H K D H Bhadeshia

List of Publications by Year
in descending order

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260	15,382	59	110
papers	citations	h-index	g-index
		22146	24254
265	265	265	5379
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Review: Friction stir welding tools. Science and Technology of Welding and Joining, 2011, 16, 325-342.	3.1	623
2	Neural Networks in Materials Science.. ISIJ International, 1999, 39, 966-979.	1.4	546
3	The bainite transformation in a silicon steel. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1979, 10, 895-907.	1.4	488
4	Bainite in steels. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1990, 21, 767-797.	1.4	481
5	Very strong low temperature bainite. Materials Science and Technology, 2002, 18, 279-284.	1.6	459
6	Acceleration of Low-temperature Bainite. ISIJ International, 2003, 43, 1821-1825.	1.4	416
7	Bainite in silicon steels: new compositionâ€"property approach Part 1. Metal Science, 1983, 17, 411-419.	0.7	415
8	Development of Hard Bainite. ISIJ International, 2003, 43, 1238-1243.	1.4	343
9	Review Type IV cracking in ferritic power plant steels. Materials Science and Technology, 2006, 22, 1387-1395.	1.6	292
10	Thermodynamic analysis of isothermal transformation diagrams. Metal Science, 1982, 16, 159-166.	0.7	270
11	Influence of silicon on cementite precipitation in steels. Materials Science and Technology, 2008, 24, 343-347.	1.6	259
12	Nanostructured bainite. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2010, 466, 3-18.	2.1	247
13	Friction stir welding of dissimilar alloys â€" a perspective. Science and Technology of Welding and Joining, 2010, 15, 266-270.	3.1	243
14	Bainite in silicon steels: new compositionâ€"property approach Part 2. Metal Science, 1983, 17, 420-425.	0.7	234
15	In-situ observations of lattice parameter fluctuations in austenite and transformation to bainite. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2005, 36, 3281-3289.	2.2	207
16	Advances in Physical Metallurgy and Processing of Steels. Design of Ferritic Creep-resistant Steels.. ISIJ International, 2001, 41, 626-640.	1.4	198
17	Mechanical stabilisation of austenite. Materials Science and Technology, 2006, 22, 641-644.	1.6	194
18	Austenite films in bainitic microstructures. Materials Science and Technology, 1995, 11, 874-882.	1.6	190

#	Article	IF	Citations
19	Stress induced transformation to bainite in Feâ€“Crâ€“Moâ€“C pressure vessel steel. Materials Science and Technology, 1991, 7, 686-698.	1.6	186
20	Strength of mixtures of bainite and martensite. Materials Science and Technology, 1994, 10, 209-214.	1.6	182
21	Welding residual stresses in ferritic power plant steels. Materials Science and Technology, 2007, 23, 1009-1020.	1.6	176
22	TRIP-Assisted Steels?. ISIJ International, 2002, 42, 1059-1060.	1.4	175
23	Model for transition from upper to lower bainite. Materials Science and Technology, 1990, 6, 592-603.	1.6	162
24	Bainite transformation kinetics Part 1 Modified model. Materials Science and Technology, 1992, 8, 985-993.	1.6	154
25	Uncertainties in dilatometric determination of martensite start temperature. Materials Science and Technology, 2007, 23, 556-560.	1.6	143
26	Stability of retained austenite in TRIP-assisted steels. Materials Science and Technology, 2004, 20, 319-322.	1.6	135
27	52nd Hatfield Memorial LectureLarge chunks of very strong steel. Materials Science and Technology, 2005, 21, 1293-1302.	1.6	123
28	Critical assessment: Friction stir welding of steels. Science and Technology of Welding and Joining, 2009, 14, 193-196.	3.1	121
29	Medium-Alloy Manganese-Rich Transformation-Induced Plasticity Steels. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 286-293.	2.2	120
30	Driving force for martensitic transformation in steels. Metal Science, 1981, 15, 175-177.	0.7	118
31	Mechanical stabilisation of bainite. Materials Science and Technology, 1995, 11, 1116-1128.	1.6	110
32	The first bulk nanostructured metal. Science and Technology of Advanced Materials, 2013, 14, 014202.	6.1	108
33	A Model for the Microstructure of Some Advanced Bainitic Steels. Materials Transactions, JIM, 1991, 32, 689-696.	0.9	107
34	High resolution observations of displacements caused by bainitic transformation. Materials Science and Technology, 1996, 12, 121-125.	1.6	99
35	Performance of neural networks in materials science. Materials Science and Technology, 2009, 25, 504-510.	1.6	99
36	<i>Î´</i> TRIP steel. Materials Science and Technology, 2007, 23, 819-827.	1.6	97

