Kevin L Kohlstedt

List of Publications by Year
in descending order

42 papers	2,187 citations	279798 23 h-index	276875 41 g-index
45 all docs	45 docs citations	45 times ranked	3497 citing authors

#	Article	IF	Citations
1	Regiospecific N-alkyl substitution tunes the molecular packing of high-performance non-fullerene acceptors. Materials Horizons, 2022, 9, 403-410.	12.2	42
2	Non-fullerene acceptors with direct and indirect hexa-fluorination afford >17% efficiency in polymer solar cells. Energy and Environmental Science, 2022, 15, 645-659.	30.8	65
3	Impact of Ï€-Conjugation Length on the Excited-State Dynamics of Star-Shaped Carbazole-Ï€-Triazine Organic Chromophores. Journal of Physical Chemistry A, 2022, 126, 3291-3300.	2.5	2
4	Unfolding bovine Î± -lactalbumin with T-jump: Characterizing disordered intermediates via time-resolved x-ray solution scattering and molecular dynamics simulations. Journal of Chemical Physics, 2021, 154, 105101.	3.0	15
5	Systematic Merging of Nonfullerene Acceptor Ï€-Extension and Tetrafluorination Strategies Affords Polymer Solar Cells with >16% Efficiency. Journal of the American Chemical Society, 2021, 143, 6123-6139.	13.7	125
6	Nanotechnology for catalysis and solar energy conversion. Nanotechnology, 2021, 32, 042003.	2.6	44
7	Resolving Dynamics in the Ensemble: Finding Paths through Intermediate States and Disordered Protein Structures. Journal of Physical Chemistry B, 2021, 125, 12401-12412.	2.6	4
8	Crystallography, Morphology, Electronic Structure, and Transport in Non-Fullerene/Non-Indacenodithienothiophene Polymer:Y6 Solar Cells. Journal of the American Chemical Society, 2020, 142, 14532-14547.	13.7	214
9	Fluorinating Ï€â€Extended Molecular Acceptors Yields Highly Connected Crystal Structures and Low Reorganization Energies for Efficient Solar Cells. Advanced Energy Materials, 2020, 10, 2000635.	19.5	78
10	Integrating solvation shell structure in experimentally driven molecular dynamics using x-ray solution scattering data. Journal of Chemical Physics, 2020, 152, 204115.	3.0	14
11	Photovoltaic Blend Microstructure for High Efficiency Post-Fullerene Solar Cells. To Tilt or Not To Tilt?. Journal of the American Chemical Society, 2019, 141, 13410-13420.	13.7	33
12	Are Transport Models Able To Predict Charge Carrier Mobilities in Organic Semiconductors?. Journal of Physical Chemistry C, 2019, 123, 29499-29512.	3.1	12
13	Building Blocks for Highâ€Efficiency Organic Photovoltaics: Interplay of Molecular, Crystal, and Electronic Properties in Postâ€Fullerene ITIC Ensembles. ChemPhysChem, 2019, 20, 2608-2626.	2.1	42
14	Wave Functions, Density Functionals, and Artificial Intelligence for Materials and Energy Research: Future Prospects and Challenges. ACS Energy Letters, 2018, 3, 155-162.	17.4	16
15	Introduction to Organic Semiconductors Using Accessible Undergraduate Chemistry Concepts. Journal of Chemical Education, 2018, 95, 1500-1511.	2.3	4
16	Design principles for photonic crystals based on plasmonic nanoparticle superlattices. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 7242-7247.	7.1	57
17	Closely packed, low reorganization energy Ï€-extended postfullerene acceptors for efficient polymer solar cells. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E8341-E8348.	7.1	126
18	Improved Scaling of Molecular Network Calculations: The Emergence of Molecular Domains. Journal of Physical Chemistry Letters, 2017, 8, 415-421.	4.6	14

