

Guang Xu

List of Publications by Year in descending order

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119
papers

1,611
citations

430874

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434195

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120
times ranked

626
citing authors

#	ARTICLE	IF	CITATIONS
1	Microstructure and Properties of a Medium-Carbon Ti-Mo-Bearing Steel Treated by One-Step Quenching and Partitioning Treatment. <i>Journal of Materials Engineering and Performance</i> , 2022, 31, 297-304.	2.5	2
2	Comparison Between the Wear Behavior of U68CuCr and U71MnG Rail Steels. <i>Journal of Materials Engineering and Performance</i> , 2022, 31, 2896-2908.	2.5	1
3	Improving mechanical properties in high-carbon pearlitic steels by replacing partial V with Nb. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 834, 142622.	5.6	16
4	Simultaneous Enhancement of Strength and Toughness in a Medium-Carbon Martensitic Steel by Ti-Mo Addition. <i>Journal of Materials Engineering and Performance</i> , 2022, 31, 4273-4281.	2.5	3
5	Effects of Tempering Temperature on the Microstructure, Strength, and Toughness of Medium-Carbon Ti-Mo-Bearing Martensitic Steel. <i>Arabian Journal for Science and Engineering</i> , 2022, 47, 9061-9073.	3.0	2
6	Effect of undercooled austenite ausforming on the role of the Mn-A constituents in the CGHAZ toughness of the HSLA steels with bainite structure. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 833, 142571.	5.6	12
7	Effect of Austempering below and above Ms on the Microstructure and Wear Performance of a Low-Carbon Bainitic Steel. <i>Metals</i> , 2022, 12, 104.	2.3	5
8	Effect of temperature, carbon content and crystallography on the lengthening kinetics of bainitic ferrite laths. <i>Materials Characterization</i> , 2022, 187, 111860.	4.4	2
9	Effect of Vanadium and Strain Rate on Hot Ductility of Low-Carbon Microalloyed Steels. <i>Metals</i> , 2022, 12, 14.	2.3	4
10	Comparative study of the role of niobium in low-carbon ferritic and bainitic steels. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 851, 143579.	5.6	6
11	Optimized Properties of a Quenching and Partitioning Steel by Quenching at Fine Martensite Start Temperature. <i>Metals and Materials International</i> , 2021, 27, 2473-2480.	3.4	13
12	Investigation on Microstructural Delamination and Compositional Segregation in Flange Steel with a High Stretch Ratio. <i>Metals and Materials International</i> , 2021, 27, 1587-1598.	3.4	6
13	In Situ Study on Interrupted Growth Behavior and Crystallography of Bainite. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2021, 52, 817-825.	2.2	9
14	Microstructure and Wear Properties of a Bainite/Martensite Multi-phase Wear Resistant Steel. <i>ISIJ International</i> , 2021, 61, 434-441.	1.4	4
15	Influences of Quenching Temperature on the Microstructure Evolution and Strength-Toughness of a Novel Medium-Carbon Ti-Mo-Bearing Martensite Steel. <i>Steel Research International</i> , 2021, 92, 2100157.	1.8	2
16	Comparison of the Impact Wear Performances of Quenching and Partitioning and Quenching and Tempering Steels. <i>Steel Research International</i> , 2021, 92, 2100325.	1.8	3
17	Effects of Q&T Parameters on Phase Transformation, Microstructure, Precipitation and Mechanical Properties in an Oil Casing Steel. <i>Physics of Metals and Metallography</i> , 2021, 122, 1463-1472.	1.0	2
18	Enhanced Mechanical Properties in a Low-Carbon Ultrafine Grain Steel by Niobium Addition. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2021, 52, 5123-5132.	2.2	6

