Lewis E Johnson

List of Publications by Year
in descending order

50 papers	1,606 citations	331670 21 h-index	302126 39 g-index
50 all docs	50 docs citations	50 times ranked	1658 citing authors

#	Article	IF	Citations
1	Surface and Stability Characterization of a Nanoporous ZIF-8 Thin Film. Journal of Physical Chemistry C, 2014, 118, 14449-14456.	3.1	189
2	Optimizing Calculations of Electronic Excitations and Relative Hyperpolarizabilities of Electrooptic Chromophores. Accounts of Chemical Research, 2014, 47, 3258-3265.	15.6	164
3	Systematic Nanoengineering of Soft Matter Organic Electro-optic Materials. Chemistry of Materials, 2011, 23, 430-445.	6.7	129
4	Siliconâ€“Organic and Plasmonicâ€“Organic Hybrid Photonics. ACS Photonics, 2017, 4, 1576-1590.	6.6	123
5	Optimum Exchange for Calculation of Excitation Energies and Hyperpolarizabilities of Organic Electro-optic Chromophores. Journal of Chemical Theory and Computation, 2014, 10, 3821-3831.	5.3	99
6	Mechanism of Catalytic O₂ Reduction by Iron Tetraphenylporphyrin. Journal of the American Chemical Society, 2019, 141, 8315-8326.	13.7	99
7	Ultrahigh Electro-Optic Coefficients, High Index of Refraction, and Long-Term Stability from Dielsâ€“Alder Cross-Linkable Binary Molecular Glasses. Chemistry of Materials, 2020, 32, 1408-1421.	6.7	98
8	Effect of Rigid Bridge-Protection Units, Quadrupolar Interactions, and Blending in Organic Electro-Optic Chromophores. Chemistry of Materials, 2017, 29, 6457-6471.	6.7	76
9	Electroâ€Optic Activity in Excess of 1000 pm V^{â^'1} Achieved via Theoryâ€Guided Organic Chromophore Design. Advanced Materials, 2021, 33, e2104174.	21.0	49
10	Reduced Dimensionality in Organic Electro-Optic Materials: Theory and Defined Order. Journal of Physical Chemistry B, 2010, 114, 11949-11956.	2.6	47
11	Structural characterization of the P1+ intermediate state of the P-cluster of nitrogenase. Journal of Biological Chemistry, 2018, 293, 9629-9635.	3.4	44
12	A QCM Study of the Immobilization of Î²-Galactosidase on Polyelectrolyte Surfaces:Â Effect of the Terminal Polyion on Enzymatic Surface Activity. Langmuir, 2007, 23, 4432-4437.	3.5	43
13	Optimization of Plasmonic-Organic Hybrid Electro-Optics. Journal of Lightwave Technology, 2018, 36, 5036-5047.	4.6	41
14	Molecular Engineering of Structurally Diverse Dendrimers with Large Electro-Optic Activities. ACS Applied Materials & Interfaces, 2019, 11, 21058-21068.	8.0	34
15	Design and synthesis of chromophores with enhanced electro-optic activities in both bulk and plasmonicâ€“organic hybrid devices. Materials Horizons, 2022, 9, 261-270.	12.2	34
16	Integrating Computational Chemistry into the Physical Chemistry Curriculum. Journal of Chemical Education, 2011, 88, 569-573.	2.3	30
17	Bis(4-dialkylaminophenyl)heteroarylamino donor chromophores exhibiting exceptional hyperpolarizabilities. Journal of Materials Chemistry C, 2021, 9, 2721-2728.	5.5	28
18	Dielectric Constants of Simple Liquids: Stockmayer and Ellipsoidal Fluids. Journal of Physical Chemistry B, 2010, 114, 8431-8440.	2.6	25

