

Thomas Yong-Jin Han

List of Publications by Year in descending order

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Version: 2024-02-01

40
papers

2,952
citations

279798

23
h-index

315739

38
g-index

41
all docs

41
docs citations

41
times ranked

5170
citing authors

#	ARTICLE	IF	CITATIONS
1	Highly compressible 3D periodic graphene aerogel microlattices. <i>Nature Communications</i> , 2015, 6, 6962.	12.8	928
2	Supercapacitors Based on Three-Dimensional Hierarchical Graphene Aerogels with Periodic Macropores. <i>Nano Letters</i> , 2016, 16, 3448-3456.	9.1	608
3	Ultralight Conductive Silver Nanowire Aerogels. <i>Nano Letters</i> , 2017, 17, 7171-7176.	9.1	163
4	High surface area carbon aerogel monoliths with hierarchical porosity. <i>Journal of Non-Crystalline Solids</i> , 2008, 354, 3513-3515.	3.1	145
5	Data-driven materials research enabled by natural language processing and information extraction. <i>Applied Physics Reviews</i> , 2020, 7, .	11.3	117
6	Reliable and explainable machine-learning methods for accelerated material discovery. <i>Npj Computational Materials</i> , 2019, 5, .	8.7	111
7	Investigating Processes of Nanocrystal Formation and Transformation via Liquid Cell TEM. <i>Microscopy and Microanalysis</i> , 2014, 20, 425-436.	0.4	94
8	Calcium Carbonate Storage in Amorphous Form and Its Template-Induced Crystallization. <i>Chemistry of Materials</i> , 2008, 20, 1064-1068.	6.7	91
9	Structural Development of Mercaptophenol Self-Assembled Monolayers and the Overlying Mineral Phase during Templated CaCO ₃ Crystallization from a Transient Amorphous Film. <i>Journal of the American Chemical Society</i> , 2007, 129, 10370-10381.	13.7	89
10	Machine vision-driven automatic recognition of particle size and morphology in SEM images. <i>Nanoscale</i> , 2020, 12, 19461-19469.	5.6	48
11	Structural evolution, formation pathways and energetic controls during template-directed nucleation of CaCO ₃ . <i>Faraday Discussions</i> , 2012, 159, 105.	3.2	45
12	Carbon Scaffolds for Stiff and Highly Conductive Monolithic Oxide-Carbon Nanotube Composites. <i>Chemistry of Materials</i> , 2011, 23, 3054-3061.	6.7	44
13	Multiphase separation of copper nanowires. <i>Chemical Communications</i> , 2016, 52, 11627-11630.	4.1	38
14	Synthesis of ZnO coated activated carbon aerogel by simple sol-gel route. <i>Journal of Materials Chemistry</i> , 2011, 21, 330-333.	6.7	37
15	The solubility and recrystallization of 1,3,5-triamino-2,4,6-trinitrobenzene in a 3-ethyl-1-methylimidazolium acetate-DMSO co-solvent system. <i>New Journal of Chemistry</i> , 2009, 33, 50-56.	2.8	36
16	Nanomaterial Synthesis Insights from Machine Learning of Scientific Articles by Extracting, Structuring, and Visualizing Knowledge. <i>Journal of Chemical Information and Modeling</i> , 2020, 60, 2876-2887.	5.4	35
17	Ignition and Combustion Characteristics of Nanoaluminum with Copper Oxide Nanoparticles of Differing Oxidation State. <i>Journal of Physical Chemistry C</i> , 2016, 120, 29023-29029.	3.1	29
18	Gold Aerogel Monoliths with Tunable Ultralow Densities. <i>Nano Letters</i> , 2020, 20, 131-135.	9.1	28

