Miao Liu

List of Publications by Year
in descending order

82 papers	7,398 citations	94269 37 h-index	64668 79 g-index
82 all docs	82 docs citations	82 times ranked	9656 citing authors

#	Article	IF	Citations
1	Powdery mildews on crops and ornamentals in Canada: a summary of the phylogeny and taxonomy from 2000 â€“ 2019. Canadian Journal of Plant Pathology, 2022, 44, 191-218.	0.8	3
2	A large accessory genome and high recombination rates may influence global distribution and broad host range of the fungal plant pathogen Claviceps purpurea. PLoS ONE, 2022, 17, e0263496.	1.1	8
3	Pressure-induced evolution of structure and electronic property of GeP. Journal of Applied Physics, 2022, 131, .	1.1	3
4	Neotypification of Claviceps humidiphila and recognition of C. bavariensis sp. nov.. Mycotaxon, 2022, 137, 73-87.	0.1	1
5	The 168-year taxonomy of Claviceps in the light of variations: From three morphological species to four sections based on multigene phylogenies. Canadian Journal of Plant Pathology, 2022, 44, 783-792.	0.8	0
6	Superconductive materials with <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>MgB</mml:mi><mml:mn>2</mml:mn></mml:msub></mml -like structures from data-driven screening. Physical Review B, 2022, 105, .	1.1	10
7	QoS-Oriented Dynamic Power Allocation in NOMA-Based Wireless Caching Networks. IEEE Wireless Communications Letters, 2021, 10, 82-86.	3.2	19
8	Sympatric divergence of the ergot fungus, Claviceps purpurea, populations infecting agricultural and nonagricultural grasses in North America. Ecology and Evolution, 2021, 11, 273-293.	0.8	7
9	Multiple Unmanned-Aerial-Vehicles Deployment and User Pairing for Nonorthogonal Multiple Access Schemes. IEEE Internet of Things Journal, 2021, 8, 1883-1895.	5.5	50
10	Whole-Genome Comparisons of Ergot Fungi Reveals the Divergence and Evolution of Species within the Genus Claviceps Are the Result of Varying Mechanisms Driving Genome Evolution and Host Range Expansion. Genome Biology and Evolution, 2021, 13, .	1.1	17
11	Joint UL/DL Resource Allocation for UAV-Aided Full-Duplex NOMA Communications. IEEE Transactions on Communications, 2021, 69, 8474-8487.	4.9	22
12	Cross-Layer Resource Allocation for UAV-Assisted Wireless Caching Networks With NOMA. IEEE Transactions on Vehicular Technology, 2021, 70, 3428-3438.	3.9	28
13	High-Throughput Screening of Element-Doped Carbon Nanotubes Toward an Optimal One-Dimensional Superconductor. Journal of Physical Chemistry Letters, 2021, 12, 6667-6675.	2.1	4
14	Phylogeny and taxonomy of <i>Podosphaera filipendulae</i> (<i>Erysiphaceae</i>) revisited. Mycoscience, 2021, 62, 390-394.	0.3	2
15	Fungi Canadenses No. 350: EPICHLOÃ‹ GLYCERIAE. Canadian Journal of Plant Pathology, 2021, 43, 855-858.	0.8	1
16	Viable substrates for the honeycomb-borophene growth. Physical Review Materials, 2021, 5, .	0.9	4
17	Mining Indole Alkaloid Synthesis Gene Clusters from Genomes of 53 Claviceps Strains Revealed Redundant Gene Copies and an Approximate Evolutionary Hourglass Model. Toxins, 2021, 13, 799.	1.5	4
18	Evolution of the Ergot Alkaloid Biosynthetic Gene Cluster Results in Divergent Mycotoxin Profiles in Claviceps purpurea Sclerotia. Toxins, 2021, 13, 861.	1.5	7