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19	Nanoâ€Engineering Lattice Dimensionality for a Soft Matter Organic Functional Material. Advanced Materials, 2012, 24, 3263-3268.	21.0	25
20	Transparent Optical-THz-Optical Link at 240/192 Gbit/s Over 5/115 m Enabled by Plasmonics. Journal of Lightwave Technology, 2022, 40, 1690-1697.	4.6	24
21	Systematic Generation of Anisotropic Coarse-Grained Lennard-Jones Potentials and Their Application to Ordered Soft Matter. Journal of Chemical Theory and Computation, 2016, 12, 4362-4374.	5.3	22
22	Structure and stability of CaH₂surfaces: on the possibility of electron-rich surfaces in metal hydrides for catalysis. Journal of Materials Chemistry A, 2017, 5, 5550-5558.	10.3	21
23	Measuring Order in Contact-Poled Organic Electrooptic Materials with Variable-Angle Polarization-Referenced Absorption Spectroscopy (VAPRAS). Journal of Physical Chemistry B, 2011, 115, 231-241.	2.6	18
24	Monitoring N3 Dye Adsorption and Desorption on TiO₂ Surfaces: A Combined QCM-D and XPS Study. ACS Applied Materials & Interfaces, 2014, 6, 9093-9099.	8.0	18
25	Electron anions and the glass transition temperature. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 10007-10012.	7.1	15
26	Modeling Chromophore Order: A Guide For Improving EO Performance. Materials Research Society Symposia Proceedings, 2014, 1698, 26.	0.1	11
27	Dielectric and Phase Behavior of Dipolar Spheroids. Journal of Physical Chemistry B, 2015, 119, 5240-5250.	2.6	10
28	Chokepoints in Mechanical Coupling Associated with Allosteric Proteins: The Pyruvate Kinase Example. Biophysical Journal, 2019, 116, 1598-1608.	0.5	10
29	CRW 2.0: A representative-compound approach to functionality-based prediction of reactive chemical hazards. Process Safety Progress, 2008, 27, 212-218.	1.0	9
30	Relation of System Dimensionality and Order Parameters. Journal of Physical Chemistry B, 2015, 119, 3205-3212.	2.6	9
31	Unraveling Excitonic Effects for the First Hyperpolarizabilities of Chromophore Aggregates. Journal of Physical Chemistry C, 2019, 123, 13818-13836.	3.1	8
32	Mechanical coupling in the nitrogenase complex. PLoS Computational Biology, 2021, 17, e1008719.	3.2	8
33	New paradigms in materials and devices for hybrid electro-optics and optical rectification. , 2021, , .		6
34	Effects of Al³⁺ on Phosphocholine and Phosphoglycerol Containing Solid Supported Lipid Bilayers. Langmuir, 2016, 32, 1771-1781.	3.5	5
35	Poling-induced birefringence in OEO materials under nanoscale confinement. , 2018, , .		5
36	Next-generation materials for hybrid electro-optic systems (Conference Presentation). , 2019, , .		4

#	Article	IF	Citations
37	Alternative bridging architectures in organic nonlinear optical materials: comparison of ï€- and ï‡-type structures. Journal of the Optical Society of America B: Optical Physics, 2016, 33, E160.	2.1	3
38	Derivatives of DANPY (Dialkylaminonaphthylpyridinium), a DNA-Binding Fluorophore: Practical Synthesis of Tricyclic 2-Amino-6-bromonaphthalenes by Bucherer Reaction. ACS Omega, 2020, 5, 537-546.	3.5	3
39	Advances in high-performance hybrid electro-optics. , 2020, , .		3
40	Organic electro-optic materials combining extraordinary nonlinearity with exceptional stability to enable commercial applications. , 2022, , .		3
41	180 GBd Electronic-Plasmonic IC Transmitter. , 2022, , .		3
42	Novel cationic dye and crosslinkable surfactant for DNA biophotonics. Proceedings of SPIE, 2012, , .	0.8	2
43	DANPY (dimethylaminonaphthylpyridinium): an economical and biocompatible fluorophore. Organic and Biomolecular Chemistry, 2019, 17, 3765-3780.	2.8	2
44	Processing of organic electro-optic materials for commercial applications. , 2020, , .		2
45	Effect of UV-crosslinking of DNA-CTMA biopolymer on its electrical and optical properties. Proceedings of SPIE, 2013, , .	0.8	1
46	SFG characterization of a cationic ONLO dye in biological thin films. Proceedings of SPIE, 2013, , .	0.8	1
47	Birefringence, dimensionality, and surface influences on organic hybrid electro-optic performance. , 2021, , .		1
48	Multi-scale theory-assisted nano-engineering of plasmonic-organic hybrid electro-optic device performance. , 2018, , .		1
49	Plasmonic-Organic-Hybrid (POH) Modulators - a Powerful Platform for Next-Generation Integrated Circuits. , 2021, , .		1
50	Characterization of N3 dye adsorption on TiO2using quartz-crystal microbalance with dissipation monitoring. , 2013, , .		0