2011, 13, 463-469.	3.5	74
60	Hypereutectic Al-Si based alloys with a thixotropic microstructure produced by ultrasonic treatment. Materials & Design, 1997, 18, 323-326.	5.1	73
61	Transmission electron microscopy investigation of boundaries between amorphous â€œgrainsâ€•in Ni50Nb20Y30 alloy. Journal of Materials Science, 2011, 46, 4336-4342.	3.7	73
62	The Solidus Line of the Cu-Bi Phase Diagram. Journal of Phase Equilibria and Diffusion, 1997, 18, 128-135.	0.3	72
63	Grain Boundary Grooving as an Indicator of Grain Boundary Phase Transformations. Journal of Materials Science, 2001, 9, 43-53.	1.2	72
64	Transformation of â˜17 special tilt boundaries to general boundaries in tin. Acta Metallurgica, 1988, 36, 1573-1583.	2.1	71
65	Pressure influence on the grain boundary wetting phase transition in Feî—¸Si alloys. Acta Materialia, 1997, 45, 1931-1940.	7.9	71
66	Effect of faceting on grain boundary motion in Zn. Acta Materialia, 2008, 56, 2728-2734.	7.9	71
67	Phase transitions during high pressure torsion of Cu Co alloys. Materials Letters, 2014, 118, 111-114.	2.6	71
68	Temperature dependence of the grain boundary segregation of Bi in Cu polycrystals. Scripta Materialia, 1997, 37, 729-735.	5.2	70
69	The effect of pressure on migration of ã€ˆ001ã€‰ tilt grain boundaries in tin bicrystals. Scripta Metallurgica, 1984, 18, 207-211.	1.2	68
70	GRAIN BOUNDARIES: PHASE TRANSITIONS AND CRITICAL PHENOMENA. International Journal of Modern Physics B, 1991, 05, 2989-3028.	2.0	68
71	Acceleration of grain boundary motion in Al by small additions of Ga. Philosophical Magazine Letters, 1995, 72, 361-368.	1.2	68
72	Wetting and premelting phase transitions in 38Â° [100] tilt grain boundary in (Fe-12 at.% Si)-Zn alloy in the vicinity of the A2-B2 bulk ordering in Fe-12 at.% Si alloy. Acta Metallurgica Et Materialia, 1991, 39, 3091-3098.	1.8	67

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73	Grain Boundary Segregation in the Cu-Bi System. Defect and Diffusion Forum, 1998, 156, 135-146.	0.4	66
74	Formation of the Ï‰ Phase in the Titaniumâ€"Iron System under Shear Deformation. JETP Letters, 2020, 111, 568-574.	1.4	65
75	Premelting transition on 38Â°ã€ˆ100ã€‰ tilt grain boundaries in (Fe-10 at.% Si)-Zn alloys. Acta Metallurgica Et Materialia, 1992, 40, 795-801.	1.8	64
76	Deformation-driven formation of equilibrium phases in the Cuâ€"Ni alloys. Journal of Materials Science, 2012, 47, 360-367.	3.7	63
77	Phase Transformations Induced by Severe Plastic Deformation. Materials Transactions, 2019, 60, 1489-1499.	1.2	63
78	Wear-resistance and hardness: Are they directly related for nanostructured hard materials?. International Journal of Refractory Metals and Hard Materials, 2015, 49, 203-211.	3.8	62
79	Phase transformations in the severely plastically deformed Zrâ€"Nb alloys. Materials Letters, 2012, 81, 225-228.	2.6	61
80	Phase transitions in Cu-based alloys under high pressure torsion. Journal of Alloys and Compounds, 2017, 707, 20-26.	5.5	61
81	The Grain Boundary Wetting Phenomena in the Ti-Containing High-Entropy Alloys: A Review. Metals, 2021, 11, 1881.	2.3	54
82	Growth of (Î±Ti) grain-boundary layers in Tiâ€"Co alloys. Russian Journal of Non-Ferrous Metals, 2016, 57, 703-709.	0.6	53
83	Pseudopartial wetting of WC/WC grain boundaries in cemented carbides. Materials Letters, 2015, 147, 105-108.	2.6	51
84	Bulk and Surface Low Temperature Phase Transitions in the Mg-Alloy EZ33A. Metals, 2020, 10, 1127.	2.3	44