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37	Transformation induced plasticity assisted steels: Stress or strain affected martensitic transformation?. Materials Science and Technology, 2007, 23, 1101-1104.	1.6	93
38	Thermodynamic extrapolation and martensite-start temperature of substitutionally alloyed steels. Metal Science, 1981, 15, 178-180.	0.7	91
39	Analysis of deformation induced martensitic transformation in stainless steels. Materials Science and Technology, 2011, 27, 366-370.	1.6	90
40	Modelling precipitation sequences in power plant steels Part 1 â€“ Kinetic theory. Materials Science and Technology, 1997, 13, 631-639.	1.6	88
41	Cementite. International Materials Reviews, 2020, 65, 1-27.	19.3	84
42	Designing low carbon, low temperature bainite. Materials Science and Technology, 2008, 24, 335-342.	1.6	83
43	Thermal stability of retained austenite in bainitic steel: anÂ <i>in situ</i> study. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2011, 467, 3141-3156.	2.1	81
44	Interphase precipitation in Tiâ€“Nb and Tiâ€“Nbâ€“Mo bearing steel. Materials Science and Technology, 2013, 29, 309-313.	1.6	81
45	The effect of niobium on the hardenability of microalloyed austenite. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1995, 26, 21-30.	2.2	80
46	Impact toughness of Câ€“Mn steel arc welds â€“ Bayesian neural network analysis. Materials Science and Technology, 1995, 11, 1046-1051.	1.6	80
47	Bayesian Neural Network Analysis of Fatigue Crack Growth Rate in Nickel Base Superalloys.. ISIJ International, 1996, 36, 1373-1382.	1.4	80
48	Finite element simulation of laser spot welding. Science and Technology of Welding and Joining, 2003, 8, 377-384.	3.1	75
49	Transition from bainite to acicular ferrite in reheated Feâ€“Crâ€“C weld deposits. Materials Science and Technology, 1990, 6, 1005-1020.	1.6	71
50	Modeling of fundamental phenomena in welds. Modelling and Simulation in Materials Science and Engineering, 1995, 3, 265-288.	2.0	71
51	Diffusion of carbon in austenite. Metal Science, 1981, 15, 477-480.	0.7	70
52	TRIP-assisted steels: cracking of high-carbon martensite. Materials Science and Technology, 2006, 22, 645-649.	1.6	70
53	Neural Networks and Information in Materials Science. Statistical Analysis and Data Mining, 2009, 1, 296-305.	2.8	68
54	Neural network model of creep strength of austenitic stainless steels. Materials Science and Technology, 2002, 18, 655-663.	1.6	65

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55	White-Etching Matter in Bearing Steel. Part II: Distinguishing Cause and Effect in Bearing Steel Failure. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 4916-4931.	2.2	65
56	Carbide precipitation in 12Cr1MoV power plant steel. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1992, 23, 1171-1179.	1.4	64
57	Titanium-rich mineral phases and the nucleation of bainite. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1994, 25, 1603-1611.	2.2	64
58	Critical Assessment 13: Elimination of white etching matter in bearing steels. Materials Science and Technology, 2015, 31, 1011-1015.	1.6	64
59	The interpretation of dilatometric data for transformations in steels. Journal of Materials Science Letters, 1989, 8, 477-478.	0.5	63
60	Diffusion of carbon in substitutionally alloyed austenite. Journal of Materials Science Letters, 1995, 14, 314-316.	0.5	61
61	Influence of carbon, manganese and nickel on microstructure and properties of strong steel weld metals: Part 3 â€“ Increased strength resulting from carbon additions. Science and Technology of Welding and Joining, 2006, 11, 19-24.	3.1	58
62	Prediction of cooling rate and microstructure in laser spot welds. Science and Technology of Welding and Joining, 2003, 8, 391-399.	3.1	57
63	Analysis of mechanical properties and microstructure of high-silicon dual-phase steel. Metal Science, 1980, 14, 41-49.	0.7	56
64	Diffusion-controlled growth of ferrite plates in plain-carbon steels. Materials Science and Technology, 1985, 1, 497-504.	1.6	56
65	Modelling and characterisation of Mo2C precipitation and cementite dissolution during tempering of Feâ€“Câ€“Mo martensitic steel. Materials Science and Technology, 2003, 19, 723-731.	1.6	54
66	Crystallography of WidmanstÃtten austenite in duplex stainless steel weld metal. Science and Technology of Welding and Joining, 2009, 14, 4-10.	3.1	54
67	competitive formation of inter- and intragranularly nucleated ferrite. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1997, 28, 2005-2013.	2.2	53
68	Influence of Silicon in Low Density Fe-C-Mn-Al Steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 1731-1735.	2.2	53
69	Orientation relationships between adjacent plates of acicular ferrite in steel weld deposits. Materials Science and Technology, 1989, 5, 93-97.	1.6	52
70	Nucleation of WidmanstÃtten ferrite. Materials Science and Technology, 1990, 6, 781-784.	1.6	52
71	Kinetics of reconstructive austenite to ferrite transformation in low alloy steels. Materials Science and Technology, 1992, 8, 421-436.	1.6	52
72	Modelling precipitation sequences in powerplant steels Part 2 â€“ Application of kinetic theory. Materials Science and Technology, 1997, 13, 640-644.	1.6	52

