Joonsuk Huh

List of Publications by Year
in descending order

55 papers	1,064 citations	516215 16 h-index	433756 31 g-index
55 all docs	55 docs citations	55 times ranked	1197 citing authors

#	Article	IF	Citations
1	Ternary Transition Metal Chalcogenide Nb₂Pd₃Se₈: A New Candidate of 1D Van der Waals Materials for Fieldâ€Effect Transistors. Advanced Functional Materials, 2022, 32, 2108104.	7.8	19
2	Carrier mobility of one-dimensional vanadium selenide (V2Se9) monolayer and nanoribbon systems: DFT study. Nanotechnology, 2022, 33, 135703.	1.3	3
3	Unconventional assemblies of bisacylhydrazones: The role of water for circularly polarized luminescence. Aggregate, 2022, 3, .	5.2	3
4	Midwavelength Infrared Colloidal Nanowire Laser. Journal of Physical Chemistry Letters, 2022, 13, 1431-1437.	2.1	1
5	BoostSweet: Learning molecular perceptual representations of sweeteners. Food Chemistry, 2022, 383, 132435.	4.2	8
6	Unveiling two-dimensional magnesium hydride as a hydrogen storage material via a generative adversarial network. Nanoscale Advances, 2022, 4, 2332-2338.	2.2	2
7	Structural, electronic, and transport properties of 1D Ta2Ni3Se8 semiconducting material. Applied Physics Letters, 2022, 120, .	1.5	6
8	Additive-free photo-mediated oxidative cyclization of pyridinium acylhydrazones to 1,3,4-oxadiazoles: solid-state conversion in a microporous organic polymer and supramolecular energy-level engineering. RSC Advances, 2021, 11, 1969-1975.	1.7	1
9	Unveiling the role of micropores in porous carbon for Liâ€“S batteries using operando SAXS. Chemical Communications, 2021, 57, 10500-10503.	2.2	10
10	Evidence for the Coexistence of Polysulfide and Conversion Reactions in the Lithium Storage Mechanism of MoS₂ Anode Material. Chemistry of Materials, 2021, 33, 1935-1945.	3.2	16
11	Analog Quantum Simulation of Non-Condon Effects in Molecular Spectroscopy. ACS Photonics, 2021, 8, 2007-2016.	3.2	8
12	Ta₂Ni₃Se₈: 1D van der Waals Material with Ambipolar Behavior. Small, 2021, 17, e2102602.	5.2	15
13	One-dimensional van der Waals stacked p-type crystal Ta₂Pt₃Se₈ for nanoscale electronics. Nanoscale, 2021, 13, 17945-17952.	2.8	9
14	Theoretical Study of Anisotropic Carrier Mobility for Two-Dimensional Nb₂Se₉ Material. ACS Omega, 2021, 6, 26782-26790.	1.6	8
15	Tuning the electronic properties of highly anisotropic 2D dangling-bond-free sheets from 1D V₂Se₉ chain structures. Nanotechnology, 2021, 32, 095203.	1.3	6
16	Partial distinguishability as a coherence resource in boson sampling. Quantum Information Processing, 2020, 19, 1.	1.0	4
17	Edge Defect-Free Anisotropic Two-Dimensional Sheets with Nearly Direct Band Gaps from a True One-Dimensional Van der Waals Nb₂Se₉ Material. ACS Omega, 2020, 5, 10800-10807.	1.6	14
18	Sampling photons to simulate molecules. Physics Magazine, 2020, 13, .	0.1	1

