

Jonathan D Poplawsky

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

146 papers	4,353 citations	34 h-index	62 g-index
161 ext. papers	5,643 ext. citations	7 avg, IF	5.78 L-index

#	Paper	IF	Citations
146	A creep-resistant additively manufactured Al-Ce-Ni-Mn alloy. <i>Acta Materialia</i> , 2022 , 227, 117699	8.4	3
145	Nano-scale insights regarding coke formation in zeolite SSZ-13 subject to the methanol-to-hydrocarbons reaction.. <i>Catalysis Science and Technology</i> , 2022 , 12, 1220-1228	5.5	2
144	Measuring oxygen solubility in Ni grains and boundaries after oxidation using atom probe tomography. <i>Scripta Materialia</i> , 2022 , 210, 114411	5.6	0
143	Microstructural evolution and strengthening mechanisms in a heat-treated additively manufactured AlCuMnZr alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022 , 840, 142928	5.3	2
142	Effect of heavy ion irradiation dose rate and temperature on θ precipitation in high purity Fe-18%Cr alloy. <i>Acta Materialia</i> , 2022 , 231, 117888	8.4	0
141	Superior High-Temperature Strength in a Supersaturated Refractory High-Entropy Alloy. <i>Advanced Materials</i> , 2021 , 33, e2102401	24	7
140	Effects of niobium and tantalum on the microstructure and strength of ferritic-martensitic steels. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021 , 807, 140900	5.3	7
139	Examining the creep strengthening nanoprecipitation in novel highly reinforced heat resistant steels. <i>Materials Characterization</i> , 2021 , 174, 110982	3.9	0
138	The subsurface structure of abraded AlZnMgCu alloy. <i>Materialia</i> , 2021 , 16, 101065	3.2	
137	The role of Si in determining the stability of the θ precipitate in Al-Cu-Mn-Zr alloys. <i>Journal of Alloys and Compounds</i> , 2021 , 862, 158152	5.7	4
136	Correlating advanced microscopies reveals atomic-scale mechanisms limiting lithium-ion battery lifetime. <i>Nature Communications</i> , 2021 , 12, 3740	17.4	3
135	Atomic structures of interfacial solute gateways to θ precipitates in Al-Cu alloys. <i>Acta Materialia</i> , 2021 , 212, 116891	8.4	5
134	Bifunctional nanoprecipitates strengthen and ductilize a medium-entropy alloy. <i>Nature</i> , 2021 , 595, 245-249	36.4	32
133	Understanding the influence of grain size on θ Cr precipitation in Fe-21Cr-5Al alloy during thermal aging using atom probe tomography. <i>Microscopy and Microanalysis</i> , 2021 , 27, 3380-3382	0.5	0
132	High-throughput design of high-performance lightweight high-entropy alloys. <i>Nature Communications</i> , 2021 , 12, 4329	17.4	25
131	Nanoscale Chemical Imaging in Zeolite Catalysts by Atom Probe Tomography. <i>Microscopy and Microanalysis</i> , 2021 , 27, 984-985	0.5	
130	Aging behavior and strengthening mechanisms of coarsening resistant metastable θ precipitates in an AlCu alloy. <i>Materials and Design</i> , 2021 , 198, 109378	8.1	20

129	The detrimental effect of elemental contaminants when using B additions to improve the creep properties of a Ni-based superalloy. <i>Scripta Materialia</i> , 2021 , 201, 113971	5.6	1
128	Strength can be controlled by edge dislocations in refractory high-entropy alloys. <i>Nature Communications</i> , 2021 , 12, 5474	17.4	7
127	High radiation tolerance of an ultrastrong nanostructured NiCoCr alloy with stable dispersed nanooxides and fine grain structure. <i>Journal of Nuclear Materials</i> , 2021 , 557, 153316	3.3	2
126	Gradient cell-structured high-entropy alloy with exceptional strength and ductility. <i>Science</i> , 2021 , 374, 984-989	33.3	49