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19	Effects of Isothermal Transformation at the Quenching Temperature on the Microstructure and Mechanical Properties of a Medium-Carbon Steel. Transactions of the Indian Institute of Metals, 2021, 74, 3265-3272.	1.5	3
20	Corrosion performance of a corrosion-resistant rail steel in the simulated subsea tunnel environment. Corrosion Reviews, 2021, 39, 561-571.	2.0	2
21	The Corrosion and Wear Behaviors of a Medium-Carbon Bainitic Steel Treated by Boro-Austempering Process. Metals, 2021, 11, 1959.	2.3	3
22	Effect of Deformation during Austempering on Bainite Transformation and Retained Austenite in a Medium-Carbon Bainitic Steel. Steel Research International, 2020, 91, 1900353.	1.8	1
23	In-Situ Observation of Martensitic Transformation in a Fe-C-Mn-Si Bainitic Steel During Austempering. Metals and Materials International, 2020, 26, 961-972.	3.4	16
24	Effects of Stress on Martensite Transformation During Continuous Cooling and Mechanical Response of a Medium-Carbon High-Strength Steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 597-607.	2.2	10
25	Transformation kinetics of carbide-free bainitic steels during isothermal holding above and below MS. Journal of Materials Research and Technology, 2020, 9, 13594-13606.	5.8	12
26	Effect of Mo on the Precipitation Behavior of FB780 Steel with a High Hole-Expanding Ratio at Different Coiling Temperatures. Transactions of the Indian Institute of Metals, 2020, 73, 2817-2827.	1.5	3
27	The Effect of Primary Ferrite on Bainitic Transformation, Microstructure, and Properties of Low Carbon Bainitic Steel. Metal Science and Heat Treatment, 2020, 62, 306-314.	0.6	0
28	Investigation on the Oxidation Behavior of Dual-Phase Silicon-Containing Steel at Different Beginning Oxidation Temperatures. Arabian Journal for Science and Engineering, 2020, 45, 9015-9022.	3.0	4
29	New insights into the effects of deformation below-M on isothermal kinetics of bainitic transformation. Journal of Materials Research and Technology, 2020, 9, 15750-15758.	5.8	7
30	Impact of Al addition on deformation behavior of Fe-Cr-Ni-Mn-C austenitic stainless steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 797, 140084.	5.6	11
31	Microstructure and Properties of a Medium-Carbon High-Strength Bainitic Steel Treated by Boro-Austempering Treatment. Steel Research International, 2020, 91, 2000128.	1.8	7
32	Quantitative Analysis of Microstructures and Strength of Nb-Ti Microalloyed Steel with Different Ti Additions. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 2084-2096.	2.2	27
33	Investigation on Microstructure and Properties of Low-Carbon Wear-Resistant Steels with Addition of Cr and Ni. Steel Research International, 2020, 91, 1900677.	1.8	5
34	Effect of austempering time on microstructure and properties of a low-carbon bainite steel. International Journal of Minerals, Metallurgy and Materials, 2020, 27, 340-346.	4.9	8
35	Effects of Q&T parameters on phase transformation, microstructure, precipitation and mechanical properties in a PS-30Cr2Nb pipeline steel. Materials Research Express, 2020, 7, 016536.	1.6	2
36	Effect of two-step ausforming on bainite transformation and retained austenite in a medium-carbon bainitic steel. Materials Research Express, 2020, 7, 016519.	1.6	5

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37	Effect of Ausforming on Retained Austenite After Continuous Cooling Transformation in a Medium-Carbon High Strength Steel. <i>Materials Research</i> , 2020, 23, .	1.3	1
38	Optimizing Microstructure and Property by Ausforming in a Medium-carbon Bainitic Steel. <i>ISIJ International</i> , 2020, 60, 2007-2014.	1.4	11
39	Comparison of the strengthening effects of Nb, V, and Ti on the mechanical properties of 20MnSi low-alloy steel. <i>International Journal of Materials Research</i> , 2020, 111, 504-510.	0.3	1
40	Comprehensive Analysis of the Effect of Ausforming on the Martensite Start Temperature in a Fe-C-Mn-Si Medium-Carbon High-Strength Bainite Steel. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2019, 50, 4541-4549.	2.2	9
41	Effects of Undercooling and Transformation Time on Microstructure and Strength of Fe-C-Mn-Si Superbainitic Steel. <i>Strength of Materials</i> , 2019, 51, 439-449.	0.5	1
42	Investigation of characteristic and evolution of fine-grained bainitic microstructure in the coarse-grained heat-affected zone of super-high strength steel for offshore structure. <i>Materials Characterization</i> , 2019, 157, 109893.	4.4	18
43	Critical ausforming temperature to promote isothermal bainitic transformation in prior-deformed austenite. <i>Materials Science and Technology</i> , 2019, 35, 420-428.	1.6	18
44	Effect of Ni and Cr Addition on Transformation and Properties of Low-Carbon Bainitic Steels. <i>Transactions of the Indian Institute of Metals</i> , 2019, 72, 1167-1174.	1.5	7
45	Effects of Initial Austenite Grain Size on Microstructure and Mechanical Properties of 5% Nickel Cryogenic Steel. <i>Metallography, Microstructure, and Analysis</i> , 2019, 8, 241-248.	1.0	5
46	The Effect of Stress on Bainite Transformation, Microstructure, and Properties of a Low-Carbon Bainitic Steel. <i>Steel Research International</i> , 2019, 90, 1900159.	1.8	10
47	The Effects of Cooling Mode on the Properties of Ti-Nb Microalloyed High-strength Hot-rolled Steels. <i>Journal Wuhan University of Technology, Materials Science Edition</i> , 2019, 34, 692-697.	1.0	5
48	Effect of austenisation temperature on bainite transformation below martensite starting temperature. <i>Materials Science and Technology</i> , 2019, 35, 1539-1550.	1.6	15
49	Correlations Between Microstructure and Dry Friction Wear Behavior of Zn-38Al-3.5Cu-1.2Mg Alloy Reinforced with SiC Nanoparticles. <i>Transactions of the Indian Institute of Metals</i> , 2019, 72, 2557-2565.	1.5	4
50	Investigating the Properties of Coil Tail in Ti-Nb-Mo Microalloyed Hot-Rolled Strip. <i>Steel Research International</i> , 2019, 90, 1900040.	1.8	19
51	Effects of Ni and Cr on Cryogenic Impact Toughness of Bainite/Martensite Multiphase Steels. <i>Metals and Materials International</i> , 2019, 25, 1151-1160.	3.4	13
52	A new method to predict mechanical properties for microalloyed steels via industrial data and mechanism analysis. <i>Journal of Iron and Steel Research International</i> , 2019, 26, 230-241.	2.8	6
53	Effects of Al addition on bainite transformation and properties of high-strength carbide-free bainitic steels. <i>Journal of Iron and Steel Research International</i> , 2019, 26, 846-855.	2.8	28
54	Combined Effects of Deformation and Undercooling on Isothermal Bainitic Transformation in an Fe-C-Mn-Si Alloy. <i>Metals</i> , 2019, 9, 138.	2.3	8

