Judy Cha

List of Publications by Year in Descending Order

111 papers	16,823 citations	51 h-index	116 g-index
116 ext. papers	18,484 ext. citations	12.5 avg, IF	6.57 L-index

#	Paper	IF	Citations
111	Thickness-dependent phase transition kinetics in lithium-intercalated MoS2. *2D Materials*, **2022**, 9, 025009	6.9	0
110	Surface Functionalization for Magnetic Property Tuning of Nonmagnetic 2D Materials. *Advanced Materials Interfaces*, **2022**, 9, 2100463	4.6	0
109	A Gapped Phase in Semimetallic T -WTe Induced by Lithium Intercalation.. *Advanced Materials*, **2022**, e2200861	24	0
108	Unconventional grain growth suppression in oxygen-rich metal oxide nanoribbons. *Science Advances*, **2021**, 7, eabh2012	14.3	3
107	Surface characterization of ultrathin atomic layer deposited molybdenum oxide films using high-sensitivity low-energy ion scattering. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2021**, 39, 063210	2.9	0
106	Materials for interconnects. *MRS Bulletin*, **2021**, 46, 959	3.2	9
105	Synergistic Integration of Chemo-Resistive and SERS Sensing for Label-Free Multiplex Gas Detection (Adv. Mater. 44/2021). *Advanced Materials*, **2021**, 33, 2170350	24	
104	Synthesis of Narrow SnTe Nanowires Using Alloy Nanoparticles. *ACS Applied Electronic Materials*, **2021**, 3, 184-191	4	2
103	Revisiting Intercalation-Induced Phase Transitions in 2D Group VI Transition Metal Dichalcogenides. *Advanced Energy and Sustainability Research*, **2021**, 2, 2100027	1.6	4
102	cm-Scale Synthesis of MoTe Thin Films with Large Grains and Layer Control. *ACS Nano*, **2021**, 15, 410-418	16.7	12
101	Heterointerface Effects on Lithium-Induced Phase Transitions in Intercalated MoS. *ACS Applied Materials & Interfaces*, **2021**, 13, 10603-10611	9.5	8
100	Structure-Transport Properties of Topological Nanowires. *Microscopy and Microanalysis*, **2021**, 27, 920-921	0.5	1
99	1D topological systems for next-generation electronics. *Matter*, **2021**, 4, 2596-2598	12.7	3
98	Angstrom-scale replication of surfaces with crystallized bulk metallic glasses. *Materials Today Nano*, **2021**, 16, 100145	9.7	1
97	Synergistic Integration of Chemo-Resistive and SERS Sensing for Label-Free Multiplex Gas Detection. *Advanced Materials*, **2021**, 33, e2105199	24	4
96	The Effect of Mechanical Strain on Lithium Staging in Graphene. *Advanced Electronic Materials*, **2021**, 7, 2000981	6.4	4
95	Near-Unity Molecular Doping Efficiency in Monolayer MoS2. *Advanced Electronic Materials*, **2021**, 7, 2000873	6.4	9

94	A Highly Efficient All-Solid-State Lithium/Electrolyte Interface Induced by an Energetic Reaction. *Angewandte Chemie - International Edition*, **2020**, 59, 14003-14008	16.4	33
93	General Nanomolding of Ordered Phases. *Physical Review Letters*, **2020**, 124, 036102	7.4	11
92	Synthesis and resistivity of topological metal MoP nanostructures. *APL Materials*, **2020**, 8, 011103	5.7	7
91	Crossover between weak antilocalization and weak localization in few-layer WTe2: Role of electron-electron interactions. *Physical Review B*, **2020**, 102,	3.3	3
90	Self-Healing of a Confined Phase Change Memory Device with a Metallic Surfactant Layer. *Microscopy and Microanalysis*, **2019**, 25, 1870-1871	0.5	0
89	Synthesis of WTe Nanowires with Increased Electron Scattering. *ACS Nano*, **2019**, 13, 6455-6460	16.7	14
88	Topological nanomaterials. *Nature Reviews Materials*, **2019**, 4, 479-496	73.3	77
87	Formation and stability of complex metallic phases including quasicrystals explored through combinatorial methods. *Scientific Reports*, **2019**, 9, 7136	4.9	14
86	Recent progress on in situ characterizations of electrochemically intercalated transition metal dichalcogenides. *Nano Research*, **2019**, 12, 2126-2139	10	19
85	The development of 2D materials for electrochemical energy applications: A mechanistic approach. *APL Materials*, **2019**, 7, 030902	5.7	16
84	Unveiling the Interfacial Effects for Enhanced Hydrogen Evolution Reaction on MoS /WTe Hybrid Structures. *Small*, **2019**, 15, e1900078	11	27
83	Supercluster-coupled crystal growth in metallic glass forming liquids. *Nature Communications*, **2019**, 10, 915	17.4	19
82	Supercluster-Coupled Crystal Growth in Metallic Glass Forming Liquids. *Microscopy and Microanalysis*, **2019**, 25, 1410-1411	0.5	
81	Structure-Property Relationships of Topological Insulator Nanomaterials. *Microscopy and Microanalysis*, **2019**, 25, 962-963	0.5	
80	Dislocation-driven SnTe surface defects during chemical vapor deposition growth. *Journal of Physics and Chemistry of Solids*, **2019**, 128, 351-359	3.9	6
79	Stable Water Oxidation in Acid Using Manganese-Modified TiO Protective Coatings. *ACS Applied Materials & Interfaces*, **2018**, 10, 18805-18815	9.5	17
78	Revealing the Contribution of Individual Factors to Hydrogen Evolution Reaction Catalytic Activity. *Advanced Materials*, **2018**, 30, e1706076	24	54
77	Self-Healing of a Confined Phase Change Memory Device with a Metallic Surfactant Layer. *Advanced Materials*, **2018**, 30, 1705587	24	48

