

Ke An

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215
papers

7,310
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239
ext. papers

9,680
ext. citations

7.6
avg, IF

6.13
L-index

#	Paper	IF	Citations
215	A precipitation-hardened high-entropy alloy with outstanding tensile properties. <i>Acta Materialia</i> , 2016 , 102, 187-196	8.4	1020
214	Enhanced strength and ductility in a high-entropy alloy via ordered oxygen complexes. <i>Nature</i> , 2018 , 563, 546-550	50.4	516
213	Gas-solid interfacial modification of oxygen activity in layered oxide cathodes for lithium-ion batteries. <i>Nature Communications</i> , 2016 , 7, 12108	17.4	379
212	Phase-Transformation Ductilization of Brittle High-Entropy Alloys via Metastability Engineering. <i>Advanced Materials</i> , 2017 , 29, 1701678	24	280
211	Lattice distortion in a strong and ductile refractory high-entropy alloy. <i>Acta Materialia</i> , 2018 , 160, 158-172	24	173
210	First In Situ Lattice Strains Measurements Under Load at VULCAN. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2011 , 42, 95-99	2.3	170
209	A disordered rock salt anode for fast-charging lithium-ion batteries. <i>Nature</i> , 2020 , 585, 63-67	50.4	137
208	An Air-Stable Na ₃ SbS ₄ Superionic Conductor Prepared by a Rapid and Economic Synthetic Procedure. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 8551-5	16.4	125
207	Visualizing the chemistry and structure dynamics in lithium-ion batteries by in-situ neutron diffraction. <i>Scientific Reports</i> , 2012 , 2, 747	4.9	118
206	In-situ observation of inhomogeneous degradation in large format Li-ion cells by neutron diffraction. <i>Journal of Power Sources</i> , 2013 , 236, 163-168	8.9	90
205	Operando Lithium Dynamics in the Li-Rich Layered Oxide Cathode Material via Neutron Diffraction. <i>Advanced Energy Materials</i> , 2016 , 6, 1502143	21.8	85
204	High performance aluminumberium alloys for high-temperature applications. <i>Materials Horizons</i> , 2017 , 4, 1070-1078	14.4	81
203	Origin of High Li ⁺ Conduction in Doped Li ₇ La ₃ Zr ₂ O ₁₂ Garnets. <i>Chemistry of Materials</i> , 2015 , 27, 5491-5496	9.6	78
202	Understanding the Role of NH ₄ ⁺ and Al ³⁺ Surface Co-modification on Lithium-Excess Layered Oxide Li _{1.2} Ni _{0.2} Mn _{0.6} O ₂ . <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 19189-200	9.5	78
201	In-situ neutron diffraction study of the xLi ₂ MnO ₃ (1-x)LiMO ₂ (x=[0,0.5]; M=[Ni, Mn, Co) layered oxide compounds during electrochemical cycling. <i>Journal of Power Sources</i> , 2013 , 240, 772-778	8.9	76
200	On the Swift effect and twinning in a rolled magnesium alloy under free-end torsion. <i>Scripta Materialia</i> , 2013 , 69, 319-322	5.6	74
199	Transformation-induced plasticity in bulk metallic glass composites evidenced by in-situ neutron diffraction. <i>Acta Materialia</i> , 2017 , 124, 478-488	8.4	72