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73	Ferritic power plant steels: remanent life assessment and approach to equilibrium. International Materials Reviews, 1998, 43, 45-69.	19.3	52
74	Design of a creep resistant nickel base superalloy for power plant applications: Part 1 - Mechanical properties modelling. Materials Science and Technology, 2003, 19, 283-290.	1.6	52
75	The Effects of Filler Metal Transformation Temperature on Residual Stresses in a High Strength Steel Weld. Journal of Pressure Vessel Technology, Transactions of the ASME, 2009, 131, .	0.6	52
76	Mechanical stabilisation of eutectoid steel. Materials Science and Technology, 2007, 23, 610-612.	1.6	51
77	Influence of carbon, manganese and nickel on microstructure and properties of strong steel weld metals: Part 2 â€“ Impact toughness gain resulting from manganese reductions. Science and Technology of Welding and Joining, 2006, 11, 9-18.	3.1	50
78	The distribution of substitutional alloying elements during the bainite transformation. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1990, 21, 837-844.	1.4	49
79	Quantitative evidence for mechanical stabilization of bainite. Materials Science and Technology, 1996, 12, 610-612.	1.6	49
80	Precipitation sequence in niobium-alloyed ferritic stainless steel. Modelling and Simulation in Materials Science and Engineering, 2004, 12, 273-284.	2.0	49
81	Thermodynamics of acicular ferrite nucleation. Materials Science and Technology, 1994, 10, 353-358.	1.6	48
82	Bayesian neural network model for austenite formation in steels. Materials Science and Technology, 1996, 12, 453-463.	1.6	48
83	Modelling Simultaneous Alloy Carbide Sequence in Power Plant Steels.. ISIJ International, 2002, 42, 760-769.	1.4	47
84	Role of fracture toughness in impact-abrasion wear. Wear, 2019, 428-429, 430-437.	3.1	47
85	The evolution of solutions: A thermodynamic analysis of mechanical alloying. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1997, 28, 2189-2194.	2.2	46
86	Changes in toughness at low oxygen concentrations in steel weld metals. Science and Technology of Welding and Joining, 2006, 11, 509-516.	3.1	46
87	Fatigue of extremely fine bainite. Materials Science and Technology, 2011, 27, 119-123.	1.6	46
88	Design of weld fillers for mitigation of residual stresses in ferritic and austenitic steel welds. Science and Technology of Welding and Joining, 2011, 16, 279-284.	3.1	46
89	Theoretical analysis of changes in cementite composition during tempering of bainite. Materials Science and Technology, 1989, 5, 131-137.	1.6	45
90	Grain control in mechanically alloyed oxide dispersion strengthened MA 957 steel. Materials Science and Technology, 1993, 9, 890-898.	1.6	45