125	Influence of artificial aging on corrosion of abraded Al-Zn-Mg-Cu alloys. <i>Corrosion Science</i> , 2021 , 191, 109745	6.8	1
124	Elevated temperature ductility dip in an additively manufactured Al-Cu-Ce alloy. <i>Acta Materialia</i> , 2021 , 220, 117285	8.4	9
123	Understanding the microstructural stability in a δ -strengthened Ni-Fe-Cr-Al-Ti alloy. <i>Journal of Alloys and Compounds</i> , 2021 , 886, 161207	5.7	1
122	Localized corrosion at nm-scale hardening precipitates in Al-Cu-Li alloys. <i>Acta Materialia</i> , 2020 , 189, 204-213	8.13	17
121	Colossal oxygen vacancy formation at a fluorite-bixbyite interface. <i>Nature Communications</i> , 2020 , 11, 1371	17.4	23
120	Structural damage and phase stability of Al _{0.3} CoCrFeNi high entropy alloy under high temperature ion irradiation. <i>Acta Materialia</i> , 2020 , 188, 1-15	8.4	42
119	Coupling computational thermodynamics with density-function-theory based calculations to design L12 precipitates in Fe Ni based alloys. <i>Materials and Design</i> , 2020 , 191, 108592	8.1	4
118	Probing Heterogeneity in Bovine Enamel Composition through Nanoscale Chemical Imaging using Atom Probe Tomography. <i>Archives of Oral Biology</i> , 2020 , 112, 104682	2.8	1
117	Interpreting nanovoids in atom probe tomography data for accurate local compositional measurements. <i>Nature Communications</i> , 2020 , 11, 1022	17.4	16
116	Directly Linking Low-Angle Grain Boundary Misorientation to Device Functionality for GaAs Grown on Flexible Metal Substrates. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 10664-10672	9.5	2
115	The synergistic role of Mn and Zr/Ti in producing δ /L12 co-precipitates in Al-Cu alloys. <i>Acta Materialia</i> , 2020 , 194, 577-586	8.4	31
114	The origin of passivity in aluminum-manganese solid solutions. <i>Corrosion Science</i> , 2020 , 173, 108749	6.8	6
113	Examining the multi-scale complexity and the crystallographic hierarchy of isothermally treated bainitic and martensitic structures. <i>Materials Characterization</i> , 2020 , 160, 110127	3.9	5
112	Radiation response of a Fe ₂₀ Cr ₂₅ Ni austenitic stainless steel under Fe ²⁺ irradiation at 500°C. <i>Materialia</i> , 2020 , 9, 100542	3.2	4

111	Fabrication and Characterization of Composite Membranes for the Concentration of Lithium Containing Solutions Using Forward Osmosis. <i>Advanced Sustainable Systems</i> , 2020 , 4, 2000165	5.9	4
110	Irradiation-induced segregation at dislocation loops in CoCrFeMnNi high entropy alloy. <i>Materialia</i> , 2020 , 14, 100951	3.2	5
109	Partitioning of tramp elements Cu and Si in a Ni-based superalloy and their effect on creep properties. <i>Materialia</i> , 2020 , 13, 100843	3.2	3
108	Lattice-Distortion-Enhanced Yield Strength in a Refractory High-Entropy Alloy. <i>Advanced Materials</i> , 2020 , 32, e2004029	24	40
107	Perspectives on Quenching and Tempering 4340 Steel. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2020 , 51, 4984-5005	2.3	8
106	Structural, band and electrical characterization of $\text{Al}_{0.19}\text{Ga}_{0.81}\text{O}_3$ films grown by molecular beam epitaxy on Sn doped Ga_2O_3 substrate. <i>Journal of Applied Physics</i> , 2019 , 126, 095702	2.5	19
105	Multi-modal characterization approach to understand proton transport mechanisms in solid oxide fuel cells. <i>Microscopy and Microanalysis</i> , 2019 , 25, 2048-2049	0.5	