198	Enhanced piezoelectricity and nature of electric-field induced structural phase transformation in textured lead-free piezoelectric Na _{0.5} Bi _{0.5} TiO ₃ -BaTiO ₃ ceramics. <i>Applied Physics Letters</i> , 2012 , 100, 172906	3.4	71
197	Thermophysical properties of Ni-containing single-phase concentrated solid solution alloys. <i>Materials and Design</i> , 2017 , 117, 185-192	8.1	69
196	Origin of high piezoelectric response in A-site disordered morphotropic phase boundary composition of lead-free piezoelectric 0.93(Na _{0.5} Bi _{0.5})TiO ₃ 0.07BaTiO ₃ . <i>Journal of Applied Physics</i> , 2013 , 113, 114101	2.5	69
195	Investigation of deformation dynamics in a wrought magnesium alloy. <i>International Journal of Plasticity</i> , 2014 , 62, 105-120	7.6	68
194	In situ neutron diffraction measurements of temperature and stresses during friction stir welding of 6061-T6 aluminium alloy. <i>Science and Technology of Welding and Joining</i> , 2007 , 12, 298-303	3.7	66
193	Formation, structure and properties of biocompatible TiZrHfNbTa high-entropy alloys. <i>Materials Research Letters</i> , 2019 , 7, 225-231	7.4	65
192	Efficient Direct Recycling of Lithium-Ion Battery Cathodes by Targeted Healing. <i>Joule</i> , 2020 , 4, 2609-2626	67.8	62
191	Neutron residual stress measurement and numerical modeling in a curved thin-walled structure by laser powder bed fusion additive manufacturing. <i>Materials and Design</i> , 2017 , 135, 122-132	8.1	61
190	Mixed-conducting interlayer boosting the electrochemical performance of Ni-rich layered oxide cathode materials for lithium ion batteries. <i>Journal of Power Sources</i> , 2019 , 421, 91-99	8.9	60
189	Micromechanical characterization of casting-induced inhomogeneity in an Al _{0.8} CoCrCuFeNi high-entropy alloy. <i>Scripta Materialia</i> , 2011 , 64, 868-871	5.6	57
188	Deformation mechanisms in a precipitation-strengthened ferritic superalloy revealed by in situ neutron diffraction studies at elevated temperatures. <i>Acta Materialia</i> , 2015 , 83, 137-148	8.4	55
187	In situ construction of hydrazone-linked COF-based core-shell hetero-frameworks for enhanced photocatalytic hydrogen evolution. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 7724-7732	13	55
186	A suite-level review of the neutron powder diffraction instruments at Oak Ridge National Laboratory. <i>Review of Scientific Instruments</i> , 2018 , 89, 092701	1.7	55
185	Structure Evolution and Thermoelectric Properties of Carbonized Polydopamine Thin Films. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 6655-6660	9.5	53
184	Transformation-reinforced high-entropy alloys with superior mechanical properties via tailoring stacking fault energy. <i>Journal of Alloys and Compounds</i> , 2019 , 792, 444-455	5.7	53
183	First-principles and machine learning predictions of elasticity in severely lattice-distorted high-entropy alloys with experimental validation. <i>Acta Materialia</i> , 2019 , 181, 124-138	8.4	51
182	A high-conduction Ge substituted Li ₃ AsS ₄ solid electrolyte with exceptional low activation energy. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 10396-10403	13	51
181	Temperature-dependent behavior of a polycrystalline NiTi shape memory alloy around the transformation regime. <i>Scripta Materialia</i> , 2013 , 68, 571-574	5.6	49

