

E-Wen Huang

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/9568226/e-wen-huang-publications-by-year.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.

107 papers	1,402 citations	18 h-index	33 g-index
116 ext. papers	1,749 ext. citations	4.2 avg, IF	4.54 L-index

#	Paper	IF	Citations
107	Machine-learning and high-throughput studies for high-entropy materials. <i>Materials Science and Engineering Reports</i> , 2022 , 147, 100645	30.9	3
106	Tensile Response of As-Cast CoCrFeNi and CoCrFeMnNi High-Entropy Alloys. <i>Crystals</i> , 2022 , 12, 157	2.3	1
105	Visualizing the valence states of europium ions in Eu-doped BaAlO using X-ray nanoprobe mapping.. <i>Journal of Synchrotron Radiation</i> , 2022 , 29, 456-461	2.4	1
104	Revealing the Precipitation Sequence with Aging Temperature in a Non-equiatomic AlCoCrFeNi High Entropy Alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2022 , 53, 314	2.3	1
103	Thermal effects on stability of hierarchical microstructure in medium- and high-entropy alloys. <i>Materials Chemistry and Physics</i> , 2022 , 278, 125677	4.4	0
102	Grain-size-dependent microstructure effects on cyclic deformation mechanisms in CoCrFeMnNi high-entropy-alloys. <i>Scripta Materialia</i> , 2022 , 210, 114459	5.6	2
101	Mechanical Behavior of High-Entropy Alloys Focusing on Tensors: An in situ Neutron Diffraction Investigation From Room to Elevated Temperature 2022 , 454-462		
100	Microstructure Evolution in High-Pressure Phase Transformations of CrFeNi and CoCrFeMnNi Alloys. <i>Journal of Alloys and Compounds</i> , 2022 , 165383	5.7	0
99	Unearthing principal strengthening factors tuning the additive manufactured 15-5 PH stainless steel. <i>Materials Characterization</i> , 2021 , 184, 111645	3.9	1
98	Reversal of favorable microstructure under plastic ploughing vs. interfacial shear induced wear in aged Co1.5CrFeNi1.5Ti0.5 high-entropy alloy. <i>Wear</i> , 2021 , 468-469, 203595	3.5	4
97	Tailoring grain sizes of the biodegradable iron-based alloys by pre-additive manufacturing microalloying. <i>Scientific Reports</i> , 2021 , 11, 9610	4.9	2
96	Preface to Innovations in High-Entropy Alloys and Bulk Metallic Glasses in Honor of Peter K. Liaw. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2021 , 52, 3671-3673 ³⁻³		
95	Influence of pre-deformation on the precipitation characteristics of aged non-equiatomic Co1.5CrFeNi1.5 high entropy alloys with Ti and Al additions. <i>Journal of Alloys and Compounds</i> , 2021 , 855, 157521	5.7	7
94	Unravelling thermal history during additive manufacturing of martensitic stainless steel. <i>Journal of Alloys and Compounds</i> , 2021 , 857, 157555	5.7	7
93	Pentafluoropyridine functionalized novel heteroatom-doped with hierarchical porous 3D cross-linked graphene for supercapacitor applications.. <i>RSC Advances</i> , 2021 , 11, 26892-26907	3.7	1
92	Regulation of cell differentiation via synergistic self-powered stimulation and degradation behavior of a biodegradable composite piezoelectric scaffold for cartilage tissue. <i>Nano Energy</i> , 2021 , 90, 106545	17.1	5
91	Investigation of Bone Growth in Additive-Manufactured Pedicle Screw Implant by Using Ti-6Al-4V and Bioactive Glass Powder Composite. <i>International Journal of Molecular Sciences</i> , 2020 , 21,	6.3	4