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55	Effects of Plastic Stress on Transformation Plasticity and Microstructure of a Carbide-Free Bainite Steel. <i>Metallography, Microstructure, and Analysis</i> , 2019, 8, 159-166.	1.0	6
56	Effects of Rolling Temperature on the Microstructure and Mechanical Properties in an Ultrafine-Grained Low-Carbon Steel. <i>Steel Research International</i> , 2019, 90, 1800318.	1.8	13
57	Transformation Behavior and Properties of Carbide-Free Bainite Steels with Different Si Contents. <i>Steel Research International</i> , 2019, 90, 1800474.	1.8	17
58	Evaluation of Mechanical Properties and Microstructures of Ultrafine Grain Low-Carbon Steel Processed by Cryorolling and Annealing. <i>Transactions of the Indian Institute of Metals</i> , 2019, 72, 741-749.	1.5	13
59	Effect of Strain Rate on the Bainitic Transformation in Fe-C-Mn-Si Medium-Carbon Bainitic Steels. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2019, 50, 573-580.	2.2	14
60	New insight to the oxidation kinetics of silicon-containing steel at high temperature. <i>Materials at High Temperatures</i> , 2018, 35, 552-557.	1.0	6
61	Effects of oxygen concentration on the passivation of Si-containing steel during high-temperature oxidation. <i>Corrosion Reviews</i> , 2018, 36, 385-393.	2.0	6
62	Refined Bainite Microstructure and Mechanical Properties of a High-Strength Low-Carbon Bainitic Steel Treated by Austempering Below and Above M_{S} . <i>Steel Research International</i> , 2018, 89, 1700469.	1.8	47
63	Effects of oxygen content on the oxidation process of Si-containing steel during anisothermal heating. <i>International Journal of Minerals, Metallurgy and Materials</i> , 2018, 25, 164-172.	4.9	5
64	Kinetics model of bainitic transformation with stress. <i>Metals and Materials International</i> , 2018, 24, 28-34.	3.4	14
65	A Method to Reduce the Oxide Scale of Silicon-Containing Steels by Adjusting the Heating Route. <i>Transactions of the Indian Institute of Metals</i> , 2018, 71, 677-684.	1.5	6
66	In Situ Observation of the Lengthening Rate of Bainite Sheaves During Continuous Cooling Process in a Fe-C-Mn-Si Superbainitic Steel. <i>Transactions of the Indian Institute of Metals</i> , 2018, 71, 185-194.	1.5	16
67	Effect of Surface Oxidation on Decarburization of a Fe-3%Si Steel during Annealing. <i>ISIJ International</i> , 2018, 58, 1727-1734.	1.4	6
68	Composition Optimization of Nb-Ti Microalloyed High Strength Steel. <i>Journal Wuhan University of Technology, Materials Science Edition</i> , 2018, 33, 1193-1197.	1.0	6
69	Effect of Cold Deformation on Microstructures and Mechanical Properties of Austenitic Stainless Steel. <i>Metals</i> , 2018, 8, 522.	2.3	33
70	Transformation Behavior of Bainite during Two-step Isothermal Process in an Ultrafine Bainite Steel. <i>ISIJ International</i> , 2018, 58, 1875-1882.	1.4	17
71	Effect of Vanadium on the Microstructure and Property of Rebar Steel. <i>Materials Science Forum</i> , 2018, 928, 269-272.	0.3	1
72	Effect of Ni Addition on Bainite Transformation and Properties in a 2000MPa Grade Ultrahigh Strength Bainitic Steel. <i>Metals and Materials International</i> , 2018, 24, 1202-1212.	3.4	15