76	Synthesis of Crystalline Black Phosphorus Thin Film on Sapphire. *Advanced Materials*, **2018**, 30, 1703748	24	67
75	Dual Tuning of Ni-Co-A (A = P, Se, O) Nanosheets by Anion Substitution and Holey Engineering for Efficient Hydrogen Evolution. *Journal of the American Chemical Society*, **2018**, 140, 5241-5247	16.4	347
74	Stepwise Sulfurization from MoO3 to MoS2 via Chemical Vapor Deposition. *ACS Applied Nano Materials*, **2018**, 1, 5655-5661	5.6	48
73	Direct Synthesis of Large-Scale WTe2 Thin Films with Low Thermal Conductivity. *Advanced Functional Materials*, **2017**, 27, 1605928	15.6	64
72	Strong Metal-Phosphide Interactions in Core-Shell Geometry for Enhanced Electrocatalysis. *Nano Letters*, **2017**, 17, 2057-2063	11.5	121
71	Semipolar (202 1) GaN and InGaN Light-Emitting Diodes Grown on Sapphire. *ACS Applied Materials & Interfaces*, **2017**, 9, 14088-14092	9.5	18
70	Efficient electrical control of thin-film black phosphorus bandgap. *Nature Communications*, **2017**, 8, 14474	17.4	183
69	Ultrathin dendrimer-graphene oxide composite film for stable cycling lithium-sulfur batteries. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 3578-3583	11.5	78
68	Direct Observation Through In Situ Transmission Electron Microscope of Early States of Crystallization in Nanoscale Metallic Glasses. *Jom*, **2017**, 69, 2187-2191	2.1	5
67	Effective Interlayer Engineering of Two-Dimensional VOPO Nanosheets via Controlled Organic Intercalation for Improving Alkali Ion Storage. *Nano Letters*, **2017**, 17, 6273-6279	11.5	84
66	Synthesis and superconductivity of In-doped SnTe nanostructures. *APL Materials*, **2017**, 5, 076110	5.7	10
65	Tailoring crystallization phases in metallic glass nanorods via nucleus starvation. *Nature Communications*, **2017**, 8, 1980	17.4	27
64	General Facet-Controlled Synthesis of Single-Crystalline {010}-Oriented LiMPO4 (M = Mn, Fe, Co) Nanosheets. *Chemistry of Materials*, **2017**, 29, 10526-10533	9.6	21
63	Suppression of Magnetoresistance in Thin WTe Flakes by Surface Oxidation. *ACS Applied Materials & Interfaces*, **2017**, 9, 23175-23180	9.5	29
62	Emulating Bilingual Synaptic Response Using a Junction-Based Artificial Synaptic Device. *ACS Nano*, **2017**, 11, 7156-7163	16.7	75
61	Structural Phase Transition and Carrier Density Tuning in SnSexTe1-x Nanoplates. *Advanced Electronic Materials*, **2016**, 2, 1600144	6.4	7
60	Nanoscale Size Effects on Crystallization Kinetics of Metallic Glass Nanorods by In Situ TEM. *Microscopy and Microanalysis*, **2016**, 22, 768-769	0.5	5
59	Anisotropic Black Phosphorus Synaptic Device for Neuromorphic Applications. *Advanced Materials*, **2016**, 28, 4991-7	24	217