90	Dual heterogeneous structures lead to ultrahigh strength and uniform ductility in a Co-Cr-Ni medium-entropy alloy. <i>Nature Communications</i> , 2020 , 11, 2390	17.4	83
89	Deformations of Ti-6Al-4V additive-manufacturing-induced isotropic and anisotropic columnar structures: measurements and underlying mechanisms. <i>Additive Manufacturing</i> , 2020 , 35, 101322	6.1	5
88	Mechanical and Magnetic Properties of the High-Entropy Alloys for Combinatorial Approaches. <i>Crystals</i> , 2020 , 10, 200	2.3	14
87	Nanowear Mechanisms of Mg Alloyed with Al and Y at Elevated Temperatures. <i>Tribology Letters</i> , 2020 , 68, 1	2.8	2
86	Enhanced age hardening effects in FCC based Co _{1.5} CrFeNi _{1.5} high entropy alloys with varying Ti and Al contents. <i>Materialia</i> , 2020 , 13, 100823	3.2	7
85	Tuning Stress in Cu Thin Films by Developing Highly (111)-Oriented Nanotwinned Structure. <i>Journal of Electronic Materials</i> , 2020 , 49, 109-115	1.9	1
84	Lattice distortion effect on elastic anisotropy of high entropy alloys. <i>Journal of Alloys and Compounds</i> , 2020 , 818, 152876	5.7	16
83	Crystal plasticity modeling and neutron diffraction measurements of a magnesium AZ31B plate: Effects of plastic anisotropy and surrounding grains. <i>Journal of the Mechanics and Physics of Solids</i> , 2020 , 135, 103795	5	17
82	Enhancement of fatigue resistance by overload-induced deformation twinning in a CoCrFeMnNi high-entropy alloy. <i>Acta Materialia</i> , 2020 , 201, 412-424	8.4	24
81	Element Effects of Mn and Ge on the Tuning of Mechanical Properties of High-Entropy Alloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2020 , 51, 5023-5028 ^{2,3}	2.3	7
80	Phase Stress Partition in Gray Cast Iron Using In Situ Neutron Diffraction Measurements. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2020 , 51, 5029-5035 ^{2,3}	2.3	1
79	Effects of Texture on the High Temperature Scratch Wear Behavior in Zinc. <i>IOP Conference Series: Materials Science and Engineering</i> , 2020 , 894, 012016	0.4	
78	On plastic anisotropy and deformation history-driven anelasticity of an extruded magnesium alloy. <i>Scripta Materialia</i> , 2020 , 176, 36-41	5.6	8
77	Ultramicrostructural reductions in teeth: implications for dietary transition from non-avian dinosaurs to birds. <i>BMC Evolutionary Biology</i> , 2020 , 20, 46	3	6
76	Comparing Cyclic Tension-Compression Effects on CoCrFeMnNi High-Entropy Alloy and Ni-Based Superalloy. <i>Crystals</i> , 2019 , 9, 420	2.3	8
75	Tuning mechanical properties of electrospun piezoelectric nanofibers by heat treatment. <i>Materialia</i> , 2019 , 8, 100461	3.2	5
74	Control of Dopant Distribution in Yttrium-Doped Bioactive Glass for Selective Internal Radiotherapy Applications Using Spray Pyrolysis. <i>Materials</i> , 2019 , 12,	3.5	6
73	Hardening steels by the generation of transient phase using additive manufacturing. <i>Intermetallics</i> , 2019 , 109, 60-67	3.5	16

