Grace G D Han

List of Publications by Year
in descending order

25 papers	1,282 citations	430874 18 h-index	580821 25 g-index
25 all docs	25 docs citations	25 times ranked	1450 citing authors

#	Article	IF	Citations
1	Optically-controlled long-term storage and release of thermal energy in phase-change materials. Nature Communications, 2017, 8, 1446.	12.8	210
2	Atomic Structure and Dynamics of Single Platinum Atom Interactions with Monolayer MoS₂. ACS Nano, 2017, 11, 3392-3403.	14.6	126
3	Arylazopyrazoles for Long-Term Thermal Energy Storage and Optically Triggered Heat Release below 0 Â°C. Journal of the American Chemical Society, 2020, 142, 8688-8695.	13.7	121
4	Molecularly Engineered Azobenzene Derivatives for High Energy Density Solid-State Solar Thermal Fuels. ACS Applied Materials & Interfaces, 2017, 9, 8679-8687.	8.0	97
5	Photon energy storage materials with high energy densities based on diacetyleneâ€“azobenzene derivatives. Journal of Materials Chemistry A, 2016, 4, 16157-16165.	10.3	86
6	Solid-state photoswitching molecules: structural design for isomerization in condensed phase. Materials Today Advances, 2020, 6, 100058.	5.2	83
7	Atomic electrostatic maps of 1D channels in 2D semiconductors using 4D scanning transmission electron microscopy. Nature Communications, 2019, 10, 1127.	12.8	62
8	Sunlight-activated phase change materials for controlled heat storage and triggered release. Journal of Materials Chemistry A, 2021, 9, 9798-9808.	10.3	61
9	Machine learning in scanning transmission electron microscopy. Nature Reviews Methods Primers, 2022, 2, .	21.2	59
10	Optically-regulated thermal energy storage in diverse organic phase-change materials. Chemical Communications, 2018, 54, 10722-10725.	4.1	55
11	Solar energy conversion and storage by photoswitchable organic materials in solution, liquid, solid, and changing phases. Journal of Materials Chemistry C, 2021, 9, 11444-11463.	5.5	46
12	Efficient Electrocatalytic Switching of Azoheteroarenes in the Condensed Phases. Journal of the American Chemical Society, 2021, 143, 15250-15257.	13.7	36
13	Photoluminescent Arrays of Nanopatterned Monolayer MoS₂. Advanced Functional Materials, 2017, 27, 1703688.	14.9	35
14	Photon Energy Storage in Strained Cyclic Hydrazones: Emerging Molecular Solar Thermal Energy Storage Compounds. Journal of the American Chemical Society, 2022, 144, 12627-12631.	13.7	33
15	Design of phase-transition molecular solar thermal energy storage compounds: compact molecules with high energy densities. Chemical Communications, 2021, 57, 9458-9461.	4.1	31
16	<i>In Situ</i> Atomic-Scale Studies of the Formation of Epitaxial Pt Nanocrystals on Monolayer Molybdenum Disulfide. ACS Nano, 2017, 11, 9057-9067.	14.6	27
17	Direct Imaging of Photoswitching Molecular Conformations Using Individual Metal Atom Markers. ACS Nano, 2019, 13, 87-96.	14.6	22
18	Stimuli-Responsive Organic Phase Change Materials: Molecular Designs and Applications in Energy Storage. Accounts of Materials Research, 2022, 3, 634-643.	11.7	20

#	ARTICLE	IF	CITATIONS
19	Direct Imaging of Individual Molecular Binding to Clean Nanopore Edges in 2D Monolayer MoS₂. ACS Nano, 2020, 14, 153-165.	14.6	19
20	Phase transition of spiropyrans: impact of isomerization dynamics at high temperatures. Chemical Communications, 2019, 55, 5813-5816.	4.1	17
21	Metal Atom Markers for Imaging Epitaxial Molecular Self-Assembly on Graphene by Scanning Transmission Electron Microscopy. ACS Nano, 2019, 13, 7252-7260.	14.6	13
22	Selfâ€Assembly of Bowlic Supramolecules on Graphene Imaged at the Individual Molecular Level using Heavy Atom Tagging. Small, 2020, 16, e2002860.	10.0	8
23	Precursor Design for High Density Single Pt Atom Sites on MoS₂: Enhanced Stability at Elevated Temperatures and Reduced 3D Clustering. Chemistry of Materials, 2020, 32, 2541-2551.	6.7	8
24	Photoswitchable Binary Nanopore Conductance and Selective Electronic Detection of Single Biomolecules under Wavelength and Voltage Polarity Control. ACS Nano, 2022, 16, 5537-5544.	14.6	4
25	Nanoporous Silicon-Assisted Patterning of Monolayer MoS₂ with Thermally Controlled Porosity: A Scalable Method for Diverse Applications. ACS Applied Nano Materials, 2018, 1, 3548-3556.	5.0	3