Jun-He Lian

List of Publications by Year
in descending order

95	1,650	257101	344852
papers	citations	24 h-index	36 g-index

97	97	97	830
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A hybrid approach for modelling of plasticity and failure behaviour of advanced high-strength steel sheets. International Journal of Damage Mechanics, 2013, 22, 188-218.	2.4	171
2	The second Sandia Fracture Challenge: predictions of ductile failure under quasi-static and moderate-rate dynamic loading. International Journal of Fracture, 2016, 198, 5-100.	1.1	73
3	An evolving non-associated Hill48 plasticity model accounting for anisotropic hardening and r-value evolution and its application to forming limit prediction. International Journal of Solids and Structures, 2018, 151, 20-44.	1.3	73
4	A strategy for synthetic microstructure generation and crystal plasticity parameter calibration of fine-grain-structured dual-phase steel. International Journal of Plasticity, 2020, 126, 102614.	4.1	66
5	A method to quantitatively upscale the damage initiation of dual-phase steels under various stress states from microscale to macroscale. Computational Materials Science, 2014, 94, 245-257.	1.4	56
6	Evaluation of the cold formability of high-strength low-alloy steel plates with the modified Baiâ€“Wierzbicki damage model. International Journal of Damage Mechanics, 2015, 24, 383-417.	2.4	52
7	Extension of the modified Baiâ€Wierzbicki model for predicting ductile fracture under complex loading conditions. Fatigue and Fracture of Engineering Materials and Structures, 2017, 40, 2152-2168.	1.7	43
8	Prediction of shear crack formation of lithium-ion batteries under rod indentation: Comparison of seven failure criteria. Engineering Fracture Mechanics, 2019, 217, 106520.	2.0	41
9	Prediction of crack formation in the progressive folding of square tubes during dynamic axial crushing. International Journal of Mechanical Sciences, 2020, 176, 105534.	3.6	37
10	The modeling scheme to evaluate the influence of microstructure features on microcrack formation of DP-steel: The artificial microstructure model and its application to predict the strain hardening behavior. Computational Materials Science, 2014, 94, 198-213.	1.4	36
11	Microstructure-based fatigue modelling with residual stresses: Prediction of the fatigue life for various inclusion sizes. International Journal of Fatigue, 2019, 129, 105158.	2.8	35
12	Microstructure-based fatigue modelling with residual stresses: Prediction of the microcrack initiation around inclusions. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 751, 133-141.	2.6	35
13	Numerical Determination of the Damage Parameters of a Dual-phase Sheet Steel. ISIJ International, 2012, 52, 743-752.	0.6	34
14	A new model for upper shelf impact toughness assessment with a computationally efficient parameter identification algorithm. Engineering Fracture Mechanics, 2015, 148, 281-303.	2.0	34
15	Mechanical Deformation of Lithium-Ion Pouch Cells under In-Plane Loadsâ€”Part I: Experimental Investigation. Journal of the Electrochemical Society, 2020, 167, 090533.	1.3	33
16	Crystallographic orientation and spatially resolved damage in a dispersion-hardened Al alloy. Acta Materialia, 2020, 193, 138-150.	3.8	33
17	Damage mechanism analysis of a high-strength dual-phase steel sheet with optimized fracture samples for various stress states and loading rates. Engineering Failure Analysis, 2019, 106, 104138.	1.8	32
18	Numerical Study of the Effect of Inclusions on the Residual Stress Distribution in High-Strength Martensitic Steels During Cooling. Applied Sciences (Switzerland), 2019, 9, 455.	1.3	32