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91	Acicular ferrite transformation in alloy-steel weld metals. Journal of Materials Science, 1991, 26, 839-845.	3.7	44
92	Changes in chemical composition of carbides in 2Â·25Crâ€“1Mo power plant steel. Materials Science and Technology, 1994, 10, 193-204.	1.6	44
93	Modelling and characterisation of V4C3precipitation and cementite dissolution during tempering of Fe-C-V martensitic steel. Materials Science and Technology, 2003, 19, 1335-1343.	1.6	44
94	Stainless steel weld metal designed to mitigate residual stresses. Science and Technology of Welding and Joining, 2009, 14, 559-565.	3.1	44
95	Non-equilibrium solidification and ferrite in <i>Î´</i>-TRIP steel. Materials Science and Technology, 2010, 26, 817-823.	1.6	44
96	Effect of interpass temperature on residual stresses in multipass welds produced using low transformation temperature filler alloy. Science and Technology of Welding and Joining, 2014, 19, 44-51.	3.1	44
97	Microstructure of lower bainite formed at large undercoolings below bainite start temperature. Materials Science and Technology, 1996, 12, 233-236.	1.6	43
98	Mathematical models in materials science. Materials Science and Technology, 2008, 24, 128-136.	1.6	42
99	Stabilisation of ferrite in hot rolled Î´-TRIP steel. Materials Science and Technology, 2011, 27, 525-529.	1.6	42
100	Coupled diffusional/displacive transformations: Part II. Solute trapping. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1990, 21, 805-809.	1.4	41
101	Sensitisation and Evolution of Chromium-depleted Zones in Fe-Cr-Ni-C Systems. ISIJ International, 2003, 43, 1814-1820.	1.4	41
102	Topology of grain deformation. Materials Science and Technology, 1998, 14, 832-834.	1.6	40
103	Divorced pearlite in steels. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2012, 468, 2767-2778.	2.1	40
104	Friction stir welding of mild steel: Tool durability and steel microstructure. Materials Science and Technology, 2014, 30, 1050-1056.	1.6	40
105	Solidification sequences in stainless steel dissimilar alloy welds. Materials Science and Technology, 1991, 7, 50-61.	1.6	39
106	Metallographic observations of bainite transformation mechanism. Materials Science and Technology, 1995, 11, 105-108.	1.6	39
107	Characterisation of severely deformed austenitic stainless steel wire. Materials Science and Technology, 2005, 21, 1323-1328.	1.6	39
108	Heat transfer coefficients during quenching of steels. Heat and Mass Transfer, 2011, 47, 315-321.	2.1	39

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109	Lower acicular ferrite. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1989, 20, 1811-1818.	1.4	38
110	Extraordinary ductility in Al-bearing Î´-TRIP steel. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2011, 467, 234-243.	2.1	38
111	Hydrogen diffusion and the percolation of austenite in nanostructured bainitic steel. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2014, 470, 20140108.	2.1	38
112	Diffusional Transformations: A Theory for the Formation of Superledges. Physica Status Solidi A, 1982, 69, 745-750.	1.7	37
113	Electron backscattering diffraction study of coalesced bainite in high strength steel weld metals. Materials Science and Technology, 2008, 24, 1183-1188.	1.6	37
114	Optimizing the Morphology and Stability of Retained Austenite in a Î´-TRIP Steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 3512-3518.	2.2	37
115	Application of first-order quasichemical theory to transformations in steels. Metal Science, 1982, 16, 167-170.	0.7	36
116	Directional recrystallisation in Inconel MA 6000 nickel base oxide dispersion strengthened superalloy. Materials Science and Technology, 1990, 6, 1236-1246.	1.6	36
117	Bearing steel microstructures after aircraft gas turbine engine service. Materials Science and Technology, 2014, 30, 1911-1918.	1.6	36
118	The bainite transformation in chemically heterogeneous 300M high-strength steel. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1990, 21, 859-875.	1.4	35
119	Coalesced bainite by isothermal transformation of reheated weld metal. Science and Technology of Welding and Joining, 2008, 13, 593-597.	3.1	35
120	Further evidence of tetragonality in bainitic ferrite. Materials Science and Technology, 2015, 31, 254-256.	1.6	35
121	Design of a creep resistant nickel base superalloy for power plant applications: Part 3 - Experimental results. Materials Science and Technology, 2003, 19, 296-302.	1.6	34
122	Quantitative metallography of deformed grains. Materials Science and Technology, 2007, 23, 757-766.	1.6	34
123	Stretch-flangeability of strong multiphase steels. Materials Science and Technology, 2007, 23, 606-609.	1.6	33
124	Spot weldability of TRIP assisted steels with high carbon and aluminium contents. Science and Technology of Welding and Joining, 2012, 17, 92-98.	3.1	33
125	High entropy alloys. Materials Science and Technology, 2015, 31, 1139-1141.	1.6	33
126	Bulk nanocrystalline steel. Ironmaking and Steelmaking, 2005, 32, 405-410.	2.1	32

