

Furen Xiao

List of Publications by Year in descending order

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68
papers

1,080
citations

516710

16
h-index

454955

30
g-index

68
all docs

68
docs citations

68
times ranked

710
citing authors

#	ARTICLE	IF	CITATIONS
1	In situ TEM study of the effect of M/A films at grain boundaries on crack propagation in an ultra-fine acicular ferrite pipeline steel. <i>Acta Materialia</i> , 2006, 54, 435-443.	7.9	158
2	Challenge of mechanical properties of an acicular ferrite pipeline steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2006, 431, 41-52.	5.6	125
3	Acicular ferritic microstructure of a low-carbon Mn-Mo-Nb microalloyed pipeline steel. <i>Materials Characterization</i> , 2005, 54, 305-314.	4.4	107
4	Effect of Nb Solute and NbC Precipitates on Dynamic or Static Recrystallization in Nb Steels. <i>Journal of Iron and Steel Research International</i> , 2012, 19, 52-56.	2.8	62
5	Effect of bainite morphology on deformation compatibility of mesostructure in ferrite/bainite dual-phase steel: Mesostructure-based finite element analysis. <i>Materials and Design</i> , 2019, 180, 107870.	7.0	33
6	Effect of toughness on low cycle fatigue behavior of pipeline steels. <i>Materials Letters</i> , 2005, 59, 1780-1784.	2.6	27
7	Effect of nano-SiO ₂ on the performance of poly(MMA/BA/MAA)/EP. <i>Materials Letters</i> , 2007, 61, 725-729.	2.6	27
8	Quantitative research on effects of Nb on hot deformation behaviors of high-Nb microalloyed steels. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011, 530, 277-284.	5.6	27
9	Effect of porosity on the grinding performance of vitrified bond diamond wheels for grinding PCD blades. <i>Ceramics International</i> , 2012, 38, 6215-6220.	4.8	27
10	Non-isothermal prior austenite grain growth of a high-Nb X100 pipeline steel during a simulated welding heat cycle process. <i>Materials and Design</i> , 2016, 89, 589-596.	7.0	27
11	Microstructural Characterization and Mechanical Properties Analysis of Weld Metals with Two Ni Contents During Post-Weld Heat Treatments. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2015, 46, 1973-1984.	2.2	25
12	Effect of Nb on Mechanical Properties of HAZ for High-Nb X80 Pipeline Steels. <i>Journal of Iron and Steel Research International</i> , 2013, 20, 53-60.	2.8	21
13	Fatigue properties of ferrite/bainite dual-phase X80 pipeline steel welded joints. <i>Science and Technology of Welding and Joining</i> , 2017, 22, 217-226.	3.1	20
14	Effect of hot deformation on phase transformation kinetics of 86CrMoV7 steel. <i>Materials Characterization</i> , 2006, 57, 306-313.	4.4	18
15	Refinement effectiveness of self-prepared (NbTi)C nanoparticles on as-cast 1045 steel. <i>Materials and Design</i> , 2018, 139, 531-540.	7.0	18
16	Isothermal transformation of low-carbon microalloyed steels. <i>Materials Characterization</i> , 2005, 54, 417-422.	4.4	17
17	Effects of welding wire composition and welding process on the weld metal toughness of submerged arc welded pipeline steel. <i>International Journal of Minerals, Metallurgy and Materials</i> , 2009, 16, 65-70.	4.9	17
18	Abrasion Mechanism of Stainless Steel/Carbon Fiber-Reinforced Polyether-Ether-Ketone (PEEK) Composites. <i>Journal of Materials Engineering and Performance</i> , 2009, 18, 973-979.	2.5	16