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19	In-depth analysis of the fatigue mechanism induced by inclusions for high-strength bearing steels. International Journal of Minerals, Metallurgy and Materials, 2021, 28, 826-834.	2.4	32
20	Investigation on the ductile fracture of high-strength pipeline steels using a partial anisotropic damage mechanics model. Engineering Fracture Mechanics, 2020, 227, 106900.	2.0	30
21	Design of damage tolerance in high-strength steels. International Journal of Materials Research, 2012, 103, 755-764.	0.1	29
22	Effects of the isotropic and anisotropic hardening within each grain on the evolution of the flow stress, the r-value and the deformation texture of tensile tests for AA6016 sheets. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 721, 154-164.	2.6	29
23	An evolving plasticity model considering anisotropy, thermal softening and dynamic strain aging. International Journal of Plasticity, 2020, 132, 102747.	4.1	28
24	Mechanical Deformation of Lithium-Ion Pouch Cells under in-plane Loadsâ€”Part II: Computational Modeling. Journal of the Electrochemical Society, 2020, 167, 090556.	1.3	27
25	Quantitative Analysis of Inclusion Engineering on the Fatigue Property Improvement of Bearing Steel. Metals, 2019, 9, 476.	1.0	24
26	Revealing the relationship between microstructures, textures, and mechanical behaviors of cold-rolled Al0.1CoCrFeNi high-entropy alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 804, 140752.	2.6	24
27	Prediction of plasticity and damage initiation behaviour of C45E + N steel by micromechanical modelling. Materials and Design, 2017, 121, 154-166.	3.3	23
28	Forming limit prediction by the Marciniakâ€“Kuczynski model coupled with the evolving non-associated Hill48 plasticity model. Journal of Materials Processing Technology, 2021, 287, 116384.	3.1	23
29	The in-depth residual strain heterogeneities due to an indentation and a laser shock peening for Ti-6Al-4V titanium alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 714, 140-145.	2.6	20
30	Modeling of plasticity and fracture behavior of X65 steels: seam weld and seamless pipes. International Journal of Fracture, 2018, 213, 17-36.	1.1	20
31	Large-deformation plasticity and fracture behavior of pure lithium under various stress states. Acta Materialia, 2021, 208, 116730.	3.8	19
32	A unified fracture criterion considering stress state dependent transition of failure mechanisms in bcc steels at â€“196 Â°C. International Journal of Plasticity, 2022, 156, 103365.	4.1	19
33	Analysis of ESAFORM 2021 cup drawing benchmark of an Al alloy, critical factors for accuracy and efficiency of FE simulations. International Journal of Material Forming, 2022, 15, .	0.9	18
34	Modeling of Damage and Failure of Dual Phase Steel in Nakajima Test. Key Engineering Materials, 0, 525-526, 69-72.	0.4	17
35	Predicting lower bound damage curves for highâ€strength lowâ€alloy steels. Fatigue and Fracture of Engineering Materials and Structures, 2013, 36, 779-794.	1.7	16
36	A Modified Lemaitre Damage Model Phenomenologically Accounting for the Lode Angle Effect on Ductile Fracture. , 2014, 3, 1841-1847.		16

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37	The lattice strain ratio in characterizing the grain-to-grain interaction effect and its specific insight on the plastic deformation of polycrystalline materials. Journal of Strain Analysis for Engineering Design, 2018, 53, 353-363.	1.0	16
38	An Experimental Study on the Impact of Deoxidation Methods on the Fatigue Properties of Bearing Steels. Steel Research International, 2018, 89, 1800129.	1.0	16
39	Prediction of edge fracture during hole-flanging of advanced high-strength steel considering blanking pre-damage. Engineering Fracture Mechanics, 2021, 248, 107721.	2.0	16
40	Local formability of medium-Mn steel. Journal of Materials Processing Technology, 2022, 299, 117368.	3.1	16
41	Investigation on micromechanism and stress state effects on cleavage fracture of ferritic-pearlitic steel at â˜'196 Â°C. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 686, 134-141.	2.6	15
42	A generalized Orowan model for cleavage fracture. Engineering Fracture Mechanics, 2017, 186, 105-118.	2.0	13
43	Grain Orientation Dependence of the Residual Lattice Strain in a Cold Rolled Interstitialâ€Free Steel. Steel Research International, 2018, 89, 1700408.	1.0	12
44	Crystal plasticity assisted prediction on the yield locus evolution and forming limit curves. AIP Conference Proceedings, 2017, , .	0.3	11
45	A strain-gradient isotropic elastoplastic damage model with J3 dependence. International Journal of Solids and Structures, 2019, 174-175, 98-127.	1.3	11
46	Self-equilibrated backstresses induce compensation between hardening and softening: Micromechanical and microstructural features. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 843, 143145.	2.6	11
47	A Generalized Damage Model Accounting for Instability and Ductile Fracture for Sheet Metals. Key Engineering Materials, 2014, 611-612, 106-110.	0.4	10
48	Microstructural evolution and properties of electromagnetic cast-rolled novel Alâ€“Li alloy under different heat treatment procedures. Journal of Materials Research and Technology, 2022, 16, 864-878.	2.6	10
49	Influence of Pore Characteristics on Anisotropic Mechanical Behavior of Laser Powder Bed Fusionâ€“Manufactured Metal by Micromechanical Modeling. Advanced Engineering Materials, 2020, 22, 2000641.	1.6	9
50	Stress-state dependence of dynamic strain aging: Thermal hardening and blue brittleness. International Journal of Minerals, Metallurgy and Materials, 2021, 28, 854-866.	2.4	9
51	Effect of ausforming on microstructure and hardness characteristics of bainitic steel. Journal of Materials Research and Technology, 2020, 9, 13365-13374.	2.6	8
52	Comparative Study on Damage Evolution during Sheet Metal Forming of Steels DP600 and DP1000. Journal of Physics: Conference Series, 2017, 896, 012074.	0.3	7
53	Fracture properties of zinc coating layers in a galvannealed steel and an electrolytically galvanized steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 732, 320-325.	2.6	7
54	Strain rate dependent plasticity and fracture of DP1000 steel under proportional and non-proportional loading. European Journal of Mechanics, A/Solids, 2022, 92, 104446.	2.1	7

