

List of Publications by Citations

Source: <https://exaly.com/author-pdf/6726395/jun-jiang-publications-by-citations.pdf>
Version: 2024-04-10

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.
The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

83 papers	1,750 citations	25 h-index	40 g-index
85 ext. papers	2,278 ext. citations	4.7 avg, IF	5.4 L-index

#	Paper	IF	Citations
83	Measurement of geometrically necessary dislocation density with high resolution electron backscatter diffraction: effects of detector binning and step size. <i>Ultramicroscopy</i> , 2013 , 125, 1-9	3.1	166
82	Evolution of dislocation density distributions in copper during tensile deformation. <i>Acta Materialia</i> , 2013 , 61, 7227-7239	8.4	149
81	Tutorial: Crystal orientations and EBSD [Dr which way is up?]. <i>Materials Characterization</i> , 2016 , 117, 113-126	3.9	83
80	Is stored energy density the primary meso-scale mechanistic driver for fatigue crack nucleation?. <i>International Journal of Plasticity</i> , 2018 , 101, 213-229	7.6	81
79	Crystal plasticity modelling and HR-DIC measurement of slip activation and strain localization in single and oligo-crystal Ni alloys under fatigue. <i>International Journal of Plasticity</i> , 2017 , 88, 70-88	7.6	77
78	The dislocation behaviour and GND development in a nickel based superalloy during creep. <i>International Journal of Plasticity</i> , 2019 , 118, 252-268	7.6	67
77	Microstructurally sensitive crack nucleation around inclusions in powder metallurgy nickel-based superalloys. <i>Acta Materialia</i> , 2016 , 117, 333-344	8.4	66
76	The orientation and strain dependence of dislocation structure evolution in monotonically deformed polycrystalline copper. <i>International Journal of Plasticity</i> , 2015 , 69, 102-117	7.6	65
75	On the mechanistic basis of fatigue crack nucleation in Ni superalloy containing inclusions using high resolution electron backscatter diffraction. <i>Acta Materialia</i> , 2015 , 97, 367-379	8.4	51
74	Slip localization and fatigue crack nucleation near a non-metallic inclusion in polycrystalline nickel-based superalloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015 , 641, 328-339	5.3	48
73	Evolution of intragranular stresses and dislocation densities during cyclic deformation of polycrystalline copper. <i>Acta Materialia</i> , 2015 , 94, 193-204	8.4	48
72	Microstructurally-sensitive fatigue crack nucleation in Ni-based single and oligo crystals. <i>Journal of the Mechanics and Physics of Solids</i> , 2017 , 106, 15-33	5	42
71	Mechanistic behaviour and modelling of creep in powder metallurgy FGH96 nickel superalloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016 , 676, 441-449	5.3	40
70	Crack nucleation using combined crystal plasticity modelling, high-resolution digital image correlation and high-resolution electron backscatter diffraction in a superalloy containing non-metallic inclusions under fatigue. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2016 , 472, 20150792	2.4	40
69	Mapping type III intragranular residual stress distributions in deformed copper polycrystals. <i>Acta Materialia</i> , 2013 , 61, 5895-5904	8.4	37
68	Microstructure-sensitive fatigue crack nucleation in a polycrystalline Ni superalloy. <i>International Journal of Fatigue</i> , 2016 , 90, 181-190	5	37
67	Accumulation of geometrically necessary dislocations near grain boundaries in deformed copper. <i>Philosophical Magazine Letters</i> , 2012 , 92, 580-588	1	36

66	Assessing the precision of strain measurements using electron backscatter diffraction--part 1: detector assessment. <i>Ultramicroscopy</i> , 2013 , 135, 126-35	3.1	35
65	Deformation compatibility in a single crystalline Ni superalloy. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2016 , 472, 20150690	2.4	28
64	The effect of pattern overlap on the accuracy of high resolution electron backscatter diffraction measurements. <i>Ultramicroscopy</i> , 2015 , 155, 62-73	3.1	26
63	A study of direct forging process for powder superalloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015 , 621, 68-75	5.3	26
62	An HR-EBSD and computational crystal plasticity investigation of microstructural stress distributions and fatigue hotspots in polycrystalline copper. <i>Acta Materialia</i> , 2016 , 115, 45-57	8.4	26
61	A review of advances and challenges in EBSD strain mapping. <i>IOP Conference Series: Materials Science and Engineering</i> , 2014 , 55, 012020	0.4	26
60	A comparative assessment of iron and cobalt-based hard-facing alloy deformation using HR-EBSD and HR-DIC. <i>Acta Materialia</i> , 2018 , 159, 173-186	8.4	25
59	Using transmission Kikuchi diffraction in a scanning electron microscope to quantify geometrically necessary dislocation density at the nanoscale. <i>Ultramicroscopy</i> , 2019 , 197, 39-45	3.1	25
58	Probing Deformation and Revealing Microstructural Mechanisms with Cross-Correlation-Based, High-Resolution Electron Backscatter Diffraction. <i>Jom</i> , 2013 , 65, 1245-1253	2.1	23
57	Measurement of probability distributions for internal stresses in dislocated crystals. <i>Applied Physics Letters</i> , 2014 , 105, 181907	3.4	23
56	Assessing the precision of strain measurements using electron backscatter diffraction--part 2: experimental demonstration. <i>Ultramicroscopy</i> , 2013 , 135, 136-41	3.1	21
55	Constitutive modeling for the simulation of the superplastic forming of TA15 titanium alloy. <i>International Journal of Mechanical Sciences</i> , 2019 , 164, 105178	5.5	19
54	The development of high strength brazing technique for Ti-6Al-4V using TiZrCuNi amorphous filler. <i>Materials Characterization</i> , 2017 , 131, 526-531	3.9	19
53	Feasibility study on direct flame impingement heating applied for the solution heat treatment, forming and cold die quenching technique. <i>Journal of Manufacturing Processes</i> , 2018 , 36, 398-404	5	18
52	The study of flow behavior and governing mechanisms of a titanium alloy during superplastic forming. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020 , 788, 139482	5.3	17
51	An integrated method for net-shape manufacturing components combining 3D additive manufacturing and compressive forming processes. <i>Procedia Engineering</i> , 2017 , 207, 1182-1187		17
50	A study on central crack formation in cross wedge rolling. <i>Journal of Materials Processing Technology</i> , 2020 , 279, 116549	5.3	16
49	Evolution of twinning and shear bands in magnesium alloys during rolling at room and cryogenic temperature. <i>Materials and Design</i> , 2020 , 193, 108793	8.1	14