180	Gradient cell-structured high-entropy alloy with exceptional strength and ductility. <i>Science</i> , 2021 , 374, 984-989	33.3	49
179	The effect of oxygen vacancy and spinel phase integration on both anionic and cationic redox in Li-rich cathode materials. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 7733-7745	13	47
178	Microstructural and micromechanical characterization of IN718 theta shaped specimens built with electron beam melting. <i>Acta Materialia</i> , 2016 , 108, 161-175	8.4	47
177	Deformation behavior of solid-solution-strengthened Mg β wt.% Al alloy: In situ neutron diffraction and elastic-viscoplastic self-consistent modeling. <i>Acta Materialia</i> , 2014 , 73, 139-148	8.4	47
176	Low-cycle fatigue of 1Cr18Ni9Ti stainless steel and related weld metal under axial, torsional and 90 \circ out-of-phase loading. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2004 , 27, 439-448 ³		47
175	Exceptionally High Performance Anode Material Based on Lattice Structure Decorated Double Perovskite Sr ₂ FeMo ₂ /3Mg ₁ /3O ₆ for Solid Oxide Fuel Cells. <i>Advanced Energy Materials</i> , 2018 , 8, 1800062 ^{21.8}		46
174	Stress partitioning behavior of an AlSi10Mg alloy produced by selective laser melting during tensile deformation using in situ neutron diffraction. <i>Journal of Alloys and Compounds</i> , 2016 , 686, 281-286	5.7	46
173	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
172	Solving the strength-ductility tradeoff in the medium-entropy NiCoCr alloy via interstitial strengthening of carbon. <i>Intermetallics</i> , 2019 , 106, 77-87	3.5	44
171	Unraveling structural evolution of LiNi _{0.5} Mn _{1.5} O ₄ by in situ neutron diffraction. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 6908	13	43
170	A study of suppressed formation of low-conductivity phases in doped Li ₇ La ₃ Zr ₂ O ₁₂ garnets by in situ neutron diffraction. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 22868-22876	13	42
169	An In-Situ Electrochemical Cell for Neutron Diffraction Studies of Phase Transitions in Small Volume Electrodes of Li-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2014 , 161, A1731-A1741	3.9	42
168	Twinning-mediated work hardening and texture evolution in CrCoFeMnNi high entropy alloys at cryogenic temperature. <i>Materials and Design</i> , 2017 , 131, 419-427	8.1	41
167	Identifying the chemical and structural irreversibility in LiNi _{0.8} Co _{0.15} Al _{0.05} O ₂ δ model compound for classical layered intercalation. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 4189-4198	13	41
166	Revealing the cyclic hardening mechanism of an austenitic stainless steel by real-time in situ neutron diffraction. <i>Scripta Materialia</i> , 2014 , 89, 45-48	5.6	41
165	A synchrotron X-ray diffraction study on the phase transformation kinetics and texture evolution of a TRIP steel subjected to torsional loading. <i>Acta Materialia</i> , 2012 , 60, 6703-6713	8.4	40
164	Lattice-Distortion-Enhanced Yield Strength in a Refractory High-Entropy Alloy. <i>Advanced Materials</i> , 2020 , 32, e2004029	24	40
163	Intragranular twinning, detwinning, and twinning-like lattice reorientation in magnesium alloys. <i>Acta Materialia</i> , 2016 , 121, 15-23	8.4	40

162	Deformation characteristics of the intermetallic alloy 60NiTi. <i>Intermetallics</i> , 2017 , 82, 40-52	3.5	39
161	Unraveling cyclic deformation mechanisms of a rolled magnesium alloy using in situ neutron diffraction. <i>Acta Materialia</i> , 2015 , 85, 343-353	8.4	39
160	Temperature dependence of elastic and plastic deformation behavior of a refractory high-entropy alloy. <i>Science Advances</i> , 2020 , 6,	14.3	39
159	Novel Chemically Stable Ba ₃ Ca _{1.18} Nb _{1.82} Y _x O ₉ Proton Conductor: Improved Proton Conductivity through Tailored Cation Ordering. <i>Chemistry of Materials</i> , 2014 , 26, 2021-2029	9.6	36
158	Deformation dynamics study of a wrought magnesium alloy by real-time in situ neutron diffraction. <i>Scripta Materialia</i> , 2013 , 69, 358-361	5.6	36
157	Probing Li-Ni Cation Disorder in Li _{1-x} Ni _{1+x} Al _y O ₂ Cathode Materials by Neutron Diffraction. <i>Journal of the Electrochemical Society</i> , 2012 , 159, A924-A928	3.9	36
156	Elucidating the mobility of H ⁺ and Li ⁺ ions in (Li _{6.25} H _x Al _{0.25})La ₃ Zr ₂ O ₁₂ via correlative neutron and electron spectroscopy. <i>Energy and Environmental Science</i> , 2019 , 12, 945-951	35.4	35
155	First Results from the VULCAN Diffractometer at the SNS. <i>Materials Science Forum</i> , 2010 , 652, 105-110	0.4	35
154	Probing Multiscale Transport and Inhomogeneity in a Lithium-Ion Pouch Cell Using In Situ Neutron Methods. <i>ACS Energy Letters</i> , 2016 , 1, 981-986	20.1	34
153	Releasing metal catalysts via phase transition: (NiO) _{0.05} -(SrTi _{0.8} Nb _{0.2} O ₃) _{0.95} as a redox stable anode material for solid oxide fuel cells. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 19990-6	9.5	34
152	What is the Role of Nb in Nickel-Rich Layered Oxide Cathodes for Lithium-Ion Batteries?. <i>ACS Energy Letters</i> , 1377-1382	20.1	34
151	Kinetic characteristics up to 4.8 V of layered LiNi _{1/3} Co _{1/3} Mn _{1/3} O ₂ cathode materials for high voltage lithium-ion batteries. <i>Electrochimica Acta</i> , 2017 , 227, 152-161	6.7	33
150	A study on fatigue crack growth behavior subjected to a single tensile overload: Part II. Transfer of stress concentration and its role in overload-induced transient crack growth. <i>Acta Materialia</i> , 2011 , 59, 495-502	8.4	33
149	From embryos to precipitates: A study of nucleation and growth in a multicomponent ferritic steel. <i>Physical Review B</i> , 2011 , 84,	3.3	33
148	Enhancing the Ion Transport in LiMnNiO by Altering the Particle Wulff Shape via Anisotropic Surface Segregation. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 36745-36754	9.5	32
147	Bifunctional nanoprecipitates strengthen and ductilize a medium-entropy alloy. <i>Nature</i> , 2021 , 595, 245-249	3.4	32
146	Phase-specific deformation behavior of a relatively tough NiAlCr(Mo) lamellar composite. <i>Scripta Materialia</i> , 2014 , 84-85, 59-62	5.6	30
145	Elucidating the Limit of Li Insertion into the Spinel Li ₄ Ti ₅ O ₁₂ 2019 , 1, 96-102		28

