Thomas Yong-Jin Han

List of Publications by Year
in descending order

40	2,952	279798	315739
papers	citations	23 h-index	38 g-index

41	41	41	5170
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Attribution-Driven Explanation of the Deep Neural Network Model via Conditional Microstructure Image Synthesis. ACS Omega, 2022, 7, 2624-2637.	3.5	2
2	Crystal structure prediction of energetic materials and a twisted arene with Genarris and GAtor. CrystEngComm, 2021, 23, 6023-6038.	2.6	15
3	Predicting Energetics Materialsâ€™ Crystalline Density from Chemical Structure by Machine Learning. Journal of Chemical Information and Modeling, 2021, 61, 2147-2158.	5.4	28
4	Leveraging Uncertainty from Deep Learning for Trustworthy Material Discovery Workflows. ACS Omega, 2021, 6, 12711-12721.	3.5	5
5	A study of real-world micrograph data quality and machine learning model robustness. Npj Computational Materials, 2021, 7, .	8.7	9
6	MR-GAN: Manifold Regularized Generative Adversarial Networks for Scientific Data. SIAM Journal on Mathematics of Data Science, 2021, 3, 1197-1222.	1.8	1
7	Gold Aerogel Monoliths with Tunable Ultralow Densities. Nano Letters, 2020, 20, 131-135.	9.1	28
8	Automated Identification of Molecular Crystalsâ€™ Packing Motifs. Journal of Chemical Information and Modeling, 2020, 60, 6147-6154.	5.4	5
9	Machine vision-driven automatic recognition of particle size and morphology in SEM images. Nanoscale, 2020, 12, 19461-19469.	5.6	48
10	Data-driven materials research enabled by natural language processing and information extraction. Applied Physics Reviews, 2020, 7, .	11.3	117
11	Predicting compressive strength of consolidated molecular solids using computer vision and deep learning. Materials and Design, 2020, 190, 108541.	7.0	28
12	Nanomaterial Synthesis Insights from Machine Learning of Scientific Articles by Extracting, Structuring, and Visualizing Knowledge. Journal of Chemical Information and Modeling, 2020, 60, 2876-2887.	5.4	35
13	Correlating dynamic microstructure to observed color in electrophoretic displays via in situ small-angle x-ray scattering. Physical Review Materials, 2020, 4, .	2.4	6
14	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
15	Reliable and explainable machine-learning methods for accelerated material discovery. Npj Computational Materials, 2019, 5, .	8.7	111
16	Electro-Optical Device with Tunable Transparency Using Colloidal Core/Shell Nanoparticles. ACS Photonics, 2018, 5, 1343-1350.	6.6	24
17	Quantitative Analysis of Color Differences within High Contrast, Low Power Reversible Electrophoretic Displays. ECS Transactions, 2018, 82, 59-66.	0.5	2
18	Tunable Amorphous Photonic Materials with Pigmentary Colloidal Nanostructures. Advanced Optical Materials, 2017, 5, 1600838.	7.3	21

#	Article	IF	Citations
19	Design Parameters for Subwavelength Transparent Conductive Nanolattices. ACS Applied Materials & Interfaces, 2017, 9, 35360-35367.	8.0	1
20	Ultralight Conductive Silver Nanowire Aerogels. Nano Letters, 2017, 17, 7171-7176.	9.1	163
21	Multiphase separation of copper nanowires. Chemical Communications, 2016, 52, 11627-11630.	4.1	38
22	Ignition and Combustion Characteristics of Nanoaluminum with Copper Oxide Nanoparticles of Differing Oxidation State. Journal of Physical Chemistry C, 2016, 120, 29023-29029.	3.1	29
23	Supercapacitors Based on Three-Dimensional Hierarchical Graphene Aerogels with Periodic Macropores. Nano Letters, 2016, 16, 3448-3456.	9.1	608
24	Highly compressible 3D periodic graphene aerogel microlattices. Nature Communications, 2015, 6, 6962.	12.8	928
25	On-Demand and Location Selective Particle Assembly via Electrophoretic Deposition for Fabricating Structures with Particle-to-Particle Precision. Langmuir, 2015, 31, 3563-3568.	3.5	27
26	Investigating Processes of Nanocrystal Formation and Transformation via Liquid Cell TEM. Microscopy and Microanalysis, 2014, 20, 425-436.	0.4	94
27	Cooperative Reorganization of Mineral and Template during Directed Nucleation of Calcium Carbonate. Journal of Physical Chemistry C, 2013, 117, 11076-11085.	3.1	15
28	Experimental Validation of the Geometrical Selection Model for Hydrothermally Grown Zinc Oxide Nanowire Arrays. Chemistry of Materials, 2013, 25, 1363-1371.	6.7	23
29	Shape control synthesis of fluorapatite structures based on supersaturation: prismatic nanowires, ellipsoids, star, and aggregate formation. CrystEngComm, 2012, 14, 6384.	2.6	14
30	Structural evolution, formation pathways and energetic controls during template-directed nucleation of CaCO3. Faraday Discussions, 2012, 159, 105.	3.2	45
31	Hierarchical ZnO structures templated with amino acid based surfactants. Microporous and Mesoporous Materials, 2012, 151, 64-69.	4.4	24
32	Synthesis of ZnO coated activated carbon aerogel by simple solâ€“gel route. Journal of Materials Chemistry, 2011, 21, 330-333.	6.7	37
33	Carbon Scaffolds for Stiff and Highly Conductive Monolithic Oxideâ€“Carbon Nanotube Composites. Chemistry of Materials, 2011, 23, 3054-3061.	6.7	44
34	Template directed formation of nanoparticle decorated multi-walled carbon nanotube bundles with uniform diameter. Nanotechnology, 2011, 22, 435603.	2.6	2
35	Synthesis and Characterization of Nanocarbon-Supported Titanium Dioxide. Materials Research Society Symposia Proceedings, 2009, 1174, 31.	0.1	0
36	The solubility and recrystallization of 1,3,5-triamino-2,4,6-trinitrobenzene in a 3-ethyl-1-methylimidazolium acetateâ€“DMSO co-solvent system. New Journal of Chemistry, 2009, 33, 50-56.	2.8	36

#	Article	IF	Citations
37	Route to high surface area TiO2/C and TiCN/C composites. Journal of Materials Chemistry, 2009, 19, 7146.	6.7	13
38	Calcium Carbonate Storage in Amorphous Form and Its Template-Induced Crystallization. Chemistry of Materials, 2008, 20, 1064-1068.	6.7	91
39	High surface area carbon aerogel monoliths with hierarchical porosity. Journal of Non-Crystalline Solids, 2008, 354, 3513-3515.	3.1	145
40	Structural Development of Mercaptophenol Self-Assembled Monolayers and the Overlying Mineral Phase during Templated CaCO₃ Crystallization from a Transient Amorphous Film. Journal of the American Chemical Society, 2007, 129, 10370-10381.	13.7	89