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19	Predicting compressive strength of consolidated molecular solids using computer vision and deep learning. <i>Materials and Design</i> , 2020, 190, 108541.	7.0	28
20	Predicting Energetics Materials's Crystalline Density from Chemical Structure by Machine Learning. <i>Journal of Chemical Information and Modeling</i> , 2021, 61, 2147-2158.	5.4	28
21	On-Demand and Location Selective Particle Assembly via Electrophoretic Deposition for Fabricating Structures with Particle-to-Particle Precision. <i>Langmuir</i> , 2015, 31, 3563-3568.	3.5	27
22	Hierarchical ZnO structures templated with amino acid based surfactants. <i>Microporous and Mesoporous Materials</i> , 2012, 151, 64-69.	4.4	24
23	Electro-Optical Device with Tunable Transparency Using Colloidal Core/Shell Nanoparticles. <i>ACS Photonics</i> , 2018, 5, 1343-1350.	6.6	24
24	Experimental Validation of the Geometrical Selection Model for Hydrothermally Grown Zinc Oxide Nanowire Arrays. <i>Chemistry of Materials</i> , 2013, 25, 1363-1371.	6.7	23
25	Tunable Amorphous Photonic Materials with Pigmentary Colloidal Nanostructures. <i>Advanced Optical Materials</i> , 2017, 5, 1600838.	7.3	21
26	Cooperative Reorganization of Mineral and Template during Directed Nucleation of Calcium Carbonate. <i>Journal of Physical Chemistry C</i> , 2013, 117, 11076-11085.	3.1	15
27	Crystal structure prediction of energetic materials and a twisted arene with Genarris and GAtor. <i>CrystEngComm</i> , 2021, 23, 6023-6038.	2.6	15
28	Shape control synthesis of fluorapatite structures based on supersaturation: prismatic nanowires, ellipsoids, star, and aggregate formation. <i>CrystEngComm</i> , 2012, 14, 6384.	2.6	14
29	Route to high surface area TiO ₂ /C and TiCN/C composites. <i>Journal of Materials Chemistry</i> , 2009, 19, 7146.	6.7	13
30	A study of real-world micrograph data quality and machine learning model robustness. <i>Npj Computational Materials</i> , 2021, 7, .	8.7	9
31	Correlating dynamic microstructure to observed color in electrophoretic displays via <i>in situ</i> small-angle x-ray scattering. <i>Physical Review Materials</i> , 2020, 4, .	2.4	6
32	Automated Identification of Molecular Crystals' Packing Motifs. <i>Journal of Chemical Information and Modeling</i> , 2020, 60, 6147-6154.	5.4	5
33	Leveraging Uncertainty from Deep Learning for Trustworthy Material Discovery Workflows. <i>ACS Omega</i> , 2021, 6, 12711-12721.	3.5	5
34	Template directed formation of nanoparticle decorated multi-walled carbon nanotube bundles with uniform diameter. <i>Nanotechnology</i> , 2011, 22, 435603.	2.6	2
35	Quantitative Analysis of Color Differences within High Contrast, Low Power Reversible Electrophoretic Displays. <i>ECS Transactions</i> , 2018, 82, 59-66.	0.5	2
36	Attribution-Driven Explanation of the Deep Neural Network Model via Conditional Microstructure Image Synthesis. <i>ACS Omega</i> , 2022, 7, 2624-2637.	3.5	2

#	ARTICLE	IF	CITATIONS
37	Design Parameters for Subwavelength Transparent Conductive Nanolattices. ACS Applied Materials & Interfaces, 2017, 9, 35360-35367.	8.0	1
38	Fabrication and 3D tomographic characterization of nanowire arrays and meshes with tunable dimensions from shear-aligned block copolymers. Soft Matter, 2019, 15, 4898-4904.	2.7	1
39	MR-GAN: Manifold Regularized Generative Adversarial Networks for Scientific Data. SIAM Journal on Mathematics of Data Science, 2021, 3, 1197-1222.	1.8	1
40	Synthesis and Characterization of Nanocarbon-Supported Titanium Dioxide. Materials Research Society Symposia Proceedings, 2009, 1174, 31.	0.1	0