

Le Zhou

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1594177/publications.pdf>

Version: 2024-02-01

89
papers

3,367
citations

172386

29
h-index

161767

54
g-index

90
all docs

90
docs citations

90
times ranked

4252
citing authors

#	ARTICLE	IF	CITATIONS
1	Elimination of extraordinarily high cracking susceptibility of aluminum alloy fabricated by laser powder bed fusion. <i>Journal of Materials Science and Technology</i> , 2022, 103, 50-58.	5.6	21
2	Microstructural Development in Inconel 718 Nickel-Based Superalloy Additively Manufactured by Laser Powder Bed Fusion. <i>Metallography, Microstructure, and Analysis</i> , 2022, 11, 88-107.	0.5	16
3	Microstructural characteristics and mechanical properties of additively manufactured Cu-10Sn alloys by laser powder bed fusion. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 838, 142775.	2.6	12
4	Effect of functionality of thiol on the optical properties of liquid crystals/polymer composite films. <i>Liquid Crystals</i> , 2021, 48, 313-321.	0.9	10
5	Oxygen-assisted direct growth of large-domain and high-quality graphene on glass targeting advanced optical filter applications. <i>Nano Research</i> , 2021, 14, 260-267.	5.8	20
6	Effects of Alloy Composition and Solid-State Diffusion Kinetics on Powder Bed Fusion Cracking Susceptibility. <i>Journal of Phase Equilibria and Diffusion</i> , 2021, 42, 5-13.	0.5	17
7	Effects of the methacrylate monomers with different end groups on the morphologies, electro-optical and mechanical properties of polymer dispersed liquid crystals composite films. <i>Liquid Crystals</i> , 2021, 48, 722-734.	0.9	26
8	Microstructural Development in As Built and Heat Treated IN625 Component Additively Manufactured by Laser Powder Bed Fusion. <i>Journal of Phase Equilibria and Diffusion</i> , 2021, 42, 14-27.	0.5	21
9	<i>In situ</i> TEM Characterization of Microstructure Evolution and Mechanical Behavior of the 3D-Printed Inconel 718 Exposed to High Temperature. <i>Microscopy and Microanalysis</i> , 2021, 27, 250-256.	0.2	7
10	Effects of multifunctional acrylates and thiols on the morphology and electro-optical properties of polymer-dispersed liquid crystal films. <i>Liquid Crystals</i> , 2021, 48, 1457-1466.	0.9	17
11	Composition-dependent solidification cracking of aluminum-silicon alloys during laser powder bed fusion. <i>Acta Materialia</i> , 2021, 208, 116698.	3.8	97
12	High strength WE43 microlattice structures additively manufactured by laser powder bed fusion. <i>Materialia</i> , 2021, 16, 101067.	1.3	18
13	The Electro-Optical Properties and Adhesion Strength of Epoxy-Polymercaptan-Based Polymer Dispersed Liquid Crystal Films. <i>Crystals</i> , 2021, 11, 576.	1.0	8
14	Additive manufacturing and mechanical properties of the dense and crack free Zr-modified aluminum alloy 6061 fabricated by the laser-powder bed fusion. <i>Additive Manufacturing</i> , 2021, 41, 101966.	1.7	28
15	High throughput mechanical testing platform and application in metal additive manufacturing and process optimization. <i>Journal of Manufacturing Processes</i> , 2021, 66, 494-505.	2.8	9
16	Design of heterogeneous structured Al alloys with wide processing window for laser-powder bed fusion additive manufacturing. <i>Additive Manufacturing</i> , 2021, 42, 102002.	1.7	10
17	Microstructure, mechanical performance, and corrosion behavior of additively manufactured aluminum alloy 5083 with 0.7 and 1.0Åwt% Zr addition. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 823, 141679.	2.6	36
18	Mechanical Behavior Assessment of Ti-6Al-4V ELI Alloy Produced by Laser Powder Bed Fusion. <i>Metals</i> , 2021, 11, 1671.	1.0	15