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19	LiOtBu-promoted stereoselective deconjugation of Î±,Î²-unsaturated diesters probed using density functional theory. Organic Chemistry Frontiers, 2020, 7, 3427-3433.	2.3	4
20	Multimode Bogoliubov transformation and Husimiâ€™s Q-function. Journal of Physics: Conference Series, 2020, 1612, 012015.	0.3	7
21	Raman scattering of true 1D van der Waals Nb₂Se₉ nanowires. Journal of Raman Spectroscopy, 2020, 51, 1100-1107.	1.2	5
22	Connection between BosonSampling with quantum and classical input states. Optics Express, 2020, 28, 6929.	1.7	9
23	Entangling bosons through particle indistinguishability and spatial overlap. Optics Express, 2020, 28, 38083.	1.7	19
24	One-Dimensional Single-Chain Nb₂Se₉as Efficient Electrocatalyst for Hydrogen Evolution Reaction. ACS Applied Energy Materials, 2019, 2, 5785-5792.	2.5	18
25	Quantum Algorithm for Calculating Molecular Vibronic Spectra. Journal of Physical Chemistry Letters, 2019, 10, 3586-3591.	2.1	39
26	Entanglement of identical particles and coherence in the first quantization language. Physical Review A, 2019, 99, .	1.0	16
27	Experimental linear optical computing of the matrix permanent. Physical Review A, 2019, 99, .	1.0	5
28	Majorization and the time complexity of linear optical networks. Journal of Physics A: Mathematical and Theoretical, 2019, 52, 245301.	0.7	5
29	Universal bound on sampling bosons in linear optics and its computational implications. National Science Review, 2019, 6, 719-729.	4.6	11
30	Structural and electronic properties of Mo6S3I6 nanowires by newly proposed theoretical compositional ordering. Scientific Reports, 2019, 9, 1222.	1.6	7
31	Indirect-To-Direct Band Gap Transition of One-Dimensional V₂Se₉: Theoretical Study with Dispersion Energy Correction. ACS Omega, 2019, 4, 18392-18397.	1.6	27
32	New Oneâ€Đimensional Material Nb₂Se₉: Theoretical Prediction of Indirect to Direct Band Gap Transition due to Dimensional Reduction. Physica Status Solidi - Rapid Research Letters, 2019, 13, 1800517.	1.2	20
33	Dynamical Casimir Effect for Gaussian Boson Sampling. Scientific Reports, 2018, 8, 3751.	1.6	11
34	Generalized concurrence in boson sampling. Scientific Reports, 2018, 8, 6101.	1.6	18
35	Quantum optical emulation of molecular vibronic spectroscopy using a trapped-ion device. Chemical Science, 2018, 9, 836-840.	3.7	42
36	Highly concentrated single-chain atomic crystal LiMo₃Se₃ solution using ion-exchange chromatography. Chemical Communications, 2018, 54, 12503-12506.	2.2	14

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37	Approximating vibronic spectroscopy with imperfect quantum optics. Journal of Physics B: Atomic, Molecular and Optical Physics, 2018, 51, 245503.	0.6	32
38	Dynamic Covalent Hydrazone Supramolecular Polymers toward Multiresponsive Self-Assembled Nanowire System. Macromolecules, 2018, 51, 8278-8285.	2.2	13
39	Quantum Computing for Molecular Vibronic Spectra and Gaussian Boson Sampling. Journal of Physics: Conference Series, 2018, 1071, 012009.	0.3	2
40	Emulation of complex open quantum systems using superconducting qubits. Quantum Information Processing, 2017, 16, 1.	1.0	23
41	Vibronic Boson Sampling: Generalized Gaussian Boson Sampling for Molecular Vibronic Spectra at Finite Temperature. Scientific Reports, 2017, 7, 7462.	1.6	48
42	Quantum Emulation of Molecular Force Fields: A Blueprint for a Superconducting Architecture. Physical Review Applied, 2017, 8, .	1.5	6
43	Cumulant expansion for fast estimate of non-Condon effects in vibronic transition profiles. Scientific Reports, 2017, 7, 17561.	1.6	3
44	Proposal for Microwave Boson Sampling. Physical Review Letters, 2016, 117, 140505.	2.9	40
45	Fast Delocalization Leads To Robust Long-Range Excitonic Transfer in a Large Quantum Chlorosome Model. Nano Letters, 2015, 15, 1722-1729.	4.5	29
46	Boson sampling for molecular vibronic spectra. Nature Photonics, 2015, 9, 615-620.	15.6	230
47	Linear-algebraic bath transformation for simulating complex open quantum systems. New Journal of Physics, 2014, 16, 123008.	1.2	16
48	A stochastic reorganizational bath model for electronic energy transfer. Journal of Chemical Physics, 2014, 140, 244103.	1.2	4
49	Theoretical characterization of excitation energy transfer in chlorosome light-harvesting antennae from green sulfur bacteria. Photosynthesis Research, 2014, 120, 273-289.	1.6	41
50	Atomistic Study of Energy Funneling in the Light-Harvesting Complex of Green Sulfur Bacteria. Journal of the American Chemical Society, 2014, 136, 2048-2057.	6.6	78
51	Chromatic acclimation and population dynamics of green sulfur bacteria grown with spectrally tailored light. Scientific Reports, 2014, 4, 5057.	1.6	15
52	Temperature and Carbon Assimilation Regulate the Chlorosome Biogenesis in Green Sulfur Bacteria. Biophysical Journal, 2013, 105, 1346-1356.	0.2	14
53	Application of time-independent cumulant expansion to calculation of Franckâ€“Condon profiles for large molecular systems. Faraday Discussions, 2011, 150, 363.	1.6	20
54	Franckâ€“Condon profiles in photodetachment-photoelectron spectra of and based on vibrational configuration interaction wavefunctions. Molecular Physics, 2010, 108, 409-423.	0.8	11

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55	An Atomic-Orbital-Based Lagrangian Approach for Calculating Geometric Gradients of Linear Response Properties. Journal of Chemical Theory and Computation, 2010, 6, 1028-1047.	2.3	28