Run-Zi Wang

List of Publications by Year
in descending order

32 papers	987 citations	471509 17 h-index	434195 31 g-index
32 all docs	32 docs citations	32 times ranked	338 citing authors

#	Article	IF	Citations
1	Dislocation-based crystal plasticity modelling of a nickel-based superalloy under dwell-fatigue: From life prediction to residual life assessment. International Journal of Fatigue, 2022, 159, 106569.	5.7	10
2	A novel cold expansion process for improving the surface integrity and fatigue life of small-deep holes in Inconel 718 superalloys. International Journal of Fatigue, 2022, 154, 106544.	5.7	18
3	A dual-scale modelling approach for creep-fatigue crack initiation life prediction of holed structure in a nickel-based superalloy. International Journal of Fatigue, 2022, 154, 106522.	5.7	14
4	Machine learning assisted probabilistic creep-fatigue damage assessment. International Journal of Fatigue, 2022, 156, 106677.	5.7	34
5	Quantitative evaluations of improved surface integrity in ultrasonic rolling process for selective laser melted in-situ TiB2/Al composite. Journal of Manufacturing Processes, 2022, 77, 412-425.	5.9	10
6	A data-driven roadmap for creep-fatigue reliability assessment and its implementation in low-pressure turbine disk at elevated temperatures. Reliability Engineering and System Safety, 2022, 225, 108523.	8.9	34
7	A life prediction method and damage assessment for creep-fatigue combined with high-low cyclic loading. International Journal of Fatigue, 2022, 161, 106923.	5.7	14
8	On multiaxial creepâ€“fatigue considering the non-proportional loading effect: Constitutive modeling, deformation mechanism, and life prediction. International Journal of Plasticity, 2022, 155, 103337.	8.8	16
9	Numerical modelling of a new FCP model and a correlation of the FCP rate with the constraint. International Journal of Fatigue, 2022, 163, 107036.	5.7	5
10	Life prediction and damage analysis of creep-fatigue combined with high-low cycle loading by using a crystal plasticity-based approach. International Journal of Fatigue, 2022, 164, 107154.	5.7	6
11	Ultrastrong and ductile additively manufactured precipitation-hardening medium-entropy alloy at ambient and cryogenic temperatures. Acta Materialia, 2022, 236, 118142.	7.9	27
12	A crystal plasticity-based approach for creep-fatigue life prediction and damage evaluation in a nickel-based superalloy. International Journal of Fatigue, 2021, 143, 106031.	5.7	49
13	Probabilistic modeling of uncertainties in fatigue reliability analysis of turbine bladed disks. International Journal of Fatigue, 2021, 142, 105912.	5.7	121
14	The creep-fatigue behavior of a nickel-based superalloy: Experiments study and cyclic plastic analysis. International Journal of Fatigue, 2021, 147, 106187.	5.7	14
15	Fatigue behaviors of 2205 duplex stainless steel with gradient nanostructured surface layer. International Journal of Fatigue, 2021, 147, 106170.	5.7	24
16	Semi-quantitative creep-fatigue damage analysis based on diffraction-based misorientation mapping and the correlation to macroscopic damage evolutions. International Journal of Fatigue, 2021, 149, 106227.	5.7	30
17	Multi-stage dwell fatigue crack growth behaviors in a nickel-based superalloy at elevated temperature. Engineering Fracture Mechanics, 2021, 253, 107859.	4.3	9
18	Cycle-dependent creep-fatigue deformation and life predictions in a nickel-based superalloy at elevated temperature. International Journal of Mechanical Sciences, 2021, 206, 106628.	6.7	34

#	Article	IF	Citations
19	Experimental and simulated investigations of low cycle fatigue behavior in a nickel-based superalloy with different volume fractions of Î´ phase. International Journal of Fatigue, 2021, 153, 106411.	5.7	10
20	Creep-Fatigue Crack Initiation Simulation of a Modified 12% Cr Steel Based on Grain Boundary Cavitation and Plastic Slip Accumulation. Materials, 2021, 14, 6565.	2.9	2
21	A novel hole cold-expansion method and its effect on surface integrity of nickel-based superalloy. Journal of Materials Science and Technology, 2020, 59, 129-137.	10.7	23
22	Creep-fatigue life prediction in nickel-based superalloy GH4169 based on microstructural damage quantification with the help of electron backscatter diffraction. Materials and Design, 2020, 195, 108939.	7.0	13
23	Investigations of micro-notch effect on small fatigue crack initiation behaviour in nickel-based alloy GH4169: Experiments and simulations. International Journal of Fatigue, 2020, 136, 105578.	5.7	33
24	High temperature fatigue and creep-fatigue behaviors in a Ni-based superalloy: Damage mechanisms and life assessment. International Journal of Fatigue, 2019, 118, 8-21.	5.7	65
25	Creep-fatigue endurance of a superheater tube plate under non-isothermal loading and multi-dwell condition. International Journal of Mechanical Sciences, 2019, 161-162, 105048.	6.7	4
26	Multi-axial creep-fatigue life prediction considering history-dependent damage evolution: A new numerical procedure and experimental validation. Journal of the Mechanics and Physics of Solids, 2019, 131, 313-336.	4.8	51
27	Creep-Fatigue Behaviors and Life Assessments in Two Nickel-Based Superalloys. Journal of Pressure Vessel Technology, Transactions of the ASME, 2018, 140, .	0.6	17
28	Fatigue life prediction of nickel-based GH4169 alloy on the basis of a multi-scale crack propagation approach. Engineering Fracture Mechanics, 2018, 199, 29-40.	4.3	31
29	The effects of inhomogeneous microstructure and loading waveform on creep-fatigue behaviour in a forged and precipitation hardened nickel-based superalloy. International Journal of Fatigue, 2017, 97, 190-201.	5.7	44
30	A generalized strain energy density exhaustion model allowing for compressive hold effect. International Journal of Fatigue, 2017, 104, 61-71.	5.7	19
31	Creep-fatigue life prediction and interaction diagram in nickel-based GH4169 superalloy at 650 Â°C based on cycle-by-cycle concept. International Journal of Fatigue, 2017, 97, 114-123.	5.7	90
32	A modified strain energy density exhaustion model for creepâ€“fatigue life prediction. International Journal of Fatigue, 2016, 90, 12-22.	5.7	116