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19	Claviceps zizaniae. Canadian Journal of Plant Pathology, 2020, 42, 260-264.	0.8	0
20	UAV-Aided Air-to-Ground Cooperative Nonorthogonal Multiple Access. IEEE Internet of Things Journal, 2020, 7, 2704-2715.	5.5	55
21	Reconciliation Problem in Polar Integrated Navigation Considering Coordinate Frame Transformation. IEEE Transactions on Vehicular Technology, 2020, 69, 10375-10379.	3.9	3
22	Four phylogenetic species of ergot from Canada and their characteristics in morphology, alkaloid production, and pathogenicity. Mycologia, 2020, 112, 974-988.	0.8	13
23	Semi-Supervised Machine Learning Aided Anomaly Detection Method in Cellular Networks. IEEE Transactions on Vehicular Technology, 2020, 69, 8459-8467.	3.9	17
24	Vacancy Occupation-Driven Polymorphic Transformation in Cobalt Ditelluride for Boosted Oxygen Evolution Reaction. ACS Nano, 2020, 14, 6968-6979.	7.3	100
25	Secrecy Outage Analysis of Transmit Antenna Selection Assisted With Wireless Power Beacon. IEEE Transactions on Vehicular Technology, 2020, 69, 7473-7482.	3.9	15
26	Smoothing-Aided Support Vector Machine Based Nonstationary Video Traffic Prediction Towards B5G Networks. IEEE Transactions on Vehicular Technology, 2020, 69, 7493-7502.	3.9	23
27	Toward Self-Adaptive Selection of Kernel Functions for Support Vector Regression in IoT-Based Marine Data Prediction. IEEE Internet of Things Journal, 2020, 7, 9943-9952.	5.5	14
28	LightAMC: Lightweight Automatic Modulation Classification via Deep Learning and Compressive Sensing. IEEE Transactions on Vehicular Technology, 2020, 69, 3491-3495.	3.9	180
29	In-situ resonant band engineering of solution-processed semiconductors generates high performance n-type thermoelectric nano-inks. Nature Communications, 2020, 11, 2069.	5.8	23
30	Exploring the sodium ion storage mechanism of gallium sulfide (Ga₂S₃): a combined experimental and theoretical approach. Nanoscale, 2019, 11, 3208-3215.	2.8	24
31	High-throughput prediction of the ground-state collinear magnetic order of inorganic materials using Density Functional Theory. Npj Computational Materials, 2019, 5, .	3.5	69
32	Iron-Doping-Induced Phase Transformation in Dual-Carbon-Confined Cobalt Diselenide Enabling Superior Lithium Storage. ACS Nano, 2019, 13, 6113-6124.	7.3	108
33	Flat AgTe Honeycomb Monolayer on Ag(111). Journal of Physical Chemistry Letters, 2019, 10, 1866-1871.	2.1	28
34	Oriented Transformation of Coâ€ŁDH into 2D/3D ZIFâ€67 to Achieve Coâ€“Nâ€“C Hybrids for Efficient Overall Water Splitting. Advanced Energy Materials, 2019, 9, 1803918.	10.2	260
35	Two-dimensional dual carbon-coupled defective nickel quantum dots towards highly efficient overall water splitting. Applied Catalysis B: Environmental, 2019, 250, 213-223.	10.8	101
36	Phylogeny of Canadian ergot fungi and a detection assay by real-time polymerase chain reaction. Mycologia, 2019, 111, 493-505.	0.8	12