#	ARTICLE	IF	CITATIONS
19	An integrated computational materials engineering-anchored closed-loop method for design of aluminum alloys for additive manufacturing. <i>Materialia</i> , 2020, 9, 100574.	1.3	40
20	Optical diffusers based on uniform nano-sized polymer balls/nematic liquid crystals composite films. <i>Liquid Crystals</i> , 2020, 47, 785-798.	0.9	10
21	Anomalous growth of Al ₈ Mo ₃ phase during interdiffusion and reaction between Al and Mo. <i>Journal of Nuclear Materials</i> , 2020, 539, 152337.	1.3	9
22	Laser powder bed fusion of Al-10 wt% Ce alloys: microstructure and tensile property. <i>Journal of Materials Science</i> , 2020, 55, 14611-14625.	1.7	51
23	Recent Advances in The Polymer Dispersed Liquid Crystal Composite and Its Applications. <i>Molecules</i> , 2020, 25, 5510.	1.7	84
24	Effect of Polymer Network Topology on the Electro-Optical Performance of Polymer Stabilized Liquid Crystal (PSLC) Devices. <i>Macromolecular Chemistry and Physics</i> , 2020, 221, 2000185.	1.1	23
25	Ligand assisted swelling-deswelling microencapsulation (LASDM) for stable, color tunable perovskite-polymer composites. <i>Nanoscale Advances</i> , 2020, 2, 2034-2043.	2.2	21
26	Understanding the Laser Powder Bed Fusion of AlSi10Mg Alloy. <i>Metallography, Microstructure, and Analysis</i> , 2020, 9, 484-502.	0.5	67
27	Additive manufacturing of dense WE43 Mg alloy by laser powder bed fusion. <i>Additive Manufacturing</i> , 2020, 33, 101123.	1.7	30
28	Process-Dependent Composition, Microstructure, and Printability of Al-Zn-Mg and Al-Zn-Mg-Sc-Zr Alloys Manufactured by Laser Powder Bed Fusion. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2020, 51, 3215-3227.	1.1	48
29	Effects of rigid structures containing (meth)acrylate monomers and crosslinking agents with different chain length on the morphology and electro-optical properties of polymer-dispersed liquid crystal films. <i>Journal of Modern Optics</i> , 2020, 67, 682-691.	0.6	23
30	The fabrication of novel optical diffusers based on UV-cured polymer dispersed liquid crystals. <i>Liquid Crystals</i> , 2019, 46, 138-144.	0.9	26
31	Microstructure and tensile property of a novel AlZnMgScZr alloy additively manufactured by gas atomization and laser powder bed fusion. <i>Scripta Materialia</i> , 2019, 158, 24-28.	2.6	158
32	Numerical simulation of high-pressure gas atomization of two-phase flow: Effect of gas pressure on droplet size distribution. <i>Advanced Powder Technology</i> , 2019, 30, 2726-2732.	2.0	34
33	The effective control of Cu through-silicon via extrusion for three-dimensional integrated circuits by a metallic cap layer. <i>Scripta Materialia</i> , 2019, 164, 101-104.	2.6	7
34	Light Diffusing, Down-Conversion Perovskite-Polymer Microspheres. <i>Digest of Technical Papers SID International Symposium</i> , 2019, 50, 917-920.	0.1	0
35	Microstructure and mechanical properties of Zr-modified aluminum alloy 5083 manufactured by laser powder bed fusion. <i>Additive Manufacturing</i> , 2019, 28, 485-496.	1.7	60
36	A switchable optical diffuser based on a polymer/nematic liquid crystal composite film with transient polymer balls-networks microstructure. <i>Liquid Crystals</i> , 2019, 46, 2213-2222.	0.9	11