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19	Ripening behavior of M ₂₃ C ₆ carbides in P92 steel during aging at 800 °C. <i>Journal of Iron and Steel Research International</i> , 2017, 24, 858-864.	2.8	16
20	Thermal-Elastic-Plastic Simulation of Internal Stress Fields of Quenched Steel 40Cr Cylindrical Specimens by FEM. <i>Materials and Manufacturing Processes</i> , 2011, 26, 732-739.	4.7	15
21	Effects of nano-AlN and sintering atmosphere on microstructure and properties of vitrified bond. <i>Composites Part B: Engineering</i> , 2011, 42, 756-762.	12.0	12
22	Investigation on grain refinement and precipitation strengthening applied in high speed wire rod containing vanadium. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 592, 102-110.	5.6	12
23	Numerical simulation of multilayered multiple metal cast rolls in compound casting process. <i>Applied Thermal Engineering</i> , 2016, 93, 518-528.	6.0	12
24	Effects of deep cryogenic treatment on the solid-state phase transformation of Cu-Al alloy in cooling process. <i>Phase Transitions</i> , 2012, 85, 650-657.	1.3	11
25	3D Numerical Simulation on Thermal Flow Coupling Field of Stainless Steel During Twin-Roll Casting. <i>Journal of Materials Engineering and Performance</i> , 2014, 23, 39-48.	2.5	11
26	Precipitation kinetics of Nb carbonitride in austenite and acicular ferrite and its effect on hardness of high-Nb steel. <i>Materials Chemistry and Physics</i> , 2016, 183, 506-515.	4.0	11
27	Effect of heat treatment on microstructure and properties of 1045 steel modified with (NbTi)C nanoparticles. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 728, 175-182.	5.6	11
28	Effects of nano-AlN on phase transformation of low temperature vitrified bond during sintering process. <i>Transactions of Nonferrous Metals Society of China</i> , 2009, 19, s706-s710.	4.2	10
29	Study on the Effect of Grinding Pressure on Material Removal Behavior Performed on a Self-Designed Passive Grinding Simulator. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 4128.	2.5	10
30	Synthesis of Bulk Nanocrystalline CoNi Alloys and Study of Their Microstructure and Magnetic Properties. <i>Materials and Manufacturing Processes</i> , 2012, 27, 1154-1159.	4.7	9
31	Effects of Hot Bending Parameters on Microstructure and Mechanical Properties of Weld Metal for X80 Hot Bends. <i>Journal of Iron and Steel Research International</i> , 2014, 21, 1129-1135.	2.8	9
32	Influence of Post-Weld Heat Treatment on the Microstructure, Microhardness, and Toughness of a Weld Metal for Hot Bend. <i>Metals</i> , 2016, 6, 75.	2.3	9
33	Ultra-incompressibility and high energy density of ReN ₈ with infinite nitrogen chains. <i>Journal of Materials Science</i> , 2021, 56, 3814-3826.	3.7	9
34	Effect of different oxides addition on the thermal expansion coefficients and residual stresses of Fe-based diamond composites. <i>Ceramics International</i> , 2014, 40, 5007-5013.	4.8	8
35	Research on the fatigue properties of sub-heat-affected zones in X80 pipe. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2020, 43, 2915-2927.	3.4	8
36	Investigation on Static Softening Behaviors of a Low Carbon Steel Under Ferritic Rolling Condition. <i>Journal of Materials Engineering and Performance</i> , 2010, 19, 151-154.	2.5	7

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37	Fabrication of NbC Reinforced Low Carbon Steel by Immersing Nb(C)-Fe Powders in Steel Melt. <i>Materials and Manufacturing Processes</i> , 2015, 30, 116-121.	4.7	7
38	Effects of grain size on the properties of bulk nanocrystalline Co-Ni alloys. <i>Materials Research Express</i> , 2017, 4, 086512.	1.6	7
39	Using direct hot-rolling approach to obtain dual-phase weathering steel Cu-P-Cr-Ni-Mo. <i>Journal of Materials Science</i> , 2010, 45, 490-495.	3.7	6
40	Quantitative Research on the Role of Large Precipitates in V-Ti Micro-Alloyed Steel during Dynamic Transformation. <i>Acta Metallurgica Sinica (English Letters)</i> , 2015, 28, 77-82.	2.9	6
41	Effect of hot deformation and Nb precipitation on continuous cooling transformation of a high-Nb steel. <i>Ironmaking and Steelmaking</i> , 2017, 44, 359-367.	2.1	6
42	Study of fatigue crack propagation behaviour for dual-phase X80 pipeline steel. <i>Ironmaking and Steelmaking</i> , 2018, 45, 635-640.	2.1	6
43	Characterization of Microstructures and Fatigue Properties for Dual-Phase Pipeline Steels by Gleeble Simulation of Heat-Affected Zone. <i>Materials</i> , 2019, 12, 1989.	2.9	6
44	Bacterial Disinfection by CuFe ₂ O ₄ Nanoparticles Enhanced by NH ₂ OH: A Mechanistic Study. <i>Nanomaterials</i> , 2020, 10, 18.	4.1	6
45	Designed a Passive Grinding Test Machine to Simulate Passive Grinding Process. <i>Processes</i> , 2021, 9, 1317.	2.8	6
46	Design of a CBN composite abrasive to improve the performance of HSG rail maintenance grinding wheel. <i>Construction and Building Materials</i> , 2022, 319, 126073.	7.2	6
47	Timed quenching process for large-scale AISI 4140 steel shaft. <i>Journal of Shanghai Jiaotong University (Science)</i> , 2011, 16, 224-226.	0.9	5
48	Mechanical Properties of High-Nb X80 Steel Weld Pipes for the Second West-to-East Gas Transmission Pipeline Project. <i>Advances in Materials Science and Engineering</i> , 2017, 2017, 1-13.	1.8	5
49	Effect of Dissolution and Precipitation of Nb on Phase Transformation, Microstructure, and Microhardness of Two High-Nb Pipeline Steels. <i>Transactions of the Indian Institute of Metals</i> , 2018, 71, 627-637.	1.5	5
50	Effect of Bainite to Ferrite Yield Strength Ratio on the Deformability of Mesostructures for Ferrite/Bainite Dual-Phase Steels. <i>Materials</i> , 2021, 14, 5352.	2.9	5
51	Optimization of Process Parameters to Improve Combination in Duplex Roller Sleeve. <i>International Journal of Metalcasting</i> , 2017, 11, 448-455.	1.9	4
52	First-Principle Study on the Stability of Lightly Doped (Nb _{1-x} Ti _x)C Complex Carbides and Their Verification in 1045 Steel. <i>ACS Omega</i> , 2021, 6, 19964-19972.	3.5	4
53	Preparation and characterization of coated abrasives with domed pyramid thermosetting polyurethane/epoxy/diamond composites by roller embossing: Wear performance. <i>Diamond and Related Materials</i> , 2021, 120, 108632.	3.9	4
54	Composition Optimization and Experimental Characterization of a Novel Steel Based on CALPHAD. <i>Journal of Materials Engineering and Performance</i> , 2015, 24, 2099-2107.	2.5	3