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37	Data-Driven Deep Learning for Automatic Modulation Recognition in Cognitive Radios. IEEE Transactions on Vehicular Technology, 2019, 68, 4074-4077.	3.9	498
38	Robust Resource Allocation and Power Splitting in SWIPT Enabled Heterogeneous Networks: A Robust Minimax Approach. IEEE Internet of Things Journal, 2019, 6, 10799-10811.	5.5	59
39	Deep Learning-Inspired Message Passing Algorithm for Efficient Resource Allocation in Cognitive Radio Networks. IEEE Transactions on Vehicular Technology, 2019, 68, 641-653.	3.9	156
40	Deep Cognitive Perspective: Resource Allocation for NOMA-Based Heterogeneous IoT With Imperfect SIC. IEEE Internet of Things Journal, 2019, 6, 2885-2894.	5.5	208
41	Origin of negative thermal expansion in Zn₂GeO₄ revealed by high pressure study. Journal Physics D: Applied Physics, 2018, 51, 095303.	1.3	11
42	Electrostatic Estimation of Intercalant Jump-Diffusion Barriers Using Finite-Size Ion Models. Journal of Physical Chemistry Letters, 2018, 9, 628-634.	2.1	16
43	Tunable electronic coupling of cobalt sulfide/carbon composites for optimizing oxygen evolution reaction activity. Journal of Materials Chemistry A, 2018, 6, 10304-10312.	5.2	86
44	Thickness-dependent phase transition and optical behavior of MoS2 films under high pressure. Nano Research, 2018, 11, 855-863.	5.8	30
45	Nine draft genome sequences of Claviceps purpurea s.lat., including C. arundinis, C. humidiphila, and C. cf. spartinae, pseudomolecules for the pitch canker pathogen Fusarium circinatum, draft genome of Davidsoniella eucalypti, Grosmannia galeiformis, Quambalaria eucalypti, and Teratosphaeria destructans. IMA Fungus, 2018, 9, 401-418.	1.7	31
46	Screening Magnetic Two-Dimensional Atomic Crystals with Nontrivial Electronic Topology. Journal of Physical Chemistry Letters, 2018, 9, 6709-6715.	2.1	53
47	Rationalizing Perovskite Data for Machine Learning and Materials Design. Journal of Physical Chemistry Letters, 2018, 9, 6948-6954.	2.1	68
48	Al2O3 coated LiCoO2 as cathode for high-capacity and long-cycling Li-ion batteries. Chinese Chemical Letters, 2018, 29, 1768-1772.	4.8	27
49	Garnet Electrolyte Surface Degradation and Recovery. ACS Applied Energy Materials, 2018, 1, 7244-7252.	2.5	81
50	Li₂Sâ€“Embedded copper metalâ€“organic framework cathode with superior electrochemical performance for Liâ€“S batteries. New Journal of Chemistry, 2018, 42, 13775-13783.	1.4	14
51	Dynamic Hosts for High-Performance Liâ€“S Batteries Studied by Cryogenic Transmission Electron Microscopy and in Situ X-ray Diffraction. ACS Energy Letters, 2018, 3, 1325-1330.	8.8	47
52	Ultrafine Co Nanoparticles Encapsulated in Carbonâ€Nanotubesâ€Grafted Graphene Sheets as Advanced Electrocatalysts for the Hydrogen Evolution Reaction. Advanced Materials, 2018, 30, e1802011.	11.1	453
53	Utilizing a metal as a sulfur host for high performance Li-S batteries. Nano Energy, 2018, 50, 685-690.	8.2	40
54	High-throughput screening of inorganic compounds for the discovery of novel dielectric and optical materials. Scientific Data, 2017, 4, 160134.	2.4	140