72	Multi-scale mapping for collagen-regulated mineralization in bone remodeling of additive manufacturing porous implants. <i>Materials Chemistry and Physics</i> , 2019 , 230, 83-92	4.4	12
71	Quantitative evaluation of grain boundary sliding and its dependence on orientation and temperature in pure Zn. <i>Materials Letters</i> , 2019 , 246, 24-27	3.3	7
70	Deviatoric deformation kinetics in high entropy alloy under hydrostatic compression. <i>Journal of Alloys and Compounds</i> , 2019 , 792, 116-121	5.7	13
69	Plastic anisotropy and deformation-induced phase transformation of additive manufactured stainless steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019 , 762, 138065	5.3	30
68	Element Effects on High-Entropy Alloy Vacancy and Heterogeneous Lattice Distortion Subjected to Quasi-equilibrium Heating. <i>Scientific Reports</i> , 2019 , 9, 14788	4.9	16
67	High-temperature materials for structural applications: New perspectives on high-entropy alloys, bulk metallic glasses, and nanomaterials. <i>MRS Bulletin</i> , 2019 , 44, 847-853	3.2	17
66	Calcitriol exerts a mineralization-inductive effect comparable to that of vitamin C in cultured human periodontium cells. <i>American Journal of Translational Research (discontinued)</i> , 2019 , 11, 2304-2316	3.6	3
65	Multi-Scale Microstructure Investigation for a PM2.5 Air-Filter Efficiency Study of Non-Woven Polypropylene. <i>Quantum Beam Science</i> , 2019 , 3, 20	1.6	13
64	Micro-Layer and Lattice Structure Effects on Impedance of Titanium Oxide Phthalocyanine. <i>Advanced Engineering Materials</i> , 2018 , 20, 1701140	3.5	3
63	Size-strain separation in diffraction line profile analysis. <i>Journal of Applied Crystallography</i> , 2018 , 51, 831-843	3.8	22
62	Internal Stress/Strain Analysis during Fatigue Crack Growth Retardation Using Neutron Diffraction. <i>Korean Journal of Materials Research</i> , 2018 , 28, 398-404	0.2	
61	Irreversible phase transformation in a CoCrFeMnNi high entropy alloy under hydrostatic compression. <i>Materials Today Communications</i> , 2018 , 14, 10-14	2.5	34
60	Plasticity Enhancement by Fe-Addition on NiAl Alloy: A Synchrotron X-ray Diffraction Mapping and Molecular Dynamics Simulation Study. <i>Quantum Beam Science</i> , 2018 , 2, 18	1.6	
59	Using in-situ synchrotron x-ray diffraction to investigate phase transformation and lattice relaxation of a three-way piezo-phototronic soft material. <i>Semiconductor Science and Technology</i> , 2017 , 32, 074005	1.8	1
58	Neutron diffraction residual stress analysis during fatigue crack growth retardation of stainless steel. <i>International Journal of Fatigue</i> , 2017 , 104, 408-415	5	18
57	Influence of Zn Addition on Micro-scale Wear of Mg ₉₂ Zn ₈ (x = 18 wt%) Alloys. <i>Tribology Letters</i> , 2017 , 65, 1	2.8	8
56	Fatigue-Crack-Growth Behavior of Two Pipeline Steels. <i>Advanced Engineering Materials</i> , 2016 , 18, 2028-2039	3.9	1
55	The combination of rolling-and-T6-treatments with Al ₂ O ₃ -reinforcing-particles effect on A6061 metal-matrix composites. <i>Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications</i> , 2016 , 230, 233-239	1.3	2

54	Fatigue induced deformation and thermodynamics evolution in a nano particle strengthened nickel base superalloy. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2016 , 39, 675-685	3	10
53	Confined martensitic phase transformation kinetics and lattice dynamics in NiTiCuBeTi shape memory alloys. <i>Acta Materialia</i> , 2016 , 110, 200-206	8.4	6
52	In-situ neutron diffraction studies on high-temperature deformation behavior in a CoCrFeMnNi high entropy alloy. <i>Intermetallics</i> , 2015 , 62, 1-6	3.5	54
51	Visible-Light Modulation on Lattice Dielectric Responses of a Piezo-Phototronic Soft Material. <i>Advanced Materials</i> , 2015 , 27, 7728-33	24	5
50	Dynamic Strain Evolution around a Crack Tip under Steady- and Overloaded-Fatigue Conditions. <i>Metals</i> , 2015 , 5, 2109-2118	2.3	9
49	A study of lattice elasticity from low entropy metals to medium and high entropy alloys. <i>Scripta Materialia</i> , 2015 , 101, 32-35	5.6	46
48	Fatigue Crack-Tip Stress Mapping Using Neutron Diffraction. <i>Korean Journal of Materials Research</i> , 2015 , 25, 690-693	0.2	
47	PEGylation site-dependent structural heterogeneity study of monoPEGylated human parathyroid hormone fragment hPTH(1-34). <i>Langmuir</i> , 2014 , 30, 11421-7	4	2
46	Microyielding of core-shell crystal dendrites in a bulk-metallic-glass matrix composite. <i>Scientific Reports</i> , 2014 , 4, 4394	4.9	16
45	Resolution of structural transformation of intermediates in AlCu alloys during non-isothermal precipitation. <i>Journal of Materials Research</i> , 2014 , 29, 874-879	2.5	7
44	Sensor Selection and Integration to Improve Video Segmentation in Complex Environments. <i>Mathematical Problems in Engineering</i> , 2014 , 2014, 1-14	1.1	1
43	Thermal-Effect Study on a Carbon-Carbon Composite Using Synchrotron X-Ray Measurements & Molecular Dynamics Simulation. <i>Materials Science Forum</i> , 2014 , 777, 35-39	0.4	
42	The Effect of Shielded Metal Arc and Gas Tungsten Arc Welding Methods on 308L Stainless Steel Weldments. <i>Materials Science Forum</i> , 2014 , 783-786, 2753-2757	0.4	
41	Phase transformation and precipitation of an AlCu alloy during non-isothermal heating studied by in situ small-angle and wide-angle scattering. <i>Journal of Alloys and Compounds</i> , 2013 , 579, 138-146	5.7	31
40	Development of crystallographic-orientation-dependent internal strains around a fatigue-crack tip during overloading and underloading. <i>Materials Characterization</i> , 2013 , 79, 7-14	3.9	3
39	Microstructural evolution of nuclear grade graphite induced by ion irradiation at high temperature environment. <i>Journal of Nuclear Materials</i> , 2013 , 434, 17-23	3.3	13
38	Characteristic of improved fatigue performance for Zr-based bulk metallic glass matrix composites. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013 , 563, 101-105	5.3	11
37	Kosmotrope-like hydration behavior of polyethylene glycol from microcalorimetry and binding isotherm measurements. <i>Langmuir</i> , 2013 , 29, 4259-65	4	14