58	Intercalation in two-dimensional transition metal chalcogenides. *Inorganic Chemistry Frontiers*, **2016**, 3, 452-463	6.8	130
57	One-Step Synthesis of MoS2/WS2 Layered Heterostructures and Catalytic Activity of Defective Transition Metal Dichalcogenide Films. *ACS Nano*, **2016**, 10, 2004-9	16.7	135
56	Revealing Surface States in In-Doped SnTe Nanoplates with Low Bulk Mobility. *Nano Letters*, **2015**, 15, 3827-32	11.5	41
55	Recent Advances in Two-Dimensional Materials beyond Graphene. *ACS Nano*, **2015**, 9, 11509-39	16.7	1581
54	Nanoscale size effects in crystallization of metallic glass nanorods. *Nature Communications*, **2015**, 6, 8157	17.4	50
53	Microscopy and Chemical Analysis of Topological Insulator Bi2Se3 and Topological Crystalline Insulator SnTe Nanostructures. *Microscopy and Microanalysis*, **2015**, 21, 1535-1536	0.5	
52	Highly conductive single-walled carbon nanotube thin film preparation by direct alignment on substrates from water dispersions. *Langmuir*, **2015**, 31, 1155-63	4	15
51	Improving lithium-sulphur batteries through spatial control of sulphur species deposition on a hybrid electrode surface. *Nature Communications*, **2014**, 5, 3943	17.4	341
50	Metal seed layer thickness-induced transition from vertical to horizontal growth of MoS2 and WS2. *Nano Letters*, **2014**, 14, 6842-9	11.5	208
49	Chemically synthesized heterostructures of two-dimensional molybdenum/tungsten-based dichalcogenides with vertically aligned layers. *ACS Nano*, **2014**, 8, 9550-7	16.7	67
48	Surface effects on electronic transport of 2D chalcogenide thin films and nanostructures. *Nano Convergence*, **2014**, 1, 18	9.2	23
47	Synthesis of SnTe nanoplates with {100} and {111} surfaces. *Nano Letters*, **2014**, 14, 4183-8	11.5	66
46	Topological crystalline insulator nanostructures. *Nanoscale*, **2014**, 6, 14133-40	7.7	29
45	One-dimensional helical transport in topological insulator nanowire interferometers. *Nano Letters*, **2014**, 14, 2815-21	11.5	103
44	Tunable Plasmon and Optical Properties of Chalcogenide Nanoplates Using Monochromated Electron Energy Loss Spectroscopy. *Microscopy and Microanalysis*, **2014**, 20, 574-575	0.5	
43	Spatially resolved In and As distributions in InGaAs/GaP and InGaAs/GaAs quantum dot systems. *Microscopy and Microanalysis*, **2014**, 20, 614-615	0.5	
42	Optical transmission enhancement through chemically tuned two-dimensional bismuth chalcogenide nanoplates. *Nature Communications*, **2014**, 5, 5670	17.4	79
41	Spatially resolved In and As distributions in InGaAs/GaP and InGaAs/GaAs quantum dot systems. *Nanotechnology*, **2014**, 25, 465702	3.4	2

40	First-row transition metal dichalcogenide catalysts for hydrogen evolution reaction. *Energy and Environmental Science*, **2013**, 6, 3553	35.4	828
39	Electrochemical tuning of vertically aligned MoS2 nanofilms and its application in improving hydrogen evolution reaction. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 19701-6	11.5	747
38	Two-dimensional chalcogenide nanoplates as tunable metamaterials via chemical intercalation. *Nano Letters*, **2013**, 13, 5913-8	11.5	60
37	Amphiphilic surface modification of hollow carbon nanofibers for improved cycle life of lithium sulfur batteries. *Nano Letters*, **2013**, 13, 1265-70	11.5	615
36	Synthesis of MoS2 and MoSe2 films with vertically aligned layers. *Nano Letters*, **2013**, 13, 1341-7	11.5	1746
35	Ambipolar field effect in Sb-doped Bi2Se3 nanoplates by solvothermal synthesis. *Nano Letters*, **2013**, 13, 632-6	11.5	50
34	MoSe2 and WSe2 nanofilms with vertically aligned molecular layers on curved and rough surfaces. *Nano Letters*, **2013**, 13, 3426-33	11.5	579
33	Topological insulator nanostructures. *Physica Status Solidi - Rapid Research Letters*, **2013**, 7, 15-25	2.5	58
32	Functionalization of silicon nanowire surfaces with metal-organic frameworks. *Nano Research*, **2012**, 5, 109-116	10	55
31	Weak antilocalization in Bi2(Se(x)Te(1-x))3 nanoribbons and nanoplates. *Nano Letters*, **2012**, 12, 1107-11	11.5	154
30	High-mobility field-effect transistors from large-area solution-grown aligned C60 single crystals. *Journal of the American Chemical Society*, **2012**, 134, 2760-5	16.4	427
29	Chemical intercalation of zerovalent metals into 2D layered Bi2Se3 nanoribbons. *Journal of the American Chemical Society*, **2012**, 134, 13773-9	16.4	117
28	Effects of magnetic doping on weak antilocalization in narrow Bi2Se3 nanoribbons. *Nano Letters*, **2012**, 12, 4355-9	11.5	59
27	Topological insulators: The surface surfaces. *Nature Nanotechnology*, **2012**, 7, 85-6	28.7	17
26	Self-limited plasmonic welding of silver nanowire junctions. *Nature Materials*, **2012**, 11, 241-9	27	891
25	Ultra-low carrier concentration and surface-dominant transport in antimony-doped Bi_2Se_3 topological insulator nanoribbons. *Nature Communications*, **2012**, 3, 757	17.4	175
24	High-density chemical intercalation of zero-valent copper into Bi2Se3 nanoribbons. *Journal of the American Chemical Society*, **2012**, 134, 7584-7	16.4	122
23	Ambipolar field effect in the ternary topological insulator (Bi(x)Sb(1-x))2Te3 by composition tuning. *Nature Nanotechnology*, **2011**, 6, 705-9	28.7	311