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127	Bainite orientation in plastically deformed austenite. International Journal of Materials Research, 2009, 100, 40-45.	0.3	32
128	Tool durability maps for friction stir welding of an aluminium alloy. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2012, 468, 3552-3570.	2.1	32
129	A model for the strength of the As-deposited regions of steel weld metals. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1988, 19, 1597-1602.	1.4	31
130	Crystallographic texture in mechanically alloyed oxide dispersion-strengthened MA956 and MA957 steels. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1993, 24, 773-779.	1.4	31
131	Estimation of the .GAMMA. and .GAMMA.' Lattice Parameters in Nickel-base Superalloys Using Neural Network Analysis.. ISIJ International, 1998, 38, 495-502.	1.4	30
132	Strength of Ferritic Steels: Neural Networks and Genetic Programming. Materials and Manufacturing Processes, 2008, 24, 10-15.	4.7	30
133	Mixed diffusion-controlled growth of pearlite in binary steel. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2011, 467, 508-521.	2.1	30
134	Cementite precipitation during tempering of martensite under the influence of an externally applied stress. Journal of Materials Science, 1994, 29, 6079-6084.	3.7	29
135	Tensile properties of mechanically alloyed oxide dispersion strengthened iron alloys Part 1 - Neural networkmodels. Materials Science and Technology, 1998, 14, 793-809.	1.6	29
136	Estimation of Type IV Cracking Tendency in Power Plant Steels. ISIJ International, 2004, 44, 1966-1968.	1.4	29
137	Understanding the complexities of bake hardening. Materials Science and Technology, 2008, 24, 107-111.	1.6	29
138	Air cooled bainitic steels for strong, seamless pipes Part 1 â€“ alloy design, kinetics and microstructure. Materials Science and Technology, 2009, 25, 1501-1507.	1.6	29
139	Macrosegregation and Microstructural Evolution in a Pressure-Vessel Steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 2983-2997.	2.2	29
140	Anomalies in carbon concentration determinations from nanostructured bainite. Materials Science and Technology, 2015, 31, 758-763.	1.6	29
141	Dry rolling/sliding wear of nanostructured pearlite. Materials Science and Technology, 2015, 31, 1735-1744.	1.6	29
142	Growth rate data on bainite in alloy steels. Materials Science and Technology, 1989, 5, 398-402.	1.6	28
143	Prediction of martensite start temperature of power plant steels. Materials Science and Technology, 1996, 12, 40-44.	1.6	28
144	Design of a creep resistant nickel base superalloy for power plant applications: Part 2 - Phase diagram and segregation simulation. Materials Science and Technology, 2003, 19, 291-295.	1.6	28

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145	Surface Relief Due to Bainite Transformation at 473ÂK (200ÂÂ°C). Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2011, 42, 3344-3348.	2.2	28
146	Tempering of Low-Temperature Bainite. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 3410-3418.	2.2	28
147	In situ synchrotron X-ray study of bainite transformation kinetics in a low-carbon Si-containing steel. Materials Science and Technology, 2017, 33, 2147-2156.	1.6	28
148	The austenite grain structure of low-alloy steel weld deposits. Journal of Materials Science, 1986, 21, 3947-3951.	3.7	27
149	Optimization of Neural Network for Charpy Toughness of Steel Welds. Materials and Manufacturing Processes, 2008, 24, 16-21.	4.7	27
150	Effects of weld preheat temperature and heat input on type IV failure. Science and Technology of Welding and Joining, 2009, 14, 436-442.	3.1	27
151	Austeniteâ€"ferrite transformation in enhanced niobium, low carbon steel. Materials Science and Technology, 2015, 31, 1066-1076.	1.6	27
152	Designing steel to resist hydrogen embrittlement: Part 1 â€" trapping capacity. Materials Science and Technology, 2018, 34, 1737-1746.	1.6	27
153	Precipitation sequences during carburisation of Crâ€"Mo steel. Materials Science and Technology, 1992, 8, 875-882.	1.6	26
154	Modeling M6C precipitation in niobium-alloyed ferritic stainless steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2002, 33, 3339-3347.	2.2	26
155	Relative effects of Mo and B on ferrite and bainite kinetics in strong steels. International Journal of Materials Research, 2009, 100, 1513-1520.	0.3	26
156	Pearlite growth rate in Feâ€"C and Feâ€"Mnâ€"C steels. Materials Science and Technology, 2015, 31, 487-493.	1.6	26
157	Directional recrystallization in mechanically alloyed oxide dispersion-strengthened metals by annealing in a moving temperature gradient. Journal of Materials Science, 1995, 30, 1439-1444.	3.7	25
158	Carbide precipitation in some secondary hardened steels. Journal of Materials Science, 1997, 32, 4815-4820.	3.7	25
159	Calculation of crystallographic texture due to displacive transformations. International Journal of Materials Research, 2008, 99, 342-346.	0.3	25
160	Induction welding and heat treatment of steel pipes: Evolution of crystallographic texture detrimental to toughness. Science and Technology of Welding and Joining, 2010, 15, 137-141.	3.1	25
161	White-Etching Matter in Bearing Steel. Part I: Controlled Cracking of 52100 Steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 4907-4915.	2.2	25
162	Effects of dilution and baseplate strength on stress distributions in multipass welds deposited using low transformation temperature filler alloys. Science and Technology of Welding and Joining, 2014, 19, 461-467.	3.1	25