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55	Preparation of polyurethane foam fine polishing wheel for stainless steel surface. Journal of Applied Polymer Science, 2021, 138, 50912.	2.6	3
56	Hot deformation behavior of a Cr-containing low carbon steel in the ferrite range. International Journal of Minerals, Metallurgy and Materials, 2009, 16, 549-553.	4.9	2
57	Stress-Strain Behaviors Simulation of High Chromium Steel at Elevated Temperatures. Journal of Materials Engineering and Performance, 2010, 19, 921-927.	2.5	2
58	Influence of matrix hardness on honing engine cylinder liner with Cu-Sn-Fe-Ni diamond stones. International Journal of Advanced Manufacturing Technology, 2013, 69, 1619-1623.	3.0	2
59	Effects of Induction Heat Treatment on Austenitic Transformation, Microstructure and Mechanical Properties of Pipeline Steels. Materials Science Forum, 0, 773-774, 741-749.	0.3	2
60	Low-Cycle Fatigue Properties of the X70 High-Frequency Electric-Resistant Welded Pipes. Advances in Materials Science and Engineering, 2018, 2018, 1-10.	1.8	2
61	Study on the Dissolution and Precipitation Behavior of Self-Designed (NbTi)C Nanoparticles Addition in 1045 Steel. Metals, 2021, 11, 184.	2.3	2
62	Behaviors of Embrittlement and Softening in Heat Affected Zone of High Strength X90 Pipeline Steels. Soldagem E Inspecao, 0, 24, .	0.6	2
63	Effect of (NbTi)C Particles on the Microstructure and Hardness of High Chromium and Nickel Indefinite Chilled Cast Iron. Crystals, 2022, 12, 978.	2.2	2
64	Transformation of M/A Constituents during Tempering and Its Effects on Impact Toughness of Weld Metals for X80 Hot Bends. Advances in Materials Science and Engineering, 2019, 2019, 1-10.	1.8	1
65	Effect of Bainite Volume Fraction on Deformability of Mesostructures for Ferrite/Bainite Dual-Phase Steel. Advances in Materials Science and Engineering, 2020, 2020, 1-17.	1.8	1
66	The Effect of the Ausforging-and-Tempering on the Microstructure and Mechanical Properties of Steel 86CrMoV7. Journal of Materials Engineering and Performance, 2008, 17, 857-863.	2.5	0
67	Application of the computer-aided quenching technology on the connecting bar of 42CrMo4. Journal of Shanghai Jiaotong University (Science), 2010, 15, 596-599.	0.9	0
68	Assessment of refining effectiveness of self-prepared nano-(TiNb)C/(NbTi)/Al complex powder inoculation on A356 alloy. Materials Research Express, 2017, 4, 076503.	1.6	0