36	An Investigation of the Orientation-dependent Study of a Nickel-based Alloy Subjected to Deformation. <i>Procedia Engineering</i> , 2012 , 36, 195-199		
35	Plastic Deformation of a Nano-Precipitate Strengthened Ni-Base Alloy Investigated by Complementary In Situ Neutron Diffraction Measurements and Molecular-Dynamics Simulations. <i>Advanced Engineering Materials</i> , 2012 , 14, 902-908	3.5	13
34	A Synchrotron X-ray Study on the Wigner Effect of the Irradiated Nuclear-grade Graphite. <i>Procedia Engineering</i> , 2012 , 36, 7-12		1
33	Three-Orthogonal-Direction Stress Mapping around a Fatigue-Crack Tip Using Neutron Diffraction. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2012 , 43, 2785-2791	2.3	8
32	Cyclic-Loading Induced Lattice-Strain Asymmetry in Loading and Transverse Directions. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2012 , 43, 1454-1461	2.3	16
31	Residual Strain Distribution around a Fatigue-Crack Tip Determined by Neutron Diffraction. <i>Materials Science Forum</i> , 2012 , 706-709, 1685-1689	0.4	1
30	Microstructural Characteristics and Mechanical Behaviors of AlCoCrFeNi High-Entropy Alloys at Ambient and Cryogenic Temperatures. <i>Materials Science Forum</i> , 2011 , 688, 419-425	0.4	75
29	Tensile deformation micromechanisms for bulk metallic glass matrix composites: From work-hardening to softening. <i>Acta Materialia</i> , 2011 , 59, 4126-4137	8.4	239
28	Evolution of microstructure in a nickel-based superalloy as a function of ageing time. <i>Philosophical Magazine Letters</i> , 2011 , 91, 483-490	1	4
27	PL02 The Real Nature of Fatigue Behavior in Bulk-Metallic Glasses. <i>The Abstracts of ATEM International Conference on Advanced Technology in Experimental Mechanics Asian Conference on Experimental Mechanics</i> , 2011 , 2011.10, _PL02-1_	0	
26	Resolving ensembled microstructural information of bulk-metallic-glass-matrix composites using synchrotron x-ray diffraction. <i>Applied Physics Letters</i> , 2010 , 97, 171910	3.4	8
25	Fatigue initiation and propagation behavior in bulk-metallic glasses under a bending load. <i>Journal of Applied Physics</i> , 2010 , 108, 113512	2.5	24
24	Texture crossover: Trace from multiple grains to a subgrain. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2010 , 528, 3-10	5.3	7
23	Evidence of two-length-scale kinetics of R-phase transformation by high-energy X-ray diffraction. <i>Scripta Materialia</i> , 2010 , 62, 617-620	5.6	2
22	Low-temperature shear banding for a Cu-based bulk-metallic glass. <i>Scripta Materialia</i> , 2010 , 63, 871-874	5.6	41
21	Fatigue-induced reversible/irreversible structural-transformations in a Ni-based superalloy. <i>International Journal of Plasticity</i> , 2010 , 26, 1124-1137	7.6	34
20	Cyclic-loading-induced accumulation of geometrically necessary dislocations near grain boundaries in an Ni-based superalloy. <i>Jom</i> , 2009 , 61, 53-58	2.1	11
19	Counterion Association and Structural Conformation Change of Charged PAMAM Dendrimer in Aqueous Solutions Revealed by Small Angle Neutron Scattering. <i>Macromolecular Symposia</i> , 2009 , 279, 65-71	0.8	2