104	Peierls barrier characteristic and anomalous strain hardening provoked by dynamic-strain-aging strengthening in a body-centered-cubic high-entropy alloy. <i>Materials Research Letters</i> , 2019 , 7, 475-481	7.4	18
103	Direct observation of creep strengthening nanoprecipitate formation in ausformed ferritic/martensitic steels. <i>Scripta Materialia</i> , 2019 , 164, 76-81	5.6	7
102	Understanding Mechanical Properties of Nano-Grained Bainitic Steels from Multiscale Structural Analysis. <i>Metals</i> , 2019 , 9, 426	2.3	4
101	Stable Metallic Enrichment in Conductive Filaments in TaOx-Based Resistive Switches Arising from Competing Diffusive Fluxes. <i>Advanced Electronic Materials</i> , 2019 , 5, 1800954	6.4	22
100	Mechanisms for stabilizing Al_2Cu precipitates at elevated temperatures investigated with phase field modeling. <i>Materialia</i> , 2019 , 6, 100335	3.2	17
99	Cascading microstructures in aluminum-steel interfaces created by impact welding. <i>Materials Characterization</i> , 2019 , 151, 119-128	3.9	15
98	Shape-preserving machining produces gradient nanolaminate medium entropy alloys with high strain hardening capability. <i>Acta Materialia</i> , 2019 , 170, 176-186	8.4	27
97	Cascading phase transformations in high carbon steel resulting in the formation of inverse bainite: An atomic scale investigation. <i>Scientific Reports</i> , 2019 , 9, 5597	4.9	1
96	Interpreting Voids in Atom Probe Tomography Data via Experiment and Theory. <i>Microscopy and Microanalysis</i> , 2019 , 25, 290-291	0.5	
95	In-situ TEM analysis of the phase transformation mechanism of a CuAlNi shape memory alloy. <i>Journal of Alloys and Compounds</i> , 2019 , 808, 151743	5.7	7
94	Elevated temperature microstructural stability in cast AlCuMnZr alloys through solute segregation. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019 , 765, 138279	5.3	49

93	Investigating Effects of Alloy Chemical Complexity on Helium Bubble Formation by Accurate Segregation Measurements Using Atom Probe Tomography. <i>Microscopy and Microanalysis</i> , 2019 , 25, 1558-1559	0.5	4
92	The Utility of Xe-Plasma FIB for Preparing Aluminum Alloy Specimens for MEMS-based In Situ Double-Tilt Heating Experiments. <i>Microscopy and Microanalysis</i> , 2019 , 25, 1442-1443	0.5	
91	Validation of an alloy design strategy for stable FeCrAlNb-X ferritic alloys using electron microscopy and atom probe tomography. <i>Materials Characterization</i> , 2019 , 158, 109987	3.9	9
90	Influence of Alloying on σ -Phase Separation in Duplex Stainless Steels. <i>Minerals, Metals and Materials Series</i> , 2019 , 2399-2408	0.3	0
89	Phase transformations of HfNbTaTiZr high-entropy alloy at intermediate temperatures. <i>Scripta Materialia</i> , 2019 , 158, 50-56	5.6	85
88	Probing the Location and Speciation of Elements in Zeolites with Correlated Atom Probe Tomography and Scanning Transmission X-Ray Microscopy. <i>ChemCatChem</i> , 2019 , 11, 488-494	5.2	11
87	Novel NiAl-strengthened high entropy alloys with balanced tensile strength and ductility. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019 , 742, 636-647	5.3	28
86	Extremely hard amorphous-crystalline hybrid steel surface produced by deformation induced cementite amorphization. <i>Acta Materialia</i> , 2018 , 152, 107-118	8.4	12
85	Investigation of pre-existing particles in Al 5083 alloys. <i>Journal of Alloys and Compounds</i> , 2018 , 740, 461-469	3.7	39
84	Influence of Nonstoichiometry on Proton Conductivity in Thin-Film Yttrium-Doped Barium Zirconate. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 4816-4823	9.5	11