144	Understanding low-cycle fatigue life improvement mechanisms in a pre-twinned magnesium alloy. <i>Journal of Alloys and Compounds</i> , 2016 , 656, 539-550	5.7	25
143	Visualizing the structural evolution of LSM/xYSZ composite cathodes for SOFC by in-situ neutron diffraction. <i>Scientific Reports</i> , 2014 , 4, 5179	4.9	25
142	Unusual thermal stability of nano-structured ferritic alloys. <i>Journal of Alloys and Compounds</i> , 2012 , 529, 96-101	5.7	25
141	Structural modulations and magnetic properties of off-stoichiometric Ni-Mn-Ga magnetic shape memory alloys. <i>Physical Review B</i> , 2012 , 85,	3.3	25
140	High-throughput design of high-performance lightweight high-entropy alloys. <i>Nature Communications</i> , 2021 , 12, 4329	17.4	25
139	Deformation mechanisms and work-hardening behavior of transformation-induced plasticity high entropy alloys by in-situ neutron diffraction. <i>Materials Research Letters</i> , 2018 , 6, 620-626	7.4	25
138	VULCAN: A Hammer for high-temperature materials research. <i>MRS Bulletin</i> , 2019 , 44, 878-885	3.2	23
137	Simultaneous Operando Measurements of the Local Temperature, State of Charge, and Strain inside a Commercial Lithium-Ion Battery Pouch Cell. <i>Journal of the Electrochemical Society</i> , 2018 , 165, A1578-A1585	3.9	23
136	Phase-specific deformation behavior of a NiAl/Ti(Mo) lamellar composite under thermal and mechanical loads. <i>Journal of Alloys and Compounds</i> , 2016 , 656, 481-490	5.7	22
135	Characterization of Crystallographic Structures Using Bragg-Edge Neutron Imaging at the Spallation Neutron Source. <i>Journal of Imaging</i> , 2017 , 3, 65	3.1	22
134	Correlation of anisotropy and directional conduction in Li_3PS_4 fast Li^+ conductor. <i>Applied Physics Letters</i> , 2015 , 107, 013904	3.4	22
133	In situ neutron diffraction studies of a commercial, soft lead zirconate titanate ceramic: response to electric fields and mechanical stress. <i>Applied Physics A: Materials Science and Processing</i> , 2010 , 99, 557-564	2.6	22
132	An Air-Stable Na_3SbS_4 Superionic Conductor Prepared by a Rapid and Economic Synthetic Procedure. <i>Angewandte Chemie</i> , 2016 , 128, 8693-8697	3.6	22
131	Investigation of deformation twinning under complex stress states in a rolled magnesium alloy. <i>Journal of Alloys and Compounds</i> , 2016 , 683, 619-633	5.7	21
130	Event-based processing of neutron scattering data at the Spallation Neutron Source. <i>Journal of Applied Crystallography</i> , 2018 , 51, 616-629	3.8	21
129	In-situ neutron diffraction investigation on twinning/detwinning activities during tension-compression load reversal in a twinning induced plasticity steel. <i>Scripta Materialia</i> , 2018 , 150, 168-172	5.6	20
128	Crystallographic orientation and spatially resolved damage in a dispersion-hardened Al alloy. <i>Acta Materialia</i> , 2020 , 193, 138-150	8.4	19
127	In-situ neutron diffraction study on the tension-compression fatigue behavior of a twinning induced plasticity steel. <i>Scripta Materialia</i> , 2017 , 137, 83-87	5.6	18