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55	Dynamic strain aging in DP1000: Effect of temperature and strain rate. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 832, 142509.	2.6	7
56	Plasticity evolution of an aluminum-magnesium alloy under abrupt strain path changes. International Journal of Material Forming, 2022, 15, 1.	0.9	7
57	Forming limit prediction by an evolving non-quadratic yield criterion considering the anisotropic hardening and r-value evolution. AIP Conference Proceedings, 2018, , .	0.3	6
58	Delayed cracking behavior of a meta-stable austenitic stainless steel under bending condition. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 768, 138470.	2.6	6
59	Exploiting the Property Profile of High Strength Steels by Damage Mechanics Approaches[*]. Materialpruefung/Materials Testing, 2012, 54, 557-563.	0.8	6
60	An Experimental and Numerical Investigation of the Anisotropic Plasticity and Fracture Properties of High Strength Steels from Laboratory to Component Scales. Procedia Structural Integrity, 2018, 13, 1312-1317.	0.3	5
61	Evolution of plastic anisotropy and strain rate sensitivity. Journal of Physics: Conference Series, 2018, 1063, 012063.	0.3	5
62	A numerical approach to evaluate roughness effects on localization and damage in sheet materials. IOP Conference Series: Materials Science and Engineering, 0, 418, 012038.	0.3	5
63	A comparative study on the forming limit diagram prediction between Marciniak-Kuczynski model and modified maximum force criterion by using the evolving non-associated Hill48 plasticity model. AIP Conference Proceedings, 2018, , .	0.3	4
64	Micromechanical modeling of cleavage fracture for a ferritic-pearlitic steel. Engineering Fracture Mechanics, 2019, 221, 106683.	2.0	4
65	Numerical Evaluation of Surface Roughness Influences on Cold Formability of Dualâ€Phase Steel. Steel Research International, 2020, 91, 2000141.	1.0	4
66	Influence of surface roughness on cold formability in bending processes: a multiscale modelling approach with the hybrid damage mechanics model. International Journal of Material Forming, 2021, 14, 235-248.	0.9	4
67	Damage and fracture loci for a dual-phase steel and a high-strength low-alloyed steel: Revealing the different plastic localizationâ€“damageâ€“ductile fracture pattern. AIP Conference Proceedings, 2016, , .	0.3	3
68	Modeling of Chip Breakage in Machining of AISI 1045 Steel by Using an Improved Damage Mechanics Model. Steel Research International, 2017, 88, 1600338.	1.0	3
69	Forming limit curves determined in high-speed Nakajima tests and predicted by a strain rate sensitive model. AIP Conference Proceedings, 2017, , .	0.3	3
70	Design of an Experimental Program to Assess the Dynamic Fracture Properties of a Dual Phase Automotive Steel. Procedia Engineering, 2017, 197, 204-213.	1.2	3
71	A microstructure sensitive modeling approach for fatigue life prediction considering the residual stress effect from heat treatment. Procedia Structural Integrity, 2018, 13, 2048-2052.	0.3	3
72	Surface roughness influences on localization and damage during forming of DP1000 sheet steel. Procedia Manufacturing, 2019, 29, 504-511.	1.9	3