83	Phase stability and transformation in a light-weight high-entropy alloy. <i>Acta Materialia</i> , 2018 , 146, 280-293	2.4	76
82	Nanoscale Chemical Imaging of Zeolites Using Atom Probe Tomography. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 10422-10435	16.4	20
81	On spinodal decomposition in alnico - A transmission electron microscopy and atom probe tomography study. <i>Acta Materialia</i> , 2018 , 153, 15-22	8.4	11
80	Effects of temperature on the irradiation responses of Al _{0.1} CoCrFeNi high entropy alloy. <i>Scripta Materialia</i> , 2018 , 144, 31-35	5.6	71
79	Influence of Alloying on σ -Phase Separation in Duplex Stainless Steels. <i>Minerals, Metals and Materials Series</i> , 2018 , 1183-1192	0.3	
78	Evaluation of Carbon Partitioning in New Generation of Quench and Partitioning (Q&P) Steels. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2018 , 49, 4809-4823	2.3	9
77	Enhanced strength and ductility of a tungsten-doped CoCrNi medium-entropy alloy. <i>Journal of Materials Research</i> , 2018 , 33, 3301-3309	2.5	31
76	Isolating Clusters of Light Elements in Molecular Sieves with Atom Probe Tomography. <i>Journal of the American Chemical Society</i> , 2018 , 140, 9154-9158	16.4	20

75	Meta-equilibrium transition microstructure for maximum austenite stability and minimum hardness in a Ti-stabilized supermartensitic stainless steel. <i>Materials and Design</i> , 2018 , 156, 609-621	8.1	11
74	Nanoskalige chemische Bildgebung von Zeolithen durch Atomsondentomographie. <i>Angewandte Chemie</i> , 2018 , 130, 10580-10593	3.6	1
73	Unraveling the Effects of Strontium Incorporation on Barite Growth In Situ and Ex Situ Observations Using Multiscale Chemical Imaging. <i>Crystal Growth and Design</i> , 2018 , 18, 5521-5533	3.5	16
72	Revealing long- and short-range structural modifications within phosphorus-treated HZSM-5 zeolites by atom probe tomography, nuclear magnetic resonance and powder X-ray diffraction. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 27766-27777	3.6	13
71	Revealing the beneficial role of K in grain interiors, grain boundaries, and at the buffer interface for highly efficient CuInSe ₂ solar cells. <i>Progress in Photovoltaics: Research and Applications</i> , 2018 , 26, 825-834	6.8	15
70	Compositional analysis on the reverted austenite and tempered martensite in a Ti-stabilized supermartensitic stainless steel: Segregation, partitioning and carbide precipitation. <i>Materials and Design</i> , 2018 , 140, 95-105	8.1	35
69	Hot Straining and Quenching and Partitioning of a TRIP-Assisted Steel: Microstructural Characterization and Mechanical Properties. <i>Materials Science Forum</i> , 2018 , 941, 704-710	0.4	0
68	Carbon Clustering in Low-Temperature Bainite. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2018 , 49, 5277-5287	2.3	15
67	Lattice distortion in a strong and ductile refractory high-entropy alloy. <i>Acta Materialia</i> , 2018 , 160, 158-172	8.4	173
66	Efficient, Parallel At-scale Correlation Analysis for Atom Probe Tomography on Hybrid Architectures 2018 ,		1
65	The Influence of Local Distortions on Proton Mobility in Acceptor Doped Perovskites. <i>Chemistry of Materials</i> , 2018 , 30, 4919-4925	9.6	23
64	The effect of carbon on the microstructures, mechanical properties, and deformation mechanisms of thermo-mechanically treated Fe _{40.4} Ni _{11.3} Mn _{34.8} Al _{7.5} Cr ₆ high entropy alloys. <i>Acta Materialia</i> , 2017 , 126, 346-360	8.4	139