18	Study of nanoprecipitates in a nickel-based superalloy using small-angle neutron scattering and transmission electron microscopy. <i>Applied Physics Letters</i> , 2008 , 93, 161904	3.4	27
17	Slip-System-Related Dislocation Study from In-Situ Neutron Measurements. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2008 , 39, 3079-3088	2.3	24
16	In situ high-energy X-ray studies of magnetic-field-induced phase transition in a ferromagnetic shape memory NiCoMnIn alloy. <i>Acta Materialia</i> , 2008 , 56, 913-923	8.4	37
15	Plastic behavior of a nickel-based alloy under monotonic-tension and low-cycle-fatigue loading. <i>International Journal of Plasticity</i> , 2008 , 24, 1440-1456	7.6	55
14	Direct evidence on magnetic-field-induced phase transition in a NiCoMnIn ferromagnetic shape memory alloy under a stress field. <i>Applied Physics Letters</i> , 2007 , 90, 101917	3.4	30
13	A neutron-diffraction study of the low-cycle fatigue behavior of HASTELLOY [®] C-22HSTM alloy. <i>International Journal of Fatigue</i> , 2007 , 29, 1812-1819	5	17
12	A Nondestructive Study Using Lattice Plane Specific Analysis on a Nano-Precipitate Strengthened Alloy. <i>Key Engineering Materials</i> , 2007 , 345-346, 1311-1314	0.4	
11	Deformation-induced phase development in a cobalt-based superalloy during monotonic and cyclic deformation. <i>Physica B: Condensed Matter</i> , 2006 , 385-386, 523-525	2.8	6
10	Magnetization reversal process of patterned Ni ₈₀ Fe ₂₀ zigzag wires. <i>Journal of Magnetism and Magnetic Materials</i> , 2004 , 272-276, E1309-E1310	2.8	
9	Magnetic studies in octagon-patterned permalloy submicro-wires. <i>Journal of Magnetism and Magnetic Materials</i> , 2004 , 272-276, 1686-1687	2.8	
8	Magnetoresistance and magnetic force microscopy studies in Ni ₈₀ Fe ₂₀ disk- and ring-patterned wires. <i>Journal of Applied Physics</i> , 2003 , 93, 8424-8426	2.5	2
7	Fabrication and physical properties of permalloy nano-size wires. <i>Physica B: Condensed Matter</i> , 2003 , 327, 247-252	2.8	5
6	Angular and field dependent magnetoresistance in Ni ₈₀ Fe ₂₀ zigzag wires. <i>Physica B: Condensed Matter</i> , 2003 , 327, 287-291	2.8	
5	Magnetoresistance study in NiFe semicircle-ring patterned wires. <i>Journal of Applied Physics</i> , 2003 , 93, 7619-7621	2.5	5
4	Study of domain wall magnetoresistance by submicron patterned magnetic structure. <i>Journal of Applied Physics</i> , 2003 , 93, 8761-8763	2.5	11
3	Community Structure Extraction for Social Networks	266-282	
2	Aging temperature role on precipitation hardening in a non-equiatomic AlCoCrFeNiTi high-entropy alloy. <i>Materials Science and Technology</i> , 1-10	1.5	0
1	Evaluation of Supercritical Carbon Dioxide Corrosion by High Temperature Oxidation Experiments and Machine Learning Models. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 1	2.3	