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73	Quantifying the Comprehensive Characteristics of Inclusion-Induced Defects Using an Integrated Destructive and Non-Destructive Method. Materials, 2021, 14, 1475.	1.3	3
74	3D multiâ€•level modelling of surface roughness influences on hole expansion ratios. Steel Research International, 0, , .	1.0	3
75	Evaluation of the Cold Formability of Multiphase Steels by Damage Mechanics Approachesâ^—. Materialpruefung/Materials Testing, 2013, 55, 628-635.	0.8	3
76	Microstructure-Based Fatigue Modeling with Residual Stresses: Effect of Inclusion Shape on Very High Cycle Fatigue Life. Crystals, 2022, 12, 200.	1.0	3
77	Modeling the Cold Formability of Dualphase Steels on Different Length Scales. , 2014, 3, 1050-1055.		2
78	Cold Formability of Automotive Sheet Metals: Anisotropy, Localization, Damage and Ductile Fracture. Key Engineering Materials, 2015, 639, 353-360.	0.4	2
79	The Second Blind Sandia Fracture Challenge: improved MBW model predictions for different strain rates. International Journal of Fracture, 2016, 198, 149-165.	1.1	2
80	Effect of plastic strain and ductile damage on elastic modulus of multiphase steel and its impact on springback prediction. AIP Conference Proceedings, 2019, , .	0.3	2
81	Anisotropic plasticity model considering the dynamic strain ageing effects. AIP Conference Proceedings, 2019, , .	0.3	2
82	Microstructure Effects on the Plastic Anisotropy of a Fine-Structured Dual-Phase Steel. Procedia Manufacturing, 2020, 47, 1552-1560.	1.9	2
83	Relationship between Inclusions and Internal Defect Spatial Distribution in Large Forging Piece for Wind Power Generation Gear. ISIJ International, 2021, , .	0.6	2
84	Influence of stress states on cleavage fracture in X70 pipeline steels. Journal of Pipeline Science and Engineering, 2022, 2, 100072.	2.4	2
85	Micromechanical Modeling of Damage and Failure in Dual Phase Steels. Key Engineering Materials, 0, 554-557, 2369-2374.	0.4	1
86	Corrigendum to â€œInvestigation on micromechanism and stress state effects on cleavage fracture of ferritic-pearlitic steel at â^'196 Â°Câ€•[Mater. Sci. Eng. A 686C (2017) 134â€“141]. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 693, 237.	2.6	1
87	Dynamic Fracture Behavior of High Strength Pipeline Steel. Procedia Engineering, 2017, 197, 214-223.	1.2	1
88	Plasticity and failure behavior modeling of high-strength steels under various strain rates and temperatures: microstructure to components. Procedia Structural Integrity, 2018, 13, 1421-1426.	0.3	1
89	Crystal plasticity modelling of flow behavior under various strain rates. AIP Conference Proceedings, 2019, , .	0.3	1
90	Modelling the surface roughness influence on the hole expansion ratio of multiphase steel. IOP Conference Series: Materials Science and Engineering, 2019, 651, 012006.	0.3	1

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91	Kinetic Model of Isothermal Bainitic Transformation of Low Carbon Steels under Ausforming Conditions. , 2022, 1, 93-115.		1
92	Cold formability prediction by the modified maximum force criterion with a non-associated Hill48 model accounting for anisotropic hardening. Journal of Physics: Conference Series, 2016, 734, 032112.	0.3	0
93	Dynamic fracture of a dual phase automotive steel. EPJ Web of Conferences, 2018, 183, 02047.	0.1	0
94	Forming limit curves of DP600 determined in high-speed Nakajima tests and predicted by two different strain-rate-sensitive models. AIP Conference Proceedings, 2018, , .	0.3	0
95	Temperature Dependence of Plastic Flow, Anisotropy and Ductile Fracture. Procedia Manufacturing, 2020, 47, 1308-1313.	1.9	0