63	Microstructural evolution of single Ni ₂ TiAl or hierarchical NiAl/Ni ₂ TiAl precipitates in Fe-Ni-Al-Cr-Ti ferritic alloys during thermal treatment for elevated-temperature applications. <i>Acta Materialia</i> , 2017 , 127, 1-16	8.4	44
62	Characterization of the effects of different tempers and aging temperatures on the precipitation behavior of Al-Mg (5.25 at.%) -Mn alloys. <i>Materials and Design</i> , 2017 , 118, 22-35	8.1	21
61	Characterizing and modeling the precipitation of Mg-rich phases in Al 5xxx alloys aged at low temperatures. <i>Journal of Materials Science and Technology</i> , 2017 , 33, 991-1003	9.1	18
60	Microstructural and magnetic property evolution with different heat-treatment conditions in an alnico alloy. <i>Acta Materialia</i> , 2017 , 133, 73-80	8.4	34
59	Quantitative assessment of carbon allocation anomalies in low temperature bainite. <i>Acta Materialia</i> , 2017 , 133, 333-345	8.4	42
58	Primary and secondary precipitates in a hierarchical-precipitate-strengthened ferritic alloy. <i>Journal of Alloys and Compounds</i> , 2017 , 706, 584-588	5.7	12

57	Secondary phases in Al _x CoCrFeNi high-entropy alloys: An in-situ TEM heating study and thermodynamic appraisal. <i>Acta Materialia</i> , 2017 , 131, 206-220	8.4	194
56	Carbon concentration measurements by atom probe tomography in the ferritic phase of high-silicon steels. <i>Acta Materialia</i> , 2017 , 125, 359-368	8.4	29
55	Accurate Quantification of Si/SiGe Interface Profiles via Atom Probe Tomography. <i>Advanced Materials Interfaces</i> , 2017 , 4, 1700622	4.6	14
54	Rapid Diffusion and Nanosegregation of Hydrogen in Magnesium Alloys from Exposure to Water. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 38125-38134	9.5	10
53	Atom-probe study of Cu and NiAl nanoscale precipitation and interfacial segregation in a nanoparticle-strengthened steel. <i>Materials Research Letters</i> , 2017 , 5, 562-568	7.4	22
52	Nanoscale Chemical Imaging of Coking Mechanisms in a Zeolite ZSM-5 Crystal by Atom Probe Tomography. <i>Microscopy and Microanalysis</i> , 2017 , 23, 674-675	0.5	5
51	Heterogeneous Creep Deformations and Correlation to Microstructures in Fe-30Cr-3Al Alloys Strengthened by an Fe ₂ Nb Laves Phase. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2017 , 48, 4598-4614	2.3	13
50	Nanoscale tomography reveals the deactivation of automotive copper-exchanged zeolite catalysts. <i>Nature Communications</i> , 2017 , 8, 1666	17.4	74
49	Atom Probe Tomography Unveils Formation Mechanisms of Wear-Protective Tribofilms by ZDDP, Ionic Liquid, and Their Combination. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 23152-23163	9.5	26
48	Understanding individual defects in CdTe thin-film solar cells via STEM: From atomic structure to electrical activity. <i>Materials Science in Semiconductor Processing</i> , 2017 , 65, 64-76	4.3	22
47	Recent Progress of Correlative Transmission Electron Microscopy and Atom Probe Tomography for Materials Characterization. <i>Microscopy and Microanalysis</i> , 2017 , 23, 692-693	0.5	
46	Structure and dynamics of shear bands in amorphous-crystalline nanolaminates. <i>Scripta Materialia</i> , 2016 , 110, 28-32	5.6	21
45	The effect of interstitial carbon on the mechanical properties and dislocation substructure evolution in Fe _{40.4} Ni _{11.3} Mn _{34.8} Al _{7.5} Cr ₆ high entropy alloys. <i>Acta Materialia</i> , 2016 , 120, 228-239	8.4	250
44	Atomic migration of carbon in hard turned layers of carburized bearing steel. <i>CIRP Annals - Manufacturing Technology</i> , 2016 , 65, 85-88	4.9	5
