

Ren-bo Song

List of Publications by Year in descending order

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856
citing authors

#	ARTICLE	IF	CITATIONS
1	Characteristics of Mechanical Properties and Microstructure for 316L Austenitic Stainless Steel. <i>Journal of Iron and Steel Research International</i> , 2011, 18, 53-59.	2.8	82
2	Tensile deformation of low density duplex Fe-Mn-Al-C steel. <i>Materials & Design</i> , 2015, 76, 32-39.	5.1	81
3	Work hardening behavior involving the substructural evolution of an austenite-ferrite Fe-Mn-Al-C steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 640, 225-234.	5.6	79
4	Effect of annealing temperature on the microstructure and tensile properties of Fe-10Mn-10Al-0.7C low-density steel. <i>Materials and Design</i> , 2016, 91, 348-360.	7.0	61
5	Evolution of the microstructure and mechanical properties of an austenite-ferrite Fe-Mn-Al-C steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 643, 183-193.	5.6	51
6	Microstructural evolution and tensile properties of 70â€¦GPa grade strong and ductile hot-rolled 6Mn steel treated by intercritical annealing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 745, 212-220.	5.6	51
7	Hot Deformation and Dynamic Recrystallization Behavior of Austenite-Based Low-Density Fe-Mn-Al-C Steel. <i>Acta Metallurgica Sinica (English Letters)</i> , 2016, 29, 441-449.	2.9	47
8	Effect of anodic T phase on surface micro-galvanic corrosion of biodegradable Mg-Zn-Zr-Nd alloys. <i>Applied Surface Science</i> , 2018, 462, 243-254.	6.1	46
9	Multiphase steel with improved impact-abrasive wear resistance in comparison with conventional Hadfield steel. <i>Materials and Design</i> , 2016, 105, 96-105.	7.0	39
10	Effect of Aging Isothermal Time on the Microstructure and Room-Temperature Impact Toughness of Fe-24.8Mn-7.3Al-1.2C Austenitic Steel with Î°-Carbides Precipitation. <i>Metals and Materials International</i> , 2018, 24, 1012-1023.	3.4	33
11	Surface corrosion behavior and reaction product film deposition mechanism of Mg-Zn-Zr-Nd alloys during degradation process in Hank's solution. <i>Surface and Coatings Technology</i> , 2018, 342, 57-68.	4.8	33
12	The formation of Ti-NbC core-shell structure in hypereutectic high chromium cast iron leads to significant refinement of primary M7C3. <i>Journal of Alloys and Compounds</i> , 2020, 824, 153806.	5.5	30
13	Surface failure behavior of 70Mn martensite steel under abrasive impact wear. <i>Wear</i> , 2016, 362-363, 129-134.	3.1	25
14	Dependence of austenite stability and deformation behavior on tempering time in an ultrahigh strength medium Mn TRIP steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 738, 153-162.	5.6	25
15	Effect of heat treatment on bonding mechanism and mechanical properties of high strength Cu/Al/Cu clad composite. <i>Journal of Alloys and Compounds</i> , 2019, 801, 573-580.	5.5	25
16	Dynamic Deformation Behavior of Dual Phase Ferritic-Martensitic Steel at Strain Rates From 10 ² to 2000 s ⁻¹ . <i>Journal of Iron and Steel Research International</i> , 2013, 20, 48-53.	2.8	24
17	Effect of microstructure evolution on tensile fracture behavior of Mg-2Zn-1Nd-0.6Zr alloy for biomedical applications. <i>Materials and Design</i> , 2019, 182, 108038.	7.0	24
18	Effect of Tempering Temperature on Microstructures and Wear Behavior of a 500 HB Grade Wear-Resistant Steel. <i>Metals</i> , 2019, 9, 45.	2.3	23