126	In situ neutron diffraction measurement of transient temperature and stress fields in a thin plate. <i>Applied Physics Letters</i> , 2006 , 88, 261903	3.4	18
125	Electrostatic levitation facility optimized for neutron diffraction studies of high temperature liquids at a spallation neutron source. <i>Review of Scientific Instruments</i> , 2016 , 87, 013904	1.7	18
124	Novel Ordered Rocksalt-Type Lithium-Rich $\text{Li}_2\text{Ru}_{1-x}\text{Ni}_x\text{O}_3$ (0.3 $\leq x$ \leq 0.5) Cathode Material with Tunable Anionic Redox Potential. <i>ACS Applied Energy Materials</i> , 2019 , 2, 5933-5944	6.1	17
123	Determination of $\sqrt{2}$ Lattice Misfit in Ni-Based Single-Crystal Superalloys at High Temperatures by Neutron Diffraction. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2018 , 49, 740-751	2.3	17
122	An in situ neutron diffraction study of plastic deformation in a $\text{Cu}_{46.5}\text{Zr}_{46.5}\text{Al}_7$ bulk metallic glass composite. <i>Scripta Materialia</i> , 2018 , 153, 118-121	5.6	17
121	A study of stress-induced phase transformation and micromechanical behavior of CuZr-based alloy by in-situ neutron diffraction. <i>Journal of Alloys and Compounds</i> , 2017 , 696, 1096-1104	5.7	16
120	Hardening steels by the generation of transient phase using additive manufacturing. <i>Intermetallics</i> , 2019 , 109, 60-67	3.5	16
119	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
118	A Combined Variable-Temperature Neutron Diffraction and Thermogravimetric Analysis Study on a Promising Oxygen Electrode, SrCoNbO , for Reversible Solid Oxide Fuel Cells. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 34855-34864	9.5	16
117	Lattice-Cell Orientation Disorder in Complex Spinel Oxides. <i>Advanced Energy Materials</i> , 2017 , 7, 1601950-1.8	2.8	16
116	NaAlTiO , A Novel Anode Material for Sodium Ion Battery. <i>Scientific Reports</i> , 2017 , 7, 162	4.9	15
115	Extracting grain-orientation-dependent data from in situ time-of-flight neutron diffraction. I. Inverse pole figures. <i>Journal of Applied Crystallography</i> , 2014 , 47, 2019-2029	3.8	15
114	Martensitic transformation in a B2-containing CuZr-based BMG composite revealed by in situ neutron diffraction. <i>Journal of Alloys and Compounds</i> , 2017 , 723, 714-721	5.7	15
113	Investigating the deformation mechanisms of a highly metastable high entropy alloy using in-situ neutron diffraction. <i>Materials Today Communications</i> , 2020 , 23, 100858	2.5	15
112	β -Phase transformation kinetics of U-30wt% Mo established by in situ neutron diffraction. <i>Journal of Nuclear Materials</i> , 2016 , 477, 149-156	3.3	15
111	In situ investigation of stress-induced martensitic transformation in granular shape memory ceramic packings. <i>Acta Materialia</i> , 2019 , 168, 362-375	8.4	14
110	The migration mechanism of transition metal ions in $\text{LiNi}_{0.5}\text{Mn}_{1.5}\text{O}_4$. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 13031-13038	13	14
109	Annealing effects on the structural and magnetic properties of off-stoichiometric Fe-Mn-Ga ferromagnetic shape memory alloys. <i>Materials and Design</i> , 2016 , 104, 327-332	8.1	14