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73	Effect of Strain Rate on Deformation Resistance during Ausforming in Fe-C-Mn-Si High-Strength Bainite Steels. <i>Steel Research International</i> , 2018, 89, 1800201.	1.8	5
74	Effects of Tempering on the Microstructure and Properties of a High-Strength Bainite Rail Steel with Good Toughness. <i>Metals</i> , 2018, 8, 484.	2.3	25
75	Effect of Rolling Reduction on Microstructure and Property of Ultrafine Grained Low-Carbon Steel Processed by Cryorolling Martensite. <i>Metals</i> , 2018, 8, 518.	2.3	23
76	Effects of Mn on microstructures and properties of hot rolled low carbon bainitic steels. <i>Journal Wuhan University of Technology, Materials Science Edition</i> , 2017, 32, 186-189.	1.0	5
77	New insights to the promoted bainitic transformation in prior deformed austenite in a Fe-C-Mn-Si alloy. <i>Metals and Materials International</i> , 2017, 23, 233-238.	3.4	13
78	Effects of Nb Addition on Transformation Kinetics and Microstructure Properties in Low-Carbon Bainitic Steels. <i>Metallography, Microstructure, and Analysis</i> , 2017, 6, 158-163.	1.0	4
79	Effect of Annealing on the Microstructure and Mechanical Properties of a Low-Carbon Steel with Ultrafine Grains. <i>Metallography, Microstructure, and Analysis</i> , 2017, 6, 233-239.	1.0	13
80	The Effect of Large Stress on Bainitic Transformation at Different Transformation Temperatures. <i>Steel Research International</i> , 2017, 88, 1600377.	1.8	10
81	Comprehensive analysis on the effects of different stress states on the bainitic transformation. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 704, 427-433.	5.6	18
82	The Recrystallization Behavior in Ultrafine-Grained Structure Steel Fabricated by Cold Rolling and Annealing. <i>Arabian Journal for Science and Engineering</i> , 2017, 42, 4771-4777.	3.0	12
83	Effects of Austenitization Temperature and Compressive Stress During Bainitic Transformation on the Stability of Retained Austenite. <i>Transactions of the Indian Institute of Metals</i> , 2017, 70, 1447-1453.	1.5	14
84	Effects of Strain and Deformation Temperature on Bainitic Transformation in a Fe-C-Mn-Si Alloy. <i>Steel Research International</i> , 2017, 88, 1600170.	1.8	9
85	The Morphologies of Different Types of Fe ₂ SiO ₄ in Si-Containing Steel. <i>Metals</i> , 2017, 7, 8.	2.3	7
86	The Effects of Cr and Al Addition on Transformation and Properties in Low-Carbon Bainitic Steels. <i>Metals</i> , 2017, 7, 40.	2.3	39
87	Bainitic Transformation and Properties of Low Carbon Carbide-Free Bainitic Steels with Cr Addition. <i>Metals</i> , 2017, 7, 263.	2.3	31
88	Method to Evaluate the Kinetics of Bainite Transformation in Low-Temperature Nanobainitic Steel Using Thermal Dilatation Curve Analysis. <i>Metals</i> , 2017, 7, 330.	2.3	14
89	The Effect of P on the Microstructure and Melting Temperature of Fe ₂ SiO ₄ in Silicon-Containing Steels Investigated by In Situ Observation. <i>Metals</i> , 2017, 7, 37.	2.3	12
90	The Effect of the Si Content on the Morphology and Amount of Fe ₂ SiO ₄ in Low Carbon Steels. <i>Metals</i> , 2016, 6, 94.	2.3	21