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163	Diffusion-controlled growth of pearlite in ternary steels. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2011, 467, 2948-2961.	2.1	24
164	Comparison of Artificial Neural Networks with Gaussian Processes to Model the Yield Strength of Nickel-base Superalloys.. ISIJ International, 1999, 39, 1020-1026.	1.4	23
165	Surface residual stresses in multipass welds produced using low transformation temperature filler alloys. Science and Technology of Welding and Joining, 2014, 19, 623-630.	3.1	23
166	Microstructures in hot wire laser beam welding of HY 80 steel. Materials Science and Technology, 1994, 10, 56-59.	1.6	22
167	Changes in chemical composition of carbides in 2Â·25Crâ€“1Mo power plant steel. Materials Science and Technology, 1994, 10, 205-208.	1.6	22
168	Stress-affected transformation to lower bainite. Journal of Materials Science, 1996, 31, 2145-2148.	3.7	22
169	Very Short and Very Long Heat Treatments in the Processing of Steel. Materials and Manufacturing Processes, 2010, 25, 1-6.	4.7	22
170	Modelling coarsening behaviour of TiC precipitates in high strength, low alloy steels. Materials Science and Technology, 2013, 29, 1074-1079.	1.6	22
171	Austenite in Transformation-Induced Plasticity Steel Subjected to Multiple Isothermal Heat Treatments. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 4201-4209.	2.2	22
172	Problems in the Welding of Automotive Alloys. Science and Technology of Welding and Joining, 2015, 20, 451-453.	3.1	22
173	An aspect of the nucleation of burst martensite. Journal of Materials Science, 1982, 17, 383-386.	3.7	21
174	Nonuniform recrystallization in a mechanically alloyed nickel-base superalloy. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1993, 24, 1049-1055.	1.4	21
175	Spot weldability of <i>Î´</i>-TRIP steel containing 0Â·4 wt-%C. Science and Technology of Welding and Joining, 2010, 15, 619-624.	3.1	21
176	Oxidation of silicon containing steel. Ironmaking and Steelmaking, 2012, 39, 599-604.	2.1	21
177	Plastic accommodation of martensite in disordered and ordered ironâ€“platinum alloys. Materials Science and Technology, 1995, 11, 109-111.	1.6	20
178	Hot strength of creep resistant ferritic steels and relationship to creep rupture data. Materials Science and Technology, 2007, 23, 1127-1131.	1.6	20
179	Mechanism of misorientation development within coalesced martensite. Materials Science and Technology, 2012, 28, 918-923.	1.6	20
180	Stress induced transformation to bainite in Feâ€“Crâ€“Moâ€“C pressure vessel steel. Materials Science and Technology, 1991, 7, 686-698.	1.6	20

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181	Considerations of solute-drag in relation to transformations in steels. Journal of Materials Science, 1983, 18, 1473-1481.	3.7	19
182	Model for solidification cracking in low alloy steel weld metals. Science and Technology of Welding and Joining, 1996, 1, 43-50.	3.1	19
183	Problems in the Calculation of Transformation Texture in Steels. ISIJ International, 2010, 50, 1517-1522.	1.4	19
184	Displacive Phase Transformation and Surface Effects Associated with Confocal Laser Scanning Microscopy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 4520-4524.	2.2	19
185	Is low phosphorus content in steel a product requirement?. Ironmaking and Steelmaking, 2015, 42, 259-267.	2.1	19
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