#	ARTICLE	IF	CITATIONS
37	Fabrication of a controllable anti-peeping device with a laminated structure of microlouver and polymer dispersed liquid crystals film. <i>Liquid Crystals</i> , 2019, 46, 2235-2244.	0.9	25
38	Light diffusing, down-converting perovskite-on-polymer microspheres. <i>Journal of Materials Chemistry C</i> , 2019, 7, 6527-6533.	2.7	15
39	Switchable anti-peeping film for liquid crystal displays from polymer dispersed liquid crystals. <i>Liquid Crystals</i> , 2019, 46, 718-724.	0.9	25
40	Phase Transformations and Microstructural Development in the U-10 Wt% Pt Mo Alloy with Varying Zr Contents After Heat Treatments Relevant to the Monolithic Fuel Plate Fabrication Process. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2019, 50, 72-96.	1.1	9
41	Microstructure, precipitates and mechanical properties of powder bed fused inconel 718 before and after heat treatment. <i>Journal of Materials Science and Technology</i> , 2019, 35, 1153-1164.	5.6	94
42	Microstructure, precipitates and hardness of selectively laser melted AlSi10Mg alloy before and after heat treatment. <i>Materials Characterization</i> , 2018, 143, 5-17.	1.9	201
43	Enhancing Electron Transfer and Electrocatalytic Activity on Crystalline Carbon-Conjugated g-C ₃ N ₄ . <i>ACS Catalysis</i> , 2018, 8, 1926-1931.	5.5	172
44	Holey Films: Freestanding NiFe Oxyfluoride Holey Film with Ultrahigh Volumetric Capacitance for Flexible Asymmetric Supercapacitors (<i>Small</i> 3/2018). <i>Small</i> , 2018, 14, 1870014.	5.2	1
45	Effects of Degassing on the Microstructure, Chemistry, and Estimated Mechanical Properties of a Cryomilled Al-Mg Alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2018, 49, 3066-3079.	1.1	1
46	Phosphorus and Aluminum Codoped Porous NiO Nanosheets as Highly Efficient Electrocatalysts for Overall Water Splitting. <i>ACS Energy Letters</i> , 2018, 3, 892-898.	8.8	130
47	Effects of crosslinking agent/diluents/thiol on morphology of the polymer matrix and electro-optical properties of polymer-dispersed liquid crystal. <i>Liquid Crystals</i> , 2018, 45, 728-735.	0.9	36
48	MoS ₂ /TiO ₂ heterostructures as nonmetal plasmonic photocatalysts for highly efficient hydrogen evolution. <i>Energy and Environmental Science</i> , 2018, 11, 106-114.	15.6	326
49	Surface-Modified Porous Carbon Nitride Composites as Highly Efficient Electrocatalyst for Zn-Air Batteries. <i>Advanced Energy Materials</i> , 2018, 8, 1701642.	10.2	129
50	Preparation of polymer-dispersed liquid crystal doped with indium tin oxide nanoparticles. <i>Liquid Crystals</i> , 2018, 45, 1068-1077.	0.9	23
51	Freestanding NiFe Oxyfluoride Holey Film with Ultrahigh Volumetric Capacitance for Flexible Asymmetric Supercapacitors. <i>Small</i> , 2018, 14, 1702295.	5.2	34
52	Diffusion and its Application in NiMnGa Alloys. , 2018, 19, 80-95.		1
53	A novel optical diffuser based on polymer micro-balls-filled nematic liquid crystal composite film. <i>RSC Advances</i> , 2018, 8, 40347-40357.	1.7	15
54	184: Converting Light Diffusing Polymer Powders into Stable Perovskite-Based Tunable Downconverters. <i>Digest of Technical Papers SID International Symposium</i> , 2018, 49, 222-224.	0.1	5

#	ARTICLE	IF	CITATIONS
55	Noncontact stress measurement from bare UHPC surface using Raman piezospectroscopy. <i>Journal of Raman Spectroscopy</i> , 2018, 49, 1540-1551.	1.2	4
56	Microstructural Characterization of AA6061 Versus AA6061 HIP Bonded Cladding-Cladding Interface. <i>Journal of Phase Equilibria and Diffusion</i> , 2018, 39, 246-254.	0.5	17
57	Microstructure and mechanical behavior of the 3D printed Inconel 718: In-situ TEM study. <i>Microscopy and Microanalysis</i> , 2018, 24, 1942-1943.	0.2	2
58	A novel light diffuser based on the combined morphology of polymer networks and polymer balls in a polymer dispersed liquid crystals film. <i>RSC Advances</i> , 2018, 8, 21690-21698.	1.7	35
59	Nonelectric Sustaining Bistable Polymer Framework Liquid Crystal Films with a Novel Semirigid Polymer Matrix. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 22757-22766.	4.0	15
60	Unconventional High-Performance Laser Protection System Based on Dichroic Dye-Doped Cholesteric Liquid Crystals. <i>Scientific Reports</i> , 2017, 7, 42955.	1.6	12
61	Reprogrammable Assembly of Molecular Motor on Solid Surfaces via Dynamic Bonds. <i>Small</i> , 2017, 13, 1700480.	5.2	9
62	Strained $W(\text{SeS})_2$ Nanoporous Films for Highly Efficient Hydrogen Evolution. <i>ACS Energy Letters</i> , 2017, 2, 1315-1320.	8.8	64
63	Periodically Patterned Au-TiO_2 Heterostructures for Photoelectrochemical Sensor. <i>ACS Sensors</i> , 2017, 2, 621-625.	4.0	86
64	Microstructural and crystallographic characteristics of modulated martensite, non-modulated martensite, and pre-martensitic tweed austenite in Ni-Mn-Ga alloys. <i>Acta Materialia</i> , 2017, 134, 93-103.	3.8	42
65	Overall Water Splitting with Room-Temperature Synthesized NiFe Oxyfluoride Nanoporous Films. <i>ACS Catalysis</i> , 2017, 7, 8406-8412.	5.5	91
66	NiS_2/FeS Holey Film as Freestanding Electrode for High-Performance Lithium Battery. <i>Advanced Energy Materials</i> , 2017, 7, 1701309.	10.2	99
67	Strengthening in hybrid alumina-titanium diboride aluminum matrix composites synthesized by ultrasonic assisted reactive mechanical mixing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 702, 312-321.	2.6	21
68	Composition-dependent interdiffusion coefficient, reduced elastic modulus and hardness in $\hat{\Gamma}^3$, $\hat{\Gamma}^3\hat{\Gamma}^2$ - and $\hat{\Gamma}^2$ -phases in the Ni-Al system. <i>Journal of Alloys and Compounds</i> , 2017, 727, 153-162.	2.8	25
69	Lithium Batteries: NiS_2/FeS Holey Film as Freestanding Electrode for High-Performance Lithium Battery (<i>Adv. Energy Mater.</i> 22/2017). <i>Advanced Energy Materials</i> , 2017, 7, .	10.2	0
70	Effect of a Polymercaptan Material on the Electro-Optical Properties of Polymer-Dispersed Liquid Crystal Films. <i>Molecules</i> , 2017, 22, 43.	1.7	16
71	A Study on the Electro-Optical Properties of Thiol-Ene Polymer Dispersed Cholesteric Liquid Crystal (PDChLC) Films. <i>Molecules</i> , 2017, 22, 317.	1.7	20
72	Enhanced Photoelectrocatalytic Reduction of Oxygen Using Au@TiO_2 Plasmonic Film. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 34970-34977.	4.0	52