43	Understanding phase stability of Al-Co-Cr-Fe-Ni high entropy alloys. <i>Materials and Design</i> , 2016 , 109, 425-433	8.1	154
42	Complex Nano-Scale Structures for Unprecedented Properties in Steels. <i>Materials Science Forum</i> , 2016 , 879, 2401-2406	0.4	2
41	Characterizing Alnico Alloy by Correlative STEM-EDS Tomography and Atom Probe Tomography. <i>Microscopy and Microanalysis</i> , 2016 , 22, 668-669	0.5	
40	Visualization of Current and Mapping of Elements in Quantum Dot Solar Cells. <i>Advanced Functional Materials</i> , 2016 , 26, 895-902	15.6	1

39	Nanoscale doping profiles within CdTe grain boundaries and at the CdS/CdTe interface revealed by atom probe tomography and STEM EBIC. <i>Solar Energy Materials and Solar Cells</i> , 2016 , 150, 95-101	6.4	26
38	The role of silicon, vacancies, and strain in carbon distribution in low temperature bainite. <i>Journal of Alloys and Compounds</i> , 2016 , 673, 289-294	5.7	9
37	Spinodal Decomposition in an Alnico Alloy. <i>Microscopy and Microanalysis</i> , 2016 , 22, 670-671	0.5	2
36	Quantification of Atomic Arrangements at Heterostructure Interfaces. <i>Microscopy and Microanalysis</i> , 2016 , 22, 1502-1503	0.5	
35	Considerations and Challenges with Characterizing Si/SiGe Interfaces. <i>Microscopy and Microanalysis</i> , 2016 , 22, 1450-1451	0.5	
34	Coke Formation in a Zeolite Crystal During the Methanol-to-Hydrocarbons Reaction as Studied with Atom Probe Tomography. <i>Angewandte Chemie</i> , 2016 , 128, 11339-11343	3.6	13
33	Correlative Energy-Dispersive X-Ray Spectroscopic Tomography and Atom Probe Tomography of the Phase Separation in an Alnico 8 Alloy. <i>Microscopy and Microanalysis</i> , 2016 , 22, 1251-1260	0.5	25
32	Atom Probe Tomography of Interfacial Segregation in CdTe-based Solar Cells. <i>Microscopy and Microanalysis</i> , 2016 , 22, 646-647	0.5	
31	Effects of Fe concentration on the ion-irradiation induced defect evolution and hardening in Ni-Fe solid solution alloys. <i>Acta Materialia</i> , 2016 , 121, 365-373	8.4	54
30	Structural and compositional dependence of the CdTe _{1-x} Se _x alloy layer photoactivity in CdTe-based solar cells. <i>Nature Communications</i> , 2016 , 7, 12537	17.4	82
29	APT mass spectrometry and SEM data for CdTe solar cells. <i>Data in Brief</i> , 2016 , 7, 779-785	1.2	1
28	Effects of welding and post-weld heat treatments on nanoscale precipitation and mechanical properties of an ultra-high strength steel hardened by NiAl and Cu nanoparticles. <i>Acta Materialia</i> , 2016 , 120, 216-227	8.4	25
27	An atom probe perspective on phase separation and precipitation in duplex stainless steels. <i>Nanotechnology</i> , 2016 , 27, 254004	3.4	36
26	Coke Formation in a Zeolite Crystal During the Methanol-to-Hydrocarbons Reaction as Studied with Atom Probe Tomography. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 11173-7	16.4	56
25	Perovskite Solar Cells with Near 100% Internal Quantum Efficiency Based on Large Single Crystalline Grains and Vertical Bulk Heterojunctions. <i>Journal of the American Chemical Society</i> , 2015 , 137, 9210-3	16.4	210
24	Phase Separation in Lean-Grade Duplex Stainless Steel 2101. <i>Jom</i> , 2015 , 67, 2216-2222	2.1	10
23	Current Enhancement of CdTe-Based Solar Cells. <i>IEEE Journal of Photovoltaics</i> , 2015 , 5, 1492-1496	3.7	35
22	CdSe _{1-x} Te _x Phase Segregation in CdSe/CdTe Based Solar Cells. <i>Microscopy and Microanalysis</i> , 2015 , 21, 691-692	0.5	2