48	Voltage Hysteresis Model for Silicon Electrodes for Lithium Ion Batteries, Including Multi-Step Phase Transformations, Crystallization and Amorphization. <i>Journal of the Electrochemical Society</i> , 2020 , 167, 130533	3.9	14
47	Experimental and crystal plasticity study on deformation bands in single crystal and multi-crystal pure aluminium. <i>Acta Materialia</i> , 2020 , 183, 78-92	8.4	14
46	Study of the Effects of Hot Forging on the Additively Manufactured Stainless Steel Preforms. <i>Journal of Manufacturing Processes</i> , 2020 , 57, 668-676	5	13
45	Toward Predictive Understanding of Fatigue Crack Nucleation in Ni-Based Superalloys. <i>Jom</i> , 2017 , 69, 863-871	2.1	11
44	Microstructural effects on central crack formation in hot cross-wedge-rolled high-strength steel parts. <i>Journal of Materials Science</i> , 2020 , 55, 9608-9622	4.3	11
43	The influence of microstructural anisotropy on the hot deformation of wire arc additive manufactured (WAAM) Inconel 718. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021 , 823, 141733	5.3	11
42	A Chemical and Morphological Study of Diesel Injector Nozzle Deposits - Insights into their Formation and Growth Mechanisms. <i>SAE International Journal of Fuels and Lubricants</i> , 2017 , 10, 106-114	1.8	9
41	The effects of Zr level in Ti-Zr-Cu-Ni brazing fillers for brazing Ti-6Al-4V. <i>Journal of Manufacturing Processes</i> , 2018 , 31, 124-130	5	9
40	Predicting the hardness and solute distribution during brazing of Ti-6Al-4V with TiZrCuNi filler metals. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018 , 712, 122-126	5.3	8
39	Effects of twin-twin interactions and deformation bands on the nucleation of recrystallization in AZ31 magnesium alloy. <i>Materials and Design</i> , 2020 , 194, 108936	8.1	8
38	Influence of surface micropatterns on the mode I fracture toughness of adhesively bonded joints. <i>International Journal of Adhesion and Adhesives</i> , 2020 , 103, 102718	3.4	7
37	Study of dislocation-twin boundary interaction mechanisms in plastic deformation of TWIP steel by discrete dislocation dynamics and dislocation density-based modeling. <i>International Journal of Plasticity</i> , 2021 , 145, 103076	7.6	7
36	Experimental investigation of novel fast-ageing treatments for AA6082 in supersaturated solid solution state. <i>Journal of Alloys and Compounds</i> , 2019 , 810, 151934	5.7	6
35	A comparative study of plastic deformation mechanisms in room-temperature and cryogenically deformed magnesium alloy AZ31. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021 , 807, 140821	5.3	6
34	Experimental investigation of the viscoplastic behaviours and microstructure evolutions of AZ31B and Elektron 717 Mg-alloys. <i>Materials and Design</i> , 2019 , 184, 108160	8.1	5
33	On the surface integrity of additive manufactured and post-processed AlSi10Mg parts. <i>Procedia CIRP</i> , 2020 , 87, 339-344	1.8	5
32	Design TiZrCuNi filler materials for vacuum brazing TA15 alloy. <i>Journal of Manufacturing Processes</i> , 2020 , 53, 328-335	5	5
31	Strain rate effects on mechanical behavior and microstructure evolution with the sequential strains of TWIP steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022 , 835, 142673	5.3	5