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91	The Varying Effects of Uniaxial Compressive Stress on the Bainitic Transformation under Different Austenitization Temperatures. <i>Metals</i> , 2016, 6, 119.	2.3	15
92	Effect of Oxidation Temperature on the Oxidation Process of Silicon-Containing Steel. <i>Metals</i> , 2016, 6, 137.	2.3	23
93	Effect of Mo Content on Microstructure and Property of Low-Carbon Bainitic Steels. <i>Metals</i> , 2016, 6, 173.	2.3	37
94	Effects of Ultra-Fast Cooling Technology on Microstructure and Properties of Low Carbon Steel. <i>Metallography, Microstructure, and Analysis</i> , 2016, 5, 135-141.	1.0	2
95	New insights into the effects of silicon content on the oxidation process in silicon-containing steels. <i>International Journal of Minerals, Metallurgy and Materials</i> , 2016, 23, 1048-1055.	4.9	11
96	Combined effect of the prior deformation and applied stress on the bainite transformation. <i>Metals and Materials International</i> , 2016, 22, 956-961.	3.4	21
97	Effect of Undercooling and Austenitic Grain Size on Bainitic Transformation in an Fe-C-Mn-Si Superbainite Steel. <i>Transactions of the Indian Institute of Metals</i> , 2016, 69, 693-698.	1.5	14
98	New insights to the effects of ausforming on the bainitic transformation. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 626, 34-40.	5.6	76
99	The effects of Nb and Mo addition on transformation and properties in low carbon bainitic steels. <i>Materials and Design</i> , 2015, 84, 95-99.	7.0	107
100	Effect of ausforming on the stability of retained austenite in a C-Mn-Si bainitic steel. <i>Metals and Materials International</i> , 2015, 21, 929-935.	3.4	35
101	Dynamic observation of bainite transformation in a Fe-C-Mn-Si superbainite steel. <i>Journal Wuhan University of Technology, Materials Science Edition</i> , 2015, 30, 818-821.	1.0	9
102	The effects of external compressive stress on the kinetics of low temperature bainitic transformation and microstructure in a superbainite steel. <i>International Journal of Materials Research</i> , 2015, 106, 1040-1045.	0.3	10
103	Comprehensive analysis of the dilatation during bainitic transformation under stress. <i>Metals and Materials International</i> , 2015, 21, 985-990.	3.4	13
104	Research on Continuous Cooling Transformation Curve of a C-Si-Mn Steel. <i>Applied Mechanics and Materials</i> , 2014, 556-562, 404-407.	0.2	2
105	Dynamic observation of twin evolution during austenite grain growth in an Fe-C-Mn-Si alloy. <i>International Journal of Materials Research</i> , 2014, 105, 337-341.	0.3	10
106	The Effects of Cooling Mode on Precipitation and Mechanical Properties of a Ti-Nb Microalloyed Steel. <i>Journal of Materials Engineering and Performance</i> , 2014, 23, 4216-4222.	2.5	14
107	Research on CCT Curve of 12Cr2Mo1R Pressure Vessel Steel. <i>Applied Mechanics and Materials</i> , 2014, 556-562, 468-471.	0.2	0
108	Mechanical Behavior of Carbide-free Medium Carbon Bainitic Steels. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2014, 45, 1352-1361.	2.2	24

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109	In situ measured growth rates of bainite plates in an Fe-C-Mn-Si superbainitic steel. International Journal of Minerals, Metallurgy and Materials, 2014, 21, 371-378.	4.9	26
110	A new approach to quantitative analysis of bainitic transformation in a superbainite steel. Scripta Materialia, 2013, 68, 833-836.	5.2	84
111	Influence of Microstructural Length Scale on the Strength and Annealing Behavior of Pearlite, Bainite, and Martensite. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 1454-1461.	2.2	10
112	In situ observations of austenite grain growth in Fe-C-Mn-Si super bainitic steel. International Journal of Minerals, Metallurgy and Materials, 2013, 20, 1060-1066.	4.9	16
113	The development of Ti-alloyed high strength microalloy steel. Materials & Design, 2010, 31, 2891-2896.	5.1	111
114	Deformation behavior of ultra-low carbon steel in ferrite region during warm processing. Journal Wuhan University of Technology, Materials Science Edition, 2008, 23, 29-32.	1.0	3
115	A new method for accurate plotting continuous cooling transformation curves. Materials Letters, 2008, 62, 3978-3980.	2.6	11
116	Influence of Annealing Technology on Drawing Properties of Cold Sheets Rolled with Compact Strip Production Hot Bands. ISIJ International, 2007, 47, 1767-1771.	1.4	6
117	Enhanced Thermal Stability of the Low-Carbon Ultrafine Grain Steel with Nanoprecipitates. Steel Research International, 0, , 2100320.	1.8	2
118	Microstructure and Crystallography of a Carbide-Free Bainite Steel Under the Effect of Stress. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 0, , 1.	2.2	0
119	Effect of high-temperature deformation on bainite transformation of a low-carbon bainite steel. Steel Research International, 0, , .	1.8	0