Fei Chen

List of Publications by Year
in descending order

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57	1,485	304368	329751
papers	citations	22 h-index	37 g-index

58	58	58	831
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Recrystallization of 30Cr2Ni4MoV ultra-super-critical rotor steel during hot deformation. Part I: Dynamic recrystallization. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 5073-5080.	2.6	131
2	Mesoscale simulation of the high-temperature austenitizing and dynamic recrystallization by coupling a cellular automaton with a topology deformation technique. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 5539-5549.	2.6	96
3	Modeling the dynamic recrystallization in austenitic stainless steel using cellular automaton method. Computational Materials Science, 2014, 83, 331-340.	1.4	83
4	Recrystallization of 30Cr2Ni4MoV ultra-super-critical rotor steel during hot deformation. Part Ð¨: Metadynamic recrystallization. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 540, 46-54.	2.6	78
5	Flow characteristics and intrinsic workability of IN718 superalloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 642, 279-287.	2.6	68
6	Modeling and simulation on dynamic recrystallization of 30Cr2Ni4MoV rotor steel using the cellular automaton method. Modelling and Simulation in Materials Science and Engineering, 2009, 17, 075015.	0.8	57
7	A physically-based constitutive model for SA508-III steel: Modeling and experimental verification. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 634, 103-115.	2.6	53
8	A modified Johnson-Cook model for 10%Cr steel at elevated temperatures and a wide range of strain rates. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 715, 1-9.	2.6	51
9	High-temperature deformation mechanisms and physical-based constitutive modeling of ultra-supercritical rotor steel. Journal of Manufacturing Processes, 2019, 38, 223-234.	2.8	50
10	Development of novel tools for electricity-assisted incremental sheet forming of titanium alloy. International Journal of Advanced Manufacturing Technology, 2016, 85, 1137-1144.	1.5	49
11	The new ductile fracture criterion for 30Cr2Ni4MoV ultra-super-critical rotor steel at elevated temperatures. Materials & Design, 2013, 52, 547-555.	5.1	48
12	A constitutive model of polyether-ether-ketone (PEEK). Journal of the Mechanical Behavior of Biomedical Materials, 2016, 53, 427-433.	1.5	48
13	Constitutive modeling of hot deformation behavior of X20Cr13 martensitic stainless steel with strain effect. Transactions of Nonferrous Metals Society of China, 2014, 24, 1407-1413.	1.7	42
14	Mesoscale modeling and simulation of microstructure evolution during dynamic recrystallization of a Ni-based superalloy. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	1.1	40
15	Multiscale modeling of discontinuous dynamic recrystallization during hot working by coupling multilevel cellular automaton and finite element method. International Journal of Plasticity, 2021, 145, 103064.	4.1	40
16	Hot tensile fracture characteristics and constitutive modelling of polyether-ether-ketone (PEEK). Polymer Testing, 2017, 63, 168-179.	2.3	38
17	Review on modeling and simulation of microstructure evolution during dynamic recrystallization using cellular automaton method. Science China Technological Sciences, 2020, 63, 357-396.	2.0	34
18	Fracture characteristics of PEEK at various stress triaxialities. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 64, 173-186.	1.5	31

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19	Experimental investigation on electroplastic effect of DP980 advanced high strength steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 637, 23-28.	2.6	28
20	Modeling of Austenite Grain Growth During Austenitization in a Low Alloy Steel. Journal of Materials Engineering and Performance, 2016, 25, 152-164.	1.2	27
21	Microstructural modeling and numerical simulation of multi-physical fields for martensitic stainless steel during hot forging process of turbine blade. International Journal of Advanced Manufacturing Technology, 2016, 82, 85-98.	1.5	27
22	Mesoscale simulation of microstructure evolution during multi-stage hot forging processes. Modelling and Simulation in Materials Science and Engineering, 2012, 20, 045008.	0.8	23
23	Static Recrystallization of 30Cr2Ni4MoV Ultra-Super-Critical Rotor Steel. Journal of Materials Engineering and Performance, 2014, 23, 3034-3041.	1.2	23
24	Investigation on the electrically-assisted stress relaxation of AZ31B magnesium alloy sheet. Journal of Materials Processing Technology, 2016, 227, 88-95.	3.1	23
25	Experimental investigation on electrically assisted cylindrical deep drawing of AZ31B magnesium alloy sheet. International Journal of Advanced Manufacturing Technology, 2016, 86, 1063-1069.	1.5	19
26	Investigation on metadynamic recrystallization behavior in SA508-Ð¨ steel during hot deformation. Journal of Manufacturing Processes, 2017, 29, 18-28.	2.8	19
27	Mechanism of twist in incremental sheet forming of thermoplastic polymer. Materials and Design, 2020, 195, 108997.	3.3	19
28	Constitutive Modeling for Elevated Temperature Flow Behavior of 30Cr2Ni4MoV Ultra-super-crical Rotor Steel. Journal of Iron and Steel Research International, 2014, 21, 521-526.	1.4	18
29	Static recrystallization behavior of SA508-III steel during hot deformation. Journal of Iron and Steel Research International, 2016, 23, 466-474.	1.4	18
30	Numerical Simulation of Microstructure Evolution for SA508-3 Steel During Inhomogeneous Hot Deformation Process. Journal of Iron and Steel Research International, 2014, 21, 1022-1029.	1.4	15
31	Mesoscale Modeling of Dynamic Recrystallization: Multilevel Cellular Automaton Simulation Framework. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 1286-1303.	1.1	13
32	Physically-Based Constitutive Modelling of As-Cast CL70 Steel for Hot Deformation. Metals and Materials International, 2021, 27, 1728-1738.	1.8	13
33	Coupled quantitative modeling of microstructural evolution and plastic flow during continuous dynamic recrystallization. International Journal of Plasticity, 2022, 156, 103372.	4.1	13
34	Mathematical Modeling of Critical Condition for Dynamic Recrystallization. Procedia Engineering, 2014, 81, 486-491.	1.2	12
35	Prediction of microstructural evolution during hot forging. Manufacturing Review, 2014, 1, 6.	0.9	12
36	Asymmetry in the hot deformation behavior of AZ31B magnesium sheets. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 659, 198-206.	2.6	12