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19	Grain size refinement and effect on the tensile properties of a novel low-cost stainless steel. <i>Materials Letters</i> , 2020, 260, 126919.	2.6	22
20	Dimensionality wear analysis: Three-body impact abrasive wear behavior of a martensitic steel in comparison with Mn13Cr2. <i>Wear</i> , 2018, 414-415, 341-351.	3.1	21
21	Non-destructive corrosion study on a magnesium alloy with mechanical properties tailored for biodegradable cardiovascular stent applications. <i>Journal of Materials Science and Technology</i> , 2021, 66, 128-138.	10.7	20
22	Study of the three-body impact abrasive wear behaviour of a low alloy steel reinforced with niobium. <i>Journal of Manufacturing Processes</i> , 2019, 46, 185-193.	5.9	19
23	Wear Behavior and Hardening Mechanism of Novel Lightweight Fe-25.1Mn-6.6Al-1.3C Steel Under Impact Abrasion Conditions. <i>Tribology Letters</i> , 2016, 64, 1.	2.6	18
24	Abrasive wear behavior and mechanism of high chromium cast iron. <i>Journal of Iron and Steel Research International</i> , 2015, 22, 84-90.	2.8	17
25	Enhanced Strength and Corrosion Resistance of Mg-2Zn-0.6Zr Alloy with Extrusion. <i>Acta Metallurgica Sinica (English Letters)</i> , 2019, 32, 10-22.	2.9	16
26	Wear behavior of bainite ductile cast iron under impact load. <i>International Journal of Minerals, Metallurgy and Materials</i> , 2014, 21, 871-877.	4.9	14
27	Effect of Nb contents on microstructure characteristics and yielding behavior of Fe-4Mn-2Al-0.2C steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 819, 141457.	5.6	14
28	Solid State Synthesis of Ternary Thermoelectric Magnesium Alloy, Mg ₂ Si _{1-x} Sn _x . <i>Materials Transactions</i> , 2006, 47, 1058-1065.	1.2	13
29	Abrasive Wear Behaviors of Light-weight Austenitic Fe-24Mn-7Al-1C Steel and Mn13Cr2 Steel. <i>Journal of Iron and Steel Research International</i> , 2016, 23, 857-866.	2.8	12
30	Correlation between cementite precipitation and Portevin-Le Chatelier effect in a hot-rolled medium Mn steel. <i>Materials Letters</i> , 2020, 258, 126796.	2.6	12
31	Aging hardening and precipitation behavior of Fe-31.6Mn-8.8Al-1.38C austenitic cast steel. <i>Vacuum</i> , 2020, 181, 109662.	3.5	12
32	Microstructures and Impact Wear Behavior of Al-Alloyed High-Mn Austenitic Cast Steel After Aging Treatment. <i>Journal of Materials Engineering and Performance</i> , 2019, 28, 4845-4855.	2.5	11
33	Revealing working hardening behavior and substructure evolutions of ultrahigh strength and enhanced wear resistance Fe-25Mn-7Al-1C steel treated by explosion processing. <i>Journal of Materials Science</i> , 2020, 55, 1256-1268.	3.7	10
34	The synergistic effect of deformation twins and polycrystalline structure on strain hardening in a high-SFE Fe-Mn-Al-C austenitic cast steel in compression. <i>Materials Letters</i> , 2020, 272, 127814.	2.6	10
35	Hot Deformation Behavior of Ti Microalloy Steels. <i>Steel Research International</i> , 2021, 92, .	1.8	10
36	Precipitation evolution, strengthening and toughening mechanisms of Fe-3Si-2Cu (in wt.%) steel during aging process. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 806, 140863.	5.6	10