85	Apparently complete grain boundary wetting in Cuâ€"In alloys. Journal of Materials Science, 2012, 47, 8336-8343.	3.7	43
86	Reversible â€œWettingâ€• of grain boundaries by the second solid phase in the Cu-In system. JETP Letters, 2014, 100, 535-539.	1.4	43
87	Pseudopartial wetting of grain boundaries in severely deformed Al-Zn alloys. Russian Journal of Non-Ferrous Metals, 2015, 56, 44-51.	0.6	42
88	High-pressure torsion driven phase transformations in Cuâ€"Alâ€"Ni shape memory alloys. Acta Materialia, 2017, 125, 274-285.	7.9	41
89	Grain boundary wetting transition in Alâ€"Mg alloys. Materials Letters, 2017, 186, 82-85.	2.6	41
90	The effect of crystallographic parameters of interphase boundaries on their surface tension and parameters of the boundary diffusion. Acta Metallurgica, 1984, 32, 1355-1364.	2.1	40

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91	Tie Lines of the Grain Boundary Wetting Phase Transition in the Zn-Rich Part of the Zn-Sn Phase Diagram. Materials Science Forum, 1999, 294-296, 411-414.	0.3	40
92	The influence of pressure on indium diffusion along single tin-germanium interphase boundaries. Scripta Metallurgica, 1983, 17, 275-279.	1.2	37
93	Bulk Nanocrystalline Ferrite Stabilized through Grain Boundary Carbon Segregation. Advanced Engineering Materials, 2018, 20, 1800443.	3.5	37
94	First observation of a wetting phase transition in low-angle grain boundaries. JETP Letters, 2008, 88, 537-542.	1.4	36
95	Preparation of Feî—¸Si single crystals and bicrystals for diffusion experiments by the electron-beam floating zone technique. Journal of Crystal Growth, 1995, 151, 180-186.	1.5	35
96	Grain boundary wetting in the NdFeB-based hard magnetic alloys. Journal of Materials Science, 2012, 47, 8352-8359.	3.7	35
97	Amorphization of Ndâ€"Feâ€"B alloy under the action of high-pressure torsion. Materials Letters, 2015, 145, 63-66.	2.6	35
98	Observation of Pseudopartial Grain Boundary Wetting in the NdFeB-Based Alloy. Journal of Materials Engineering and Performance, 2016, 25, 3303-3309.	2.5	35
99	Diffusive and displacive phase transitions in Tiâ€"Fe and Tiâ€"Co alloys under high pressure torsion. Journal of Alloys and Compounds, 2018, 735, 2281-2286.	5.5	35
100	Using Severe Plastic Deformation to Produce Nanostructured Materials with Superior Properties. Annual Review of Materials Research, 2022, 52, 357-382.	9.3	34
101	â€œWettingâ€•Phase Transitions by the Second Solid Phase for Linear Defects (Grain Boundary Triple) Tj ETQq1 1 0.784314 rgBT /Overl	1.4	33
102	Influence of the grain boundary character on the temperature of transition to complete wetting in the Cuâ€"In system. Journal of Materials Science, 2015, 50, 4762-4771.	3.7	32
103	Competition for impurity atoms between defects and solid solution during high pressure torsion. Scripta Materialia, 2019, 173, 46-50.	5.2	32
104	The influence of an ordering transition on the interdiffusion in Fe-Si alloys. Acta Metallurgica Et Materialia, 1995, 43, 3075-3083.	1.8	31
105	Grain boundary phase observed in Alâ€"5 at.% Zn alloy by using HREM. Philosophical Magazine Letters, 2007, 87, 423-430.	1.2	30
106	Hardmetals with nanograin reinforced binder: Binder fine structure and hardness. International Journal of Refractory Metals and Hard Materials, 2008, 26, 583-588.	3.8	30
107	Lines of Grain Boundary Phase Transitions in Bulk Phase Diagrams. Materials Science Forum, 1996, 207-209, 59-68.	0.3	29