30	Quantifying geometrically necessary dislocation density during hot deformation in AA6082 Al alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021 , 814, 141158	5.3	5
29	Develop an effective oxygen removal method for copper powder. <i>Advanced Powder Technology</i> , 2018 , 29, 1904-1912	4.6	5
28	Metal-free chemical vapor deposition growth of graphitic tubular structures on engineered perovskite oxide substrates. <i>Carbon</i> , 2016 , 99, 591-598	10.4	4
27	A study of various heating effects on the microstructure and mechanical properties of AA6082 using EBSD and CPFE. <i>Journal of Alloys and Compounds</i> , 2020 , 818, 152921	5.7	4
26	Microstructure evolution and mechanical properties of Ti ₂ AlNb/TiAl brazed joint using newly-developed Ti ₆ Al ₄ Nb ₂ Zr filler alloy. <i>Progress in Natural Science: Materials International</i> , 2020 , 30, 410-416	3.6	4
25	Enhanced plasticity at cryogenic temperature in a magnesium alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021 , 811, 141001	5.3	4
24	A study of solid-state bonding-by-hot-deforming mechanism in Inconel 718. <i>Journal of Materials Processing Technology</i> , 2021 , 295, 117191	5.3	4
23	Mechanism-based constitutive equations for superplastic forming of TA15 with equiaxed fine grain structure. <i>Procedia Engineering</i> , 2017 , 207, 1874-1879		3
22	Combining microstructural characterization with crystal plasticity and phase-field modelling for the study of static recrystallization in pure aluminium. <i>Computational Materials Science</i> , 2020 , 173, 109419	3.2	3
21	The study of central cracking mechanism and criterion in cross wedge rolling. <i>International Journal of Machine Tools and Manufacture</i> , 2020 , 159, 103647	9.4	3
20	Dynamic mechanical behaviour induced by adiabatic temperature rise of FeMnAlC steel. <i>Materials Science and Technology</i> , 2021 , 37, 280-291	1.5	3
19	Static recrystallization study on pure aluminium using crystal plasticity finite element and phase-field modelling. <i>Procedia Manufacturing</i> , 2018 , 15, 1800-1807	1.5	3
18	Research on the hydroforming regularity and process optimization control of complex aluminum alloy part with variable cross-section size. <i>Procedia Manufacturing</i> , 2020 , 50, 332-336	1.5	2
17	The effects of hot forging on the preform additive manufactured 316 stainless steel parts. <i>Micron</i> , 2021 , 143, 103026	2.3	2
16	Microstructural Evolution of Mechanically Deformed Polycrystalline Silicon for Kerfless Photovoltaics. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2019 , 216, 1800578	1.6	2
15	Characterisation of carbonaceous deposits on diesel injector nozzles. <i>Fuel</i> , 2020 , 274, 117629	7.1	2
14	Predicting virtual creep crack growth in a simulated titanium aluminide alloy microstructure containing voids, precipitates, and grain/grain boundary distortions. <i>Engineering Fracture Mechanics</i> , 2022 , 262, 108171	4.2	1
13	The study of hot deformation on laser cladding remanufactured 316L stainless steel. <i>Materials and Design</i> , 2021 , 212, 110255	8.1	1

12	The Low-Cycle Fatigue Behavior, Failure Mechanism and Prediction of SLM Ti-6Al-4V Alloy with Different Heat Treatment Methods. <i>Materials</i> , 2021 , 14,	3.5	1
11	Study of the microstructure, bonding evolution and mechanical properties of continuously extruded magnesium AZ31 sheet. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021 , 819, 141456	5.3	1
10	Understanding the Strain Path Effect on the Deformed Microstructure of Single Crystal Pure Aluminum. <i>Metals</i> , 2021 , 11, 1189	2.3	1
9	How would the deformation bands affect recrystallization in pure aluminium?. <i>Materials and Design</i> , 2021 , 209, 109960	8.1	1
8	Develop a new strain rate sensitive solid-state pressure bonding model. <i>Materials and Design</i> , 2022 , 215, 110436	8.1	0
7	Develop a novel high-strength vacuum brazing technique for TiAl intermetallic. <i>International Journal of Lightweight Materials and Manufacture</i> , 2021 , 4, 237-245	2.2	0
6	An Investigation into the Forming of Fiber Metal Laminates with Different Thickness Metal Skins Using Hydromechanical Deep Drawing. <i>Applied Composite Materials</i> , 1	2	0
5	Analysis of Dislocation Densities using High Resolution Electron Backscatter Diffraction. <i>Microscopy and Microanalysis</i> , 2015 , 21, 1891-1892	0.5	
4	Pattern Overlap and High Resolution Electron Backscatter Diffraction. <i>Microscopy and Microanalysis</i> , 2015 , 21, 2045-2046	0.5	
3	Microstructure and Texture Evolution during Severe Plastic Deformation at Cryogenic Temperatures in an Al-0.1Mg Alloy. <i>Metals</i> , 2021 , 11, 1822	2.3	
2	Modeling and Optimization Methods in Forming Processes 2021 , 237-251		
1	Revealing geometrically necessary dislocation density from electron backscatter patterns via multi-modal deep learning.. <i>Ultramicroscopy</i> , 2022 , 237, 113519	3.1	