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37	Hot ductility behavior of a Fe-0.3C-9Mn-2Al medium Mn steel. International Journal of Minerals, Metallurgy and Materials, 2021, 28, 422-429.	4.9	9
38	Effects of Temperature and Strain Rate on Solid-/Liquid-Phase Flow Behavior of 9Cr18 Steel During Thixoforming. Acta Metallurgica Sinica (English Letters), 2017, 30, 567-575.	2.9	8
39	Influence of Nb Addition on Microstructure and Mechanical Properties of Medium-Mn Low-Density Steels. Steel Research International, 2018, 89, 1700552.	1.8	8
40	Effect of the Austenitizing Temperature on Microstructure Evolution and Impact Toughness of a Novel Bainite Ductile Iron. Metals and Materials International, 2020, 27, 4014.	3.4	7
41	The precipitation evolution and mechanism of micro-sized NbC in the melt of Fe-25wt.%Cr-3.5wt.%C-2.0wt.%Nb alloy. Materials Characterization, 2022, 183, 111611.	4.4	7
42	Influence of Annealing Temperature on Microstructure and Three-Stage Strain Hardening Behavior in Cold-Rolled Fe-Mn-Al-C Steel. Jom, 2019, 71, 4105-4113.	1.9	6
43	Decreasing yield ratio of 70 GPa grade hot-rolled medium Mn steel by weakening multi-strengthening effects. Vacuum, 2019, 170, 108972.	3.5	6
44	Microstructure characteristics and impact fracture mechanisms of Nb and Ti micro-alloyed offshore platform steels. Vacuum, 2022, 195, 110709.	3.5	6
45	Phase Transformation and Carbide Precipitation of Functional Gradient Semi-solid 9Cr18 Steel. Acta Metallurgica Sinica (English Letters), 2018, 31, 823-830.	2.9	5
46	Compression Deformation Behavior of a Fe-26Mn-7Al-1.3C Austenitic Steel after Precipitation-Hardened Treatment. Steel Research International, 2019, 90, 1800571.	1.8	5
47	Microstructure, mechanical properties and tribological behavior of a novel low-alloy high strength Mg-2Zn-0.5Zr-0.5Nd alloy. Vacuum, 2020, 179, 109518.	3.5	5
48	Constitutive Modeling for Thixoforming of 9Cr18 Semi-solid Alloy and 3D Forecast Mapping. Journal of Iron and Steel Research International, 2016, 23, 1309-1315.	2.8	3
49	Strain Rate Effect on Microstructural Evolution and Deformation Behavior of Medium-Mn Transformation-Induced Plasticity Steels. Steel Research International, 2021, 92, .	1.8	3
50	Phase Transformation and Precipitation Mechanism of Nb Microalloyed Bainite-Martensite Offshore Platform Steel at Different Cooling Rates. Steel Research International, 2019, 90, 1900224.	1.8	2
51	Effect of three-staged normalizing on the impact wear resistance of 3.23 mass% Cr-Mn-Cu-Si cast iron. Wear, 2019, 426-427, 59-67.	3.1	2
52	Role of Subordinate Phases on the Dry Impact-Abrasion Behavior of Low Chromium Cast Iron. Metals and Materials International, 2020, 26, 1797-1805.	3.4	2
53	Comprehensive Influence of the Normalized and Final Annealing Process on High-Strength Nonoriented Silicon Steel. Steel Research International, 2022, 93, .	1.8	2
54	Hot Deformation Behavior of NM550 Wear-Resistant Steel. , 2015, , 873-879.		1

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55	The Influence of Holding Time on the Microstructure and Mechanical Properties of a 58CrMnSiNiMo Wear-Resistant Cast Steel during Diffusion Annealing. Steel Research International, 2019, 90, 1900130.	1.8	1
56	Transition region: It is crucial to study the failure of 2.86wt%Cr Si Mn Cu iron alloy under impact wear. Vacuum, 2019, 160, 429-433.	3.5	1
57	Internal cracking with crystal lattice failure of 2.93wt%Cr-Mn-Cu-Si iron under impact-abrasion. Vacuum, 2019, 164, 219-223.	3.5	1
58	Slanted Blades Optimizing Grain Texture and Work Hardening of Non-Oriented Electrical Steel in Stress Coverages during Shearing and Blanking Processes. Steel Research International, 0, , 2100233.	1.8	1
59	Microstructure Evolution and Mechanical Properties of Grade E690 Offshore Platform Steel. , 0, , 1117-1123.		0
60	Phase Transformation During Continuous Cooling of NM550 Wear-Resistant Steel. , 0, , 835-841.		0
61	Formability of 800 MPa Grade Hot-Dip Galvanized Steel Sheet. Steel Research International, 2018, 89, 1800154.	1.8	0