22	Improving the performance of lithium-sulfur batteries by conductive polymer coating. *ACS Nano*, **2011**, 5, 9187-93	16.7	756
21	Stackable nonvolatile memory with ultra thin polysilicon film and low-leakage (Ti,Dy)xOy for low processing temperature and low operating voltages. *Microelectronic Engineering*, **2011**, 88, 3462-3465	2.5	
20	Hollow carbon nanofiber-encapsulated sulfur cathodes for high specific capacity rechargeable lithium batteries. *Nano Letters*, **2011**, 11, 4462-7	11.5	1096
19	DNAsomes: Multifunctional DNA-based nanocarriers. *Small*, **2011**, 7, 74-8	11	66
18	In situ transmission electron microscopy observation of nanostructural changes in phase-change memory. *ACS Nano*, **2011**, 5, 2742-8	16.7	40
17	One nanometer resolution electrical probe via atomic metal filament formation. *Nano Letters*, **2011**, 11, 231-5	11.5	23
16	Low reflectivity and high flexibility of tin-doped indium oxide nanofiber transparent electrodes. *Journal of the American Chemical Society*, **2011**, 133, 27-9	16.4	85
15	Highly conductive, mechanically robust, and electrochemically inactive TiC/C nanofiber scaffold for high-performance silicon anode batteries. *ACS Nano*, **2011**, 5, 8346-51	16.7	109
14	Rapid surface oxidation as a source of surface degradation factor for Bi2Se3. *ACS Nano*, **2011**, 5, 4698-703	16.7	279
13	Nano-structured textiles as high-performance aqueous cathodes for microbial fuel cells. *Energy and Environmental Science*, **2011**, 4, 1293	35.4	67
12	Magnetic doping and kondo effect in bi(2)se(3) nanoribbons. *Nano Letters*, **2010**, 10, 1076-81	11.5	109
11	Electrospun metal nanofiber webs as high-performance transparent electrode. *Nano Letters*, **2010**, 10, 4242-8	11.5	610
10	New nanostructured Li2S/silicon rechargeable battery with high specific energy. *Nano Letters*, **2010**, 10, 1486-91	11.5	547
9	Ultrathin topological insulator Bi2Se3 nanoribbons exfoliated by atomic force microscopy. *Nano Letters*, **2010**, 10, 3118-22	11.5	148
8	Few-layer nanoplates of Bi 2 Se 3 and Bi 2 Te 3 with highly tunable chemical potential. *Nano Letters*, **2010**, 10, 2245-50	11.5	370
7	Topological insulator nanowires and nanoribbons. *Nano Letters*, **2010**, 10, 329-33	11.5	263
6	High magnetoresistance tunnel junctions with MgBO barriers and NiFeB free electrodes. *Applied Physics Letters*, **2009**, 94, 112504	3.4	18
5	Free-standing nanoparticle superlattice sheets controlled by DNA. *Nature Materials*, **2009**, 8, 519-25	27	344

4	Multifunctional nanoarchitectures from DNA-based ABC monomers. *Nature Nanotechnology*, **2009**, 4, 430-6	28.7	144
3	Three-Dimensional Imaging of Carbon Nanotubes Deformed by Metal Islands. *Nano Letters*, **2007**, 7, 3770-3773	11.5	29
2	Heterointerface Control over Lithium-Induced Phase Transitions in MoS2 Nanosheets: Implications for Nanoscaled Energy Materials. *ACS Applied Nano Materials*,	5.6	3
1	Compact Super Electron-Donor to Monolayer MoS2. *Nano Letters*,	11.5	2