108	Amorphization of crystalline phases in the Ndâ€"Feâ€"B alloy driven by the high-pressure torsion. Materials Letters, 2015, 161, 735-739.	2.6	29

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109	Faceting of Î£3 and Î£9 grain boundaries in Cuâ€“Bi alloys. Acta Materialia, 2005, 53, 247-254.	7.9	28
110	Formation regularities of grain-boundary interlayers of the Î±-Ti phase in binary titanium alloys. Russian Journal of Non-Ferrous Metals, 2016, 57, 229-235.	0.6	26
111	Pseudopartial Grain Boundary Wetting: Key to the Thin Intergranular Layers. Defect and Diffusion Forum, 0, 333, 175-192.	0.4	25
112	Cytotoxicity of biodegradable magnesium alloy WE43 to tumor cells in vitro: Bioresorbable implants with antitumor activity?. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2020, 108, 167-173.	3.4	24
113	Effect of internal stress on short-circuit diffusion in thin films and nanolaminates: Application to Cu/W nano-multilayers. Applied Surface Science, 2020, 508, 145254.	6.1	24
114	High pressure torsion of Cuâ€“Ag and Cuâ€“Sn alloys: Limits for solubility and dissolution. Acta Materialia, 2020, 195, 184-198.	7.9	24
115	Corrosion behaviour of the protective and decorative TiN coatings on large area steel strips. Surface and Coatings Technology, 2000, 125, 229-232.	4.8	23
116	Transformation Pathway upon Heating of Tiâ€“Fe Alloys Deformed by Highâ€Pressure Torsion. Advanced Engineering Materials, 2018, 20, 1700933.	3.5	23
117	Coarsening of (Î±Ti)â€‰+â€‰(Î²Ti) Microstructure in the Tiâ€“Alâ€“V Alloy at Constant Temperature. Advanced Engineering Materials, 2018, 20, 1800510.	3.5	23
118	Plastic flow and microstructural instabilities during high-pressure torsion of Cu/ZnO composites. Materials Characterization, 2018, 145, 389-401.	4.4	23
119	Faceting and migration of twin grain boundaries in zinc. International Journal of Materials Research, 2005, 96, 161-166.	0.8	23
120	Grain Boundary Wetting by a Second Solid Phase in the High Entropy Alloys: A Review. Materials, 2021, 14, 7506.	2.9	23
121	Grain Boundary Phase Transitions in the Alâ€“Mg System and Their Influence on High-Strain Rate Superplasticity. Defect and Diffusion Forum, 2003, 216-217, 307-312.	0.4	22
122	Structural changes in aluminum alloys upon severe plastic deformation. Physics of the Solid State, 2007, 49, 868-873.	0.6	22
123	Grain boundary wetting phase transitions in peritectic copperâ€"cobalt alloys. Physics of the Solid State, 2016, 58, 742-746.	0.6	22
124	How to Tune the Alumina Aerogels Structure by the Variation of a Supercritical Solvent. Evolution of the Structure During Heat Treatment. Journal of Physical Chemistry C, 2016, 120, 3319-3325.	3.1	22
125	Pseudopartial wetting of W/W grain boundaries by the nickel-rich layers. Materials Letters, 2017, 192, 101-103.	2.6	22
126	Structural and Mechanical Properties of Tiâ€“Co Alloys Treated by High Pressure Torsion. Materials, 2019, 12, 426.	2.9	22

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127	Wetting of grain boundary triple junctions by intermetallic delta-phase in the Cuâ€“In alloys. Journal of Materials Science, 2021, 56, 7840-7848.	3.7	22
128	Influence of faceting-roughening on triple-junction migration in zinc. International Journal of Materials Research, 2005, 96, 1147-1151.	0.8	21
129	Enhanced Ductility in Ultrafine-Grained Al Alloys Produced by SPD Techniques. Materials Science Forum, 0, 633-634, 321-332.	0.3	20