21	Ferritic Alloys with Extreme Creep Resistance via Coherent Hierarchical Precipitates. <i>Scientific Reports</i> , 2015 , 5, 16327	4.9	66
20	Controllable Growth of Perovskite Films by Room-Temperature Air Exposure for Efficient Planar Heterojunction Photovoltaic Cells. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 14862-5	16.4	37
19	Controllable Growth of Perovskite Films by Room-Temperature Air Exposure for Efficient Planar Heterojunction Photovoltaic Cells. <i>Angewandte Chemie</i> , 2015 , 127, 15075-15078	3.6	2
18	Physics of grain boundaries in polycrystalline photovoltaic semiconductors. <i>Journal of Applied Physics</i> , 2015 , 117, 112807	2.5	44
17	Grain-boundary-enhanced carrier collection in CdTe solar cells. <i>Physical Review Letters</i> , 2014 , 112, 156103	3.4	210
16	Disordered grain growth in polycrystalline GaN obtained by the polymer-derived-ceramic route. <i>RSC Advances</i> , 2014 , 4, 2634-2639	3.7	5
15	Direct Electronic Property Imaging of a Nanocrystal-Based Photovoltaic Device by Electron Beam-Induced Current via Scanning Electron Microscopy. <i>Journal of Physical Chemistry Letters</i> , 2014 , 5, 856-60	6.4	9
14	Direct Imaging of Cl- and Cu-Induced Short-Circuit Efficiency Changes in CdTe Solar Cells. <i>Advanced Energy Materials</i> , 2014 , 4, 1400454	21.8	58
13	Defect Physics in Photovoltaic Materials Revealed by Combined High-Resolution Microscopy and Density-Functional Theory Calculation. <i>Microscopy and Microanalysis</i> , 2014 , 20, 514-515	0.5	1
12	Understanding Individual Defects in CdTe Solar Cells: From Atomic Structure to Electrical Activity. <i>Microscopy and Microanalysis</i> , 2014 , 20, 518-519	0.5	1
11	Site Interdiffusion within Grains and Grain Boundaries in CdTe Solar Cells. <i>IEEE Journal of Photovoltaics</i> , 2014 , 4, 1636-1643	3.7	23
10	The role of donor-acceptor pairs in the excitation of Eu-ions in GaN:Eu epitaxial layers. <i>Journal of Applied Physics</i> , 2014 , 115, 204501	2.5	38
9	From atomic structure to photovoltaic properties in CdTe solar cells. <i>Ultramicroscopy</i> , 2013 , 134, 113-125	3.1	65
8	Defect roles in the excitation of Eu ions in Eu:GaN. <i>Optics Express</i> , 2013 , 21, 30633-41	3.3	8
7	Effect of thermal annealing on luminescence properties of Eu,Mg-codoped GaN grown by organometallic vapor phase epitaxy. <i>Applied Physics Letters</i> , 2013 , 102, 141904	3.4	16
6	High-resolution confocal microscopy with simultaneous electron and laser beam irradiation. <i>Microscopy and Microanalysis</i> , 2012 , 18, 1263-9	0.5	8
5	Approaches for high internal quantum efficiency green InGaN light-emitting diodes with large overlap quantum wells. <i>Optics Express</i> , 2011 , 19 Suppl 4, A991-A1007	3.3	477
4	Near-infrared photoluminescence properties of neodymium in in situ doped AlN grown using plasma-assisted molecular beam epitaxy. <i>Optical Materials Express</i> , 2011 , 1, 78	2.6	10

3	Nature and Excitation Mechanism of the Emission-dominating Minority Eu-center in GaN Grown by Organometallic Vapor-phase Epitaxy. <i>Materials Research Society Symposia Proceedings</i> , 2011 , 1342, 67		4
2	Growths of staggered InGa _N quantum wells light-emitting diodes emitting at 520/525 nm employing graded growth-temperature profile. <i>Applied Physics Letters</i> , 2009 , 95, 061104	3-4	125
1	Design and characteristics of staggered InGa _N quantum-well light-emitting diodes in the green spectral regime. <i>IET Optoelectronics</i> , 2009 , 3, 283-295	1-5	83