108	In-situ neutron diffraction and crystal plasticity finite element modeling to study the kinematic stability of retained austenite in bearing steels. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018 , 711, 579-587	5.3	14
107	Boosting Nitrogen Activation via Bimetallic Organic Frameworks for Photocatalytic Ammonia Synthesis. <i>ACS Catalysis</i> , 2021 , 11, 9986-9995	13.1	14
106	Probing the electrolyte infiltration behaviour of activated carbon supercapacitor electrodes by in situ neutron scattering using aqueous NaCl as electrolyte. <i>Carbon</i> , 2018 , 136, 139-142	10.4	13
105	The pressure-assisted master sintering surface. <i>Journal of Materials Science</i> , 2002 , 37, 4555-4559	4.3	13
104	In-situ TOF neutron diffraction studies of cyclic softening in superelasticity of a NiFeGaCo shape memory alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017 , 680, 324-328	5.3	12
103	Grain orientation dependence of lattice strains and intergranular damage rates in polycrystals under cyclic loading. <i>Scripta Materialia</i> , 2013 , 68, 265-268	5.6	12
102	Transition from the twinning induced plasticity to the ϵ transformation induced plasticity in a high manganese steel. <i>Acta Materialia</i> , 2018 , 161, 273-284	8.4	12
101	Mechanical properties and microstructure changes of proton exchange membrane under immersed conditions. <i>Polymer Engineering and Science</i> , 2014 , 54, 2215-2221	2.3	11
100	In situ neutron diffraction study of twin reorientation and pseudoplastic strain in NiMnGa single crystals. <i>Scripta Materialia</i> , 2011 , 65, 540-543	5.6	11
99	Texture Evolution and Phase Transformation in Titanium Investigated by In-Situ Neutron Diffraction. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2011 , 42, 1444-1448	2.3	11
98	Synthesis and catalytic performance of polydopamine supported metal nanoparticles. <i>Scientific Reports</i> , 2020 , 10, 10416	4.9	10
97	Effect of nickel on the kinematic stability of retained austenite in carburized bearing steels [In-situ neutron diffraction and crystal plasticity modeling of uniaxial tension tests in AISI 8620, 4320 and 3310 steels. <i>International Journal of Plasticity</i> , 2020 , 131, 102748	7.6	10
96	Grain Orientation Dependence of the Residual Lattice Strain in a Cold Rolled Interstitial-Free Steel. <i>Steel Research International</i> , 2018 , 89, 1700408	1.6	10
95	Characterization and analyses of degradation and recovery of LaNi _{4.78} Sn _{0.22} hydrides following thermal aging. <i>Journal of Alloys and Compounds</i> , 2013 , 580, S207-S210	5.7	10
94	Durability of (Pr _{0.7} Sr _{0.3})MnO ₃ /YSZ composite cathodes for solid oxide fuel cells. <i>Journal of Power Sources</i> , 2006 , 158, 254-262	8.9	10
93	Tuning Both Anionic and Cationic Redox Chemistry of Li-Rich Li _{1.2} Mn _{0.6} Ni _{0.2} O ₂ via a Three-in-One Strategy. <i>Chemistry of Materials</i> , 2020 , 32, 9404-9414	9.6	10
92	Multiscale mechanical fatigue damage of stainless steel investigated by neutron diffraction and X-ray microdiffraction. <i>Acta Materialia</i> , 2019 , 165, 336-345	8.4	10
91	Lean duplex TRIP steel: Role of ferrite in the texture development, plastic anisotropy, martensitic transformation kinetics, and stress partitioning. <i>Materialia</i> , 2021 , 15, 100952	3.2	10