130	Effective Temperature of High Pressure Torsion in Zr-Nb Alloys. High Temperature Materials and Processes, 2012, 31, .	1.4	20
131	Effect of the wetting of grain boundaries on the formation of a solid solution in the Al-Zn system. JETP Letters, 2012, 96, 380-384.	1.4	20
132	Grain refinement of intermetallic compounds in the Cuâ€“Sn system under high pressure torsion. Materials Letters, 2016, 179, 12-15.	2.6	20
133	Contact angles of WC/WC grain boundaries with binder in cemented carbides with various carbon content. Materials Letters, 2017, 196, 1-3.	2.6	20
134	The Effect of Equal-Channel Angular Pressing on the Microstructure, the Mechanical and Corrosion Properties and the Anti-Tumor Activity of Magnesium Alloyed with Silver. Materials, 2019, 12, 3832.	2.9	20
135	Structure Refinement and Fragmentation of Precipitates under Severe Plastic Deformation: A Review. Materials, 2022, 15, 601.	2.9	20
136	High Entropy Alloys Coatings Deposited by Laser Cladding: A Review of Grain Boundary Wetting Phenomena. Coatings, 2022, 12, 343.	2.6	20
137	Indium diffusion along interphase twist boundaries Snî—¸Ge. Scripta Metallurgica, 1981, 15, 1197-1200.	1.2	18
138	Influence of Grain Boundary Phase Transitions on the Properties of Cu-Bi Polycrystals. Defect and Diffusion Forum, 2001, 188-190, 185-0.	0.4	18
139	Effect of severe plastic deformation on the coercivity of Coâ€“Cu alloys. Philosophical Magazine Letters, 2009, 89, 649-654.	1.2	18
140	Wetting transition of grain boundaries in the Sn-rich part of the Snâ€“Bi phase diagram. Journal of Materials Science, 2011, 46, 1557-1562.	3.7	18
141	Heat effect of grain boundary wetting in Alâ€“Mg alloys. Journal of Materials Science, 2012, 47, 8367-8371.	3.7	18
142	Phase transformations in a Cu Cr alloy induced by high pressure torsion. Materials Characterization, 2016, 114, 151-156.	4.4	18
143	Phase transitions at grain boundaries in the presence of impurities. Acta Metallurgica, 1989, 37, 1995-1998.	2.1	17
144	Liquid film migration in a Mo(Ni) bicrystal. Philosophical Magazine Letters, 1996, 73, 187-194.	1.2	17

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145	Faceting and Roughening of the Asymmetric Twin Grain Boundaries in Zinc. Journal of Materials Science, 2001, 9, 275-279.	1.2	17
146	Pokrovsky-Talapov Critical Behavior and Rough-to-Rough Ridges of theÎ£3Coincidence Tilt Boundary in Mo. Physical Review Letters, 2004, 92, 196101.	7.8	17
147	Formation of Nanostructure during High-Pressure Torsion of Al-Zn, Al-Mg and Al-Zn-Mg Alloys. Defect and Diffusion Forum, 2005, 237-240, 739-744.	0.4	17
148	Wetting and premelting of triple junctions and grain boundaries in the Alâ€"Zn alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 495, 126-131.	5.6	17
149	The Effect of Grain Boundary Sliding and Strain Rate Sensitivity on the Ductility of Ultrafine-Grained Materials. Materials Science Forum, 0, 667-669, 677-682.	0.3	17
150	Grain boundary wetting and premelting in the Cuâ€"Co alloys. Journal of Alloys and Compounds, 2014, 615, S183-S187.	5.5	17
151	Effect of the subsidiary misorientation components on the â€œspecial grain boundary-general boundaryâ€• transformation in the vicinity of the coincidence misorientation of Î£17 in tin. Acta Metallurgica, 1989, 37, 2855-2860.	2.1	16
152	Corrosion resistance of the vacuum arc deposited Ti, TiN and TiO2 coatings on large area glass substrates. Surface and Coatings Technology, 2000, 125, 223-228.	4.8	16