#	Article	IF	Citations
19	Deterministic Symmetry Breaking of Plasmonic Nanostructures Enabled by DNA-Programmable Assembly. Nano Letters, 2017, 17, 5830-5835.	9.1	19
20	The competing effects of core rigidity and linker flexibility in the nanoassembly of trivalent small molecule-DNA hybrids (SMDH₃s)â€“a synergistic experimental-modeling study. Nanoscale, 2017, 9, 12652-12663.	5.6	3
21	A n-vector model for charge transport in molecular semiconductors. Journal of Chemical Physics, 2016, 145, 204102.	3.0	6
22	Mind the Gap. ACS Central Science, 2016, 2, 278-280.	11.3	5
23	Design Considerations for RNA Spherical Nucleic Acids (SNAs). Bioconjugate Chemistry, 2016, 27, 2124-2131.	3.6	39
24	What Controls the Hybridization Thermodynamics of Spherical Nucleic Acids?. Journal of the American Chemical Society, 2015, 137, 3486-3489.	13.7	79
25	Uniform Circular Disks With Synthetically Tailorable Diameters: Two-Dimensional Nanoparticles for Plasmonics. Nano Letters, 2015, 15, 1012-1017.	9.1	90
26	Conformational Order in Aggregates of Conjugated Polymers. Journal of the American Chemical Society, 2015, 137, 6254-6262.	13.7	177
27	Self-assembly of reconfigurable colloidal molecules. Soft Matter, 2014, 10, 3541.	2.7	25
28	Structural and Conformational Dispersion in the Rational Design of Conjugated Polymers. Macromolecules, 2014, 47, 987-992.	4.8	42
29	Mesoscale molecular network formation in amorphous organic materials. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 10055-10060.	7.1	79
30	Controlling Orientational Order in 1-D Assemblies of Multivalent Triangular Prisms. Journal of Physical Chemistry Letters, 2013, 4, 203-208.	4.6	11
31	Synthesis, Assembly, and Image Analysis of Spheroidal Patchy Particles. Langmuir, 2013, 29, 4688-4696.	3.5	63
32	Controlling Conformations of Conjugated Polymers and Small Molecules: The Role of Nonbonding Interactions. Journal of the American Chemical Society, 2013, 135, 10475-10483.	13.7	386
33	Growth Dynamics for DNA-Guided Nanoparticle Crystallization. ACS Nano, 2013, 7, 10948-10959.	14.6	24
34	Self-assembly and tunable mechanics of reconfigurable colloidal crystals. Physical Review E, 2013, 87, .	2.1	11
35	Liquid Crystal Order in Colloidal Suspensions of Spheroidal Particles by Direct Current Electric Field Assembly. Small, 2012, 8, 1551-1562.	10.0	71
36	Electrostatics and optimal arrangement of ionic triangular lattices confined to cylindrical fibers. Physical Review E, 2009, 80, 051503.	2.1	5

#	Article	IF	Citations
37	The electrostatic origin of chiral patterns on nanofibers. Soft Matter, 2009, 5, 736.	2.7	15
38	Protofibril Assemblies of the Arctic, Dutch, and Flemish Mutants of the Alzheimer's AÎ²1â€“40 Peptide. Biophysical Journal, 2008, 94, 2007-2016.	0.5	54
39	Contrasting Disease and Nondisease Protein Aggregation by Molecular Simulation. Accounts of Chemical Research, 2008, 41, 1037-1047.	15.6	34
40	Spontaneous Chirality via Long-Range Electrostatic Forces. Physical Review Letters, 2007, 99, 030602.	7.8	30
41	Patterning Cylindrical Fibers with Long-Range Electrostatic Forces. Materials Research Society Symposia Proceedings, 2007, 1062, 1.	0.1	0
42	Fluorine Tuning of Morphology, Energy Loss, and Carrier Dynamics in Perylenediimide Polymer Solar Cells. ACS Energy Letters, 0, , .	17.4	11