90	Effect of external stress on deuteride (hydride) precipitation in Zircaloy-4 using in situ neutron diffraction. <i>Journal of Nuclear Materials</i> , 2017 , 487, 396-405	3.3	9
89	Stress-induced charge-ordering process in LiMn2O4. <i>Materials Research Letters</i> , 2017 , 5, 89-94	7.4	9
88	In-situ neutron diffraction of LaCoO3 perovskite under uniaxial compression. II. Elastic properties. <i>Journal of Applied Physics</i> , 2014 , 116, 013504	2.5	9
87	Strain incompatibility and residual strains in ferroelectric single crystals. <i>Scientific Reports</i> , 2012 , 2, 929	4.9	9
86	Radial distribution of martensitic phase transformation in a metastable stainless steel under torsional deformation: A synchrotron X-ray diffraction study. <i>Materials Letters</i> , 2011 , 65, 3013-3015	3.3	9
85	Changes in lattice-strain profiles around a fatigue crack through the retardation period after overloading. <i>Physica B: Condensed Matter</i> , 2006 , 385-386, 633-635	2.8	9
84	Design and Optimization of the Direct Recycling of Spent Li-Ion Battery Cathode Materials. <i>ACS Sustainable Chemistry and Engineering</i> , 2021 , 9, 4543-4553	8.3	9
83	Enhancing fatigue life by ductile-transformable multicomponent B2 precipitates in a high-entropy alloy. <i>Nature Communications</i> , 2021 , 12, 3588	17.4	9
82	Revealing the Structural Stability and Na-Ion Mobility of 3D Superionic Conductor Na3SbS4 at Extremely Low Temperatures. <i>ACS Applied Energy Materials</i> , 2018 , 1, 7028-7034	6.1	9
81	Improving the oxygen redox reversibility of Li-rich battery cathode materials via Coulombic repulsive interactions strategy. <i>Nature Communications</i> , 2022 , 13, 1123	17.4	9
80	A High-Temperature Neutron Diffraction Study of Nb2AlC and TiNbAlC. <i>Journal of the American Ceramic Society</i> , 2015 , 98, 940-947	3.8	8
79	Applying neutron transmission physics and 3D statistical full-field model to understand 2D Bragg-edge imaging. <i>Journal of Applied Physics</i> , 2018 , 123, 074901	2.5	8
78	Real-Time In Situ Neutron Diffraction Investigation of Phase-Specific Load Sharing in a Cold-Rolled TRIP Sheet Steel. <i>Jom</i> , 2018 , 70, 1576-1586	2.1	8
77	PIND: High spatial resolution by pinhole neutron diffraction. <i>Applied Physics Letters</i> , 2018 , 112, 253501	3.4	8
76	Design and implementation of a multiaxial loading capability during heating on an engineering neutron diffractometer. <i>Review of Scientific Instruments</i> , 2014 , 85, 103901	1.7	8
75	In situ neutron diffraction analysis of grain structure during friction stir processing of an aluminum alloy. <i>Materials Letters</i> , 2012 , 85, 29-32	3.3	8
74	Evolution of residual-strain distribution through an overload-induced retardation period during fatigue-crack growth. <i>Journal of Applied Physics</i> , 2010 , 107, 023517	2.5	8
73	High performance and low thermal expansion in Er-Fe-V-Mo dual-phase alloys. <i>Acta Materialia</i> , 2020 , 198, 271-280	8.4	8

72	In situ neutron scattering study of nanoscale phase evolution in PbTe-PbS thermoelectric material. <i>Applied Physics Letters</i> , 2016 , 109, 081903	3.4	8
71	On plastic anisotropy and deformation history-driven anelasticity of an extruded magnesium alloy. <i>Scripta Materialia</i> , 2020 , 176, 36-41	5.6	8
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69	Bioinspired Construction of g-C ₃ N ₄ Nanolayers on a Carbonized Polydopamine Nanosphere Surface with Excellent Photocatalytic Performance. <i>Industrial & Engineering Chemistry Research</i> , 2020 , 59, 12389-12398	3.9	7
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