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37	Investigation on Dynamic Recrystallization Behavior of Martensitic Stainless Steel. Advances in Materials Science and Engineering, 2014, 2014, 1-16.	1.0	11
38	Design of the novel hot incremental sheet forming experimental setup, characterization of formability behavior of polyether-ether-ketone (PEEK). International Journal of Advanced Manufacturing Technology, 2020, 106, 5365-5381.	1.5	11
39	Ductile Fracture Prediction of 316LN Stainless Steel In Hot Deformation Process. Journal of Iron and Steel Research International, 2014, 21, 923-930.	1.4	10
40	New Constitutive Model for Hot Working. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 1229-1239.	1.1	10
41	Investigation on transient electrically-assisted stress relaxation of QP980 advanced high strength steel. Mechanics of Materials, 2016, 93, 238-245.	1.7	9
42	Microstructure refinement by tool rotation-induced vibration in incremental sheet forming. Procedia Engineering, 2017, 207, 795-800.	1.2	9
43	Study on Dynamic Recrystallization Behaviors in a Hot-Deformed FB2 Ultra-supercritical Rotor Steel. Metallography, Microstructure, and Analysis, 2019, 8, 145-158.	0.5	8
44	PEEK based cranial reconstruction using thermal assisted incremental sheet forming. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2022, 236, 997-1004.	1.5	8
45	Deformation and fracture of AMC under different heat treatment conditions and its suitability for incremental sheet forming. Procedia Engineering, 2017, 207, 848-853.	1.2	6
46	Void closure behavior during plastic deformation using the representative volume element model. Applied Physics A: Materials Science and Processing, 2020, 126, 1.	1.1	6
47	Creep rupture behavior and microstructural evolution of modified 9Crâ€“1Mo heat-resistant steel. Journal of Iron and Steel Research International, 2018, 25, 1303-1310.	1.4	5
48	A Comparative Study on Constitutive Modeling for Flow Behavior of Ultra-Supercritical Steel at High Temperature. Journal of Materials Engineering and Performance, 2019, 28, 7475-7492.	1.2	4
49	Microstructure Evolution Mechanism and Mechanical Properties of Mg-RE Alloy at a Critical Transition Temperature of Material Performance. Journal of Materials Engineering and Performance, 2020, 29, 7198-7206.	1.2	4
50	A virtual laboratory based on full-field crystal plasticity simulation to characterize the multiscale mechanical properties of AHSS. Scientific Reports, 2022, 12, 5054.	1.6	4
51	A new method for joining of polymer sheet and open-cell metal foam by thermal assisted incremental forming. International Journal of Advanced Manufacturing Technology, 2022, 119, 3659.	1.5	3
52	Prediction of Flow Stress Behavior of 70Cr3Mo Back-Up Roll Steel Using Modified Zerilli-Armstrong Model. Applied Mechanics and Materials, 0, 552, 247-250.	0.2	2
53	Behavior and Mechanism of Void Welding Under Thermal Mechanical Coupling. Metals and Materials International, 2022, 28, 1751-1762.	1.8	2
54	Modeling and simulation of austenite grain evolution for heavy forging steel 30Cr2Ni4MoV undergoing hot deformation. , 2013, , .		1

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55	Modeling the completely recrystallized grain growth of NiCrMoV rotor steel. Journal of Shanghai Jiaotong University (Science), 2015, 20, 600-605.	0.5	1
56	Investigation on the Strengthening Mechanism of Flow Control Extrusion by Using Experiment and Numerical Simulation. Materials, 2021, 14, 5001.	1.3	0
57	Modeling the Dynamic Recrystallization: A Modified Cellular Automaton Method. , 0, , 57-62.		0