#	ARTICLE	IF	CITATIONS
73	Mechanical anomaly observed in Ni-Mn-Ga alloys by nanoindentation. <i>Acta Materialia</i> , 2016, 118, 54-63.	3.8	17
74	Thermally stable transparent sol-gel based active siloxane oligomer materials with tunable high refractive index and dual reactive groups. <i>RSC Advances</i> , 2016, 6, 70825-70831.	1.7	17
75	Atomistic study on the interaction of nitrogen and Mg lattice and the nitride formation in nanocrystalline Mg alloys synthesized using cryomilling process. <i>Acta Materialia</i> , 2016, 115, 295-307.	3.8	7
76	Improvement of aging kinetics and precipitate size refinement in Mg-Sn alloys by hafnium additions. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 651, 854-858.	2.6	16
77	Multi-shape-memory effects in a wavelength-selective multicomposite. <i>Journal of Materials Chemistry A</i> , 2015, 3, 13953-13961.	5.2	57
78	Microstructural Development and Ternary Interdiffusion in Ni-Mn-Ga Alloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2015, 46, 5572-5587.	1.1	8
79	Nanostructured tungsten through cryogenic attrition. <i>International Journal of Refractory Metals and Hard Materials</i> , 2015, 52, 70-77.	1.7	2
80	Failure characteristics and mechanisms of EB-PVD TBCs with Pt-modified NiAl bond coats. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 637, 98-106.	2.6	15
81	Magnetocaloric response of non-stoichiometric Ni ₂ MnGa alloys and the influence of crystallographic texture. <i>Acta Materialia</i> , 2015, 97, 245-256.	3.8	24
82	Martensitic transformation and mechanical properties of Ni _{49+x} Mn _{36-x} Al ₁₅ (x=0, 0.5, 1.0, 1.5 and 2.0) alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 646, 57-65.	2.6	14
83	Diffusion kinetics, mechanical properties, and crystallographic characterization of intermetallic compounds in the Mg-Zn binary system. <i>Intermetallics</i> , 2015, 67, 145-155.	1.8	47
84	Microstructural and Crystallographic Characterization of Ni _{2+x} Mn _{1-x} Ga Alloys (x=0.14, 0.16, 0.19). <i>Journal of Materials Research</i> , 2015, 30, 239-246.	0.5	4
85	Effects of Cr and Ni on interdiffusion and reaction between U and Fe-Cr-Ni alloys. <i>Journal of Nuclear Materials</i> , 2014, 451, 372-378.	1.3	12
86	Interdiffusion and reaction between Zr and Al alloys from 425 to 625 °C. <i>Intermetallics</i> , 2014, 49, 154-162.	1.8	19
87	Sc-phthalocyanine sheet: Promising material for hydrogen storage. <i>Applied Physics Letters</i> , 2011, 99, .	1.5	32
88	Microstructure and Thermal Properties of Plasma Sprayed Thermal Barrier Coatings from Nanostructured YSZ. <i>Journal of Thermal Spray Technology</i> , 2010, 19, 1186-1194.	1.6	126
89	HOT-CORROSION BEHAVIOR OF THERMAL BARRIER COATED DZ125 SUPERALLOY EXPOSED TO ATOMIZED SEAWATER AND KEROSENE. <i>International Journal of Modern Physics B</i> , 2010, 24, 3155-3160.	1.0	0