153	Grain Boundary Phase Transitions in the Cu-Bi System. Defect and Diffusion Forum, 2001, 194-199, 1343-1348.	0.4	16
154	Distribution of impurities and minor components in nanostructured conducting oxides. International Journal of Nanomanufacturing, 2008, 2, 253.	0.3	16
155	Wetting of grain boundaries in hard-magnetic Nd-Fe-B alloys. Russian Journal of Non-Ferrous Metals, 2012, 53, 450-456.	0.6	16
156	Transformation of Hume-Rothery phases under the action of high pressure torsion. JETP Letters, 2014, 100, 376-379.	1.4	16
157	Investigation on the precipitate formation and behavior in nitrogen-containing equiatomic CoCrFeMnNi high-entropy alloy. Materials Letters, 2020, 258, 126806.	2.6	16
158	Grain Boundary Wetting Phase Transitions on the Al-Sn and Al-Sn-Pb Systems. Materials Science Forum, 1996, 207-209, 437-440.	0.3	15
159	Vacuum arc deposition of Mo films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1996, 14, 3252-3255.	2.1	15
160	Stable and metastable phases in the vacuum arc deposited Co thin films. Thin Solid Films, 1998, 319, 124-127.	1.8	15
161	Masked deposition of decorative coatings on large area glass and plastic sheets. Thin Solid Films, 1999, 351, 204-208.	1.8	15
162	First measurement of the heat effect of the grain boundary wetting phase transition. Journal of Materials Science, 2011, 46, 4243-4247.	3.7	15

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163	SPD-induced changes of structure and magnetic properties in the Cuâ€“Co alloys. Materials Letters, 2013, 98, 217-221.	2.6	15
164	Severe Plastic Deformation on Powder Metallurgy Cuâ€“Alâ€“Ni Shape Memory Alloys. Materials Today: Proceedings, 2015, 2, S747-S750.	1.8	15
165	Transformations of Cu(in) supersaturated solid solutions under high-pressure torsion. Materials Letters, 2015, 138, 255-258.	2.6	15
166	Dissolution of Ag Precipitates in the Cuâ€“8wt.%Ag Alloy Deformed by High Pressure Torsion. Materials, 2019, 12, 447.	2.9	15
167	Generation and healing of porosity in high purity copper by high-pressure torsion. Materials Characterization, 2018, 145, 1-9.	4.4	14
168	Thermal Stability of Athermal Ï‰â€‘Ti(Fe) Produced upon Quenching of Î²â€‘Ti(Fe). Advanced Engineering Materials, 2019, 21, 1800158.	3.5	14
169	Solute drag and wetting of a grain boundary. Philosophical Magazine Letters, 1997, 76, 133-138.	1.2	13
170	Phase transformations in Alâ€“Mgâ€“Zn alloys during high pressure torsion and subsequent heating. Journal of Materials Science, 2013, 48, 4758-4765.	3.7	13
171	Gradient bandgap narrowing in severely deformed ZnO nanoparticles. Materials Research Letters, 2021, 9, 58-64.	8.7	13
172	The effect of bismuth segregation on the faceting of Î£3 and Î£9 coincidence boundaries in copper bicrystals. International Journal of Materials Research, 2007, 98, 451-456.	0.3	13
173	Grain Boundary Wetting Phenomena in High Entropy Alloys Containing Nitrides, Carbides, Borides, Silicides, and Hydrogen: A Review. Crystals, 2021, 11, 1540.	2.2	13
174	Severe Plastic Deformation and Phase Transformations in High Entropy Alloys: A Review. Crystals, 2022, 12, 54.	2.2	13
175	Grain boundary faceting close to the Î£3 coincidence misorientation in copper. International Journal of Materials Research, 2004, 95, 939-944.	0.8	12
176	Structure, phase composition, and microhardness of carbon steels after high-pressure torsion. Journal of Materials Science, 2008, 43, 3800-3805.	3.7	12
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