Kevin L Kohlstedt

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/1458847/publications.pdf

Version: 2024-02-01

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	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
2	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
3	Conformational Order in Aggregates of Conjugated Polymers. Journal of the American Chemical Society, 2015, 137, 6254-6262.	13.7	177
4	Closely packed, low reorganization energy π-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
5	Systematic Merging of Nonfullerene Acceptor π-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	Uniform Circular Disks With Synthetically Tailorable Diameters: Two-Dimensional Nanoparticles for Plasmonics. Nano Letters, 2015, 15, 1012-1017.	9.1	90
7	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
8	What Controls the Hybridization Thermodynamics of Spherical Nucleic Acids?. Journal of the American Chemical Society, 2015, 137, 3486-3489.	13.7	79
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	Liquid Crystal Order in Colloidal Suspensions of Spheroidal Particles by Direct Current Electric Field Assembly. Small, 2012, 8, 1551-1562.	10.0	71
11	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
12	Synthesis, Assembly, and Image Analysis of Spheroidal Patchy Particles. Langmuir, 2013, 29, 4688-4696.	3.5	63
13	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
14	Protofibril Assemblies of the Arctic, Dutch, and Flemish Mutants of the Alzheimer's Aβ1–40 Peptide. Biophysical Journal, 2008, 94, 2007-2016.	0.5	54
15	Nanotechnology for catalysis and solar energy conversion. Nanotechnology, 2021, 32, 042003.	2.6	44
16	Structural and Conformational Dispersion in the Rational Design of Conjugated Polymers. Macromolecules, 2014, 47, 987-992.	4.8	42
17	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
18	Regiospecific $\langle i \rangle N \langle i \rangle$ -alkyl substitution tunes the molecular packing of high-performance non-fullerene acceptors. Materials Horizons, 2022, 9, 403-410.	12.2	42

#	Article	IF	CITATIONS
19	Design Considerations for RNA Spherical Nucleic Acids (SNAs). Bioconjugate Chemistry, 2016, 27, 2124-2131.	3.6	39
20	Contrasting Disease and Nondisease Protein Aggregation by Molecular Simulation. Accounts of Chemical Research, 2008, 41, 1037-1047.	15.6	34
21	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
22	Spontaneous Chirality via Long-Range Electrostatic Forces. Physical Review Letters, 2007, 99, 030602.	7.8	30
23	Self-assembly of reconfigurable colloidal molecules. Soft Matter, 2014, 10, 3541.	2.7	25
24	Growth Dynamics for DNA-Guided Nanoparticle Crystallization. ACS Nano, 2013, 7, 10948-10959.	14.6	24
25	Deterministic Symmetry Breaking of Plasmonic Nanostructures Enabled by DNA-Programmable Assembly. Nano Letters, 2017, 17, 5830-5835.	9.1	19
26	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
27	The electrostatic origin of chiral patterns on nanofibers. Soft Matter, 2009, 5, 736.	2.7	15
28	Unfolding bovine $\langle b \rangle \langle i \rangle \hat{l} \pm \langle i \rangle \langle b \rangle$ -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
29	Improved Scaling of Molecular Network Calculations: The Emergence of Molecular Domains. Journal of Physical Chemistry Letters, 2017, 8, 415-421.	4.6	14
30	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
31	Are Transport Models Able To Predict Charge Carrier Mobilities in Organic Semiconductors?. Journal of Physical Chemistry C, 2019, 123, 29499-29512.	3.1	12
32	Controlling Orientational Order in 1-D Assemblies of Multivalent Triangular Prisms. Journal of Physical Chemistry Letters, 2013, 4, 203-208.	4.6	11
33	Self-assembly and tunable mechanics of reconfigurable colloidal crystals. Physical Review E, 2013, 87, .	2.1	11
34	Fluorine Tuning of Morphology, Energy Loss, and Carrier Dynamics in Perylenediimide Polymer Solar Cells. ACS Energy Letters, 0, , .	17.4	11
35	A n-vector model for charge transport in molecular semiconductors. Journal of Chemical Physics, 2016, 145, 204102.	3.0	6
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	Mind the Gap. ACS Central Science, 2016, 2, 278-280.	11.3	5
38	Introduction to Organic Semiconductors Using Accessible Undergraduate Chemistry Concepts. Journal of Chemical Education, 2018, 95, 1500-1511.	2.3	4
39	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
40	The competing effects of core rigidity and linker flexibility in the nanoassembly of trivalent small molecule-DNA hybrids (SMDH ₃ s)–a synergistic experimental-modeling study. Nanoscale, 2017, 9, 12652-12663.	5.6	3
41	Impact of π-Conjugation Length on the Excited-State Dynamics of Star-Shaped Carbazole-π-Triazine Organic Chromophores. Journal of Physical Chemistry A, 2022, 126, 3291-3300.	2.5	2
42	Patterning Cylindrical Fibers with Long-Range Electrostatic Forces. Materials Research Society Symposia Proceedings, 2007, 1062, 1.	0.1	0