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55	Rust fungi on Panicum. Mycologia, 2017, 109, 1-17.	0.8	30
56	Anharmonicity of monolayer MoS2, MoSe2, and WSe2: A Raman study under high pressure and elevated temperature. Applied Physics Letters, 2017, 110, .	1.5	79
57	Odyssey of Multivalent Cathode Materials: Open Questions and Future Challenges. Chemical Reviews, 2017, 117, 4287-4341.	23.0	914
58	General Synthesis of Dual Carbonâ€Confined Metal Sulfides Quantum Dots Toward Highâ€Performance Anodes for Sodiumâ€Ion Batteries. Advanced Functional Materials, 2017, 27, 1702046.	7.8	259
59	Fast Mg2+ diffusion in Mo3(PO4)3O for Mg batteries. Chemical Communications, 2017, 53, 7998-8001.	2.2	22
60	Strain-Mediated Interfacial Dynamics during Auâ€“PbS Coreâ€“Shell Nanostructure Formation. ACS Nano, 2016, 10, 6235-6240.	7.3	21
61	A high capacity thiospinel cathode for Mg batteries. Energy and Environmental Science, 2016, 9, 2273-2277.	15.6	349
62	Is alpha-V2O5 a cathode material for Mg insertion batteries?. Journal of Power Sources, 2016, 323, 44-50.	4.0	108
63	Evaluation of sulfur spinel compounds for multivalent battery cathode applications. Energy and Environmental Science, 2016, 9, 3201-3209.	15.6	121
64	Tunable metal-insulator transition in Nd1â^'xYxNiO3 (xâ€‰=â€‰0.3, 0.4) perovskites thin film at near room temperature. Applied Physics Letters, 2015, 107, .	1.5	3
65	First-principles evaluation of multi-valent cation insertion into orthorhombic V₂O₅. Chemical Communications, 2015, 51, 13619-13622.	2.2	148
66	Materials Design Rules for Multivalent Ion Mobility in Intercalation Structures. Chemistry of Materials, 2015, 27, 6016-6021.	3.2	445
67	Spinel compounds as multivalent battery cathodes: a systematic evaluation based on ab initio calculations. Energy and Environmental Science, 2015, 8, 964-974.	15.6	430
68	Photoluminescence of monolayer MoS₂on LaAlO₃and SrTiO₃substrates. Nanoscale, 2014, 6, 15248-15254.	2.8	122
69	Quantum manifestation of elastic constants in nanofilms. Nanotechnology, 2014, 25, 135706.	1.3	6
70	Laying the foundation for a taxonomic review of Puccinia coronata s.l. in a phylogenetic context. Mycological Progress, 2013, 12, 63-89.	0.5	37
71	Plant-Symbiotic Fungi as Chemical Engineers: Multi-Genome Analysis of the Clavicipitaceae Reveals Dynamics of Alkaloid Loci. PLoS Genetics, 2013, 9, e1003323.	1.5	344
72	Puccinia chunjii, a close relative of the cereal stem rusts revealed by molecular phylogeny and morphological study. Mycologia, 2012, 104, 1056-1067.	0.8	10

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73	Quantum Electronic Stress: Density-Functional-Theory Formulation and Physical Manifestation. Physical Review Letters, 2012, 109, 055501.	2.9	55
74	Interplay between quantum size effect and strain effect on growth of nanoscale metal thin films. Physical Review B, 2012, 86, .	1.1	22
75	Chemical versus thermal folding of graphene edges. Nano Research, 2011, 4, 1242-1247.	5.8	8
76	Taxonomic study of stripe rust, Puccinia striiformis sensu lato, based on molecular and morphological evidence. Fungal Biology, 2010, 114, 881-899.	1.1	67
77	Bistability of Nanoscale Ag Islands on a<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Si</mml:mi><mml:mo stretchy="false">(</mml:mo><mml:mn>111</mml:mn><mml:mo stretchy="false">)</mml:mo><mml:mtext mathvariant="normal">âˆ’</mml:mtext><mml:mo stretchy="false">(</mml:mo><mml:mn>4</mml:mn><mml:mo>Ã—</mml:mo><mml:mn>1</mml:mn><mml:mo) Tj ETQq1 1 0.78431 mathvariant="normal">âˆ’</mml:mtext><mml:mi>In</mml:mi></	2.9	17
78	Comparison study of the luminescent properties of the white-light long afterglow phosphors: Ca MgSi2O5+:Dy3+(x=1, 2, 3). Journal of Luminescence, 2009, 129, 531-535.	1.5	115
79	Quantum Manifestations of Graphene Edge Stress and Edge Instability: A First-Principles Study. Physical Review Letters, 2009, 102, 166404.	2.9	243
80	Collective magnetic behavior of graphene nanohole superlattices. Nano Research, 2008, 1, 56-62.	5.8	94
81	Local Structure of Nanocrystalline Lu2O3:Eu Studied by X-ray Absorption Spectroscopy. Journal of Physical Chemistry C, 2007, 111, 1945-1950.	1.5	31
82	The valence of rare earth ions in R2MgSi2O7:Eu, Dy (R = Ca, Sr) long-afterglow phosphors. Physica Status Solidi A, 2004, 201, 3109-3112.	1.7	45