

Michael L Steigerwald

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9589326/publications.pdf>

Version: 2024-02-01

92
papers

6,181
citations

76326

40
h-index

69250

77
g-index

100
all docs

100
docs citations

100
times ranked

6805
citing authors

#	ARTICLE	IF	CITATIONS
1	Molecular helices as electron acceptors in high-performance bulk heterojunction solar cells. <i>Nature Communications</i> , 2015, 6, 8242.	12.8	525
2	Chemical principles of single-molecule electronics. <i>Nature Reviews Materials</i> , 2016, 1, .	48.7	442
3	Quantitative Intramolecular Singlet Fission in Bipentacenes. <i>Journal of the American Chemical Society</i> , 2015, 137, 8965-8972.	13.7	324
4	Helical Ribbons for Molecular Electronics. <i>Journal of the American Chemical Society</i> , 2014, 136, 8122-8130.	13.7	243
5	Nanoscale Atoms in Solid-State Chemistry. <i>Science</i> , 2013, 341, 157-160.	12.6	199
6	Stereoelectronic switching in single-molecule junctions. <i>Nature Chemistry</i> , 2015, 7, 215-220.	13.6	176
7	A Direct Mechanism of Ultrafast Intramolecular Singlet Fission in Pentacene Dimers. <i>ACS Central Science</i> , 2016, 2, 316-324.	11.3	176
8	Ligand Control of Growth, Morphology, and Capping Structure of Colloidal CdSe Nanorods. <i>Chemistry of Materials</i> , 2007, 19, 2573-2580.	6.7	159
9	Long, Atomically Precise Donor-Acceptor Cove-Edge Nanoribbons as Electron Acceptors. <i>Journal of the American Chemical Society</i> , 2017, 139, 5648-5651.	13.7	150
10	Supersized contorted aromatics. <i>Chemical Science</i> , 2013, 4, 2018.	7.4	141
11	Solid-Solution Nanoparticles: Use of a Nonhydrolytic Sol-Gel Synthesis To Prepare HfO ₂ and Hf _x Zr _{1-x} O ₂ Nanocrystals. <i>Chemistry of Materials</i> , 2004, 16, 1336-1342.	6.7	139
12	Electron Delocalization in Perylene Diimide Helicenes. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 13519-13523.	13.8	123
13	Exciton Correlations in Intramolecular Singlet Fission. <i>Journal of the American Chemical Society</i> , 2016, 138, 7289-7297.	13.7	117
14	A Helicene Nanoribbon with Greatly Amplified Chirality. <i>Journal of the American Chemical Society</i> , 2018, 140, 6235-6239.	13.7	110
15	Intramolecular Singlet Fission in Oligoacene Heterodimers. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 3373-3377.	13.8	109
16	Conjugated Macrocycles in Organic Electronics. <i>Accounts of Chemical Research</i> , 2019, 52, 1068-1078.	15.6	107
17	Chiral Conjugated Corrals. <i>Journal of the American Chemical Society</i> , 2015, 137, 9982-9987.	13.7	104
18	High-performance organic pseudocapacitors via molecular contortion. <i>Nature Materials</i> , 2021, 20, 1136-1141.	27.5	103

#	ARTICLE	IF	CITATIONS
19	Macrocyclization in the Design of Organic n-Type Electronic Materials. <i>Journal of the American Chemical Society</i> , 2016, 138, 12861-12867.	13.7	101
20	Shape-shifting in contorted dibenzotetrathienocoronenes. <i>Chemical Science</i> , 2011, 2, 1480-1486.	7.4	100
21	Rigid, Conjugated Macrocycles for High Performance Organic Photodetectors. <i>Journal of the American Chemical Society</i> , 2016, 138, 16426-16431.	13.7	98
22	Plasmon Induced Photovoltage and Charge Separation in Citrate-Stabilized Gold Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2010, 114, 12896-12899.	3.1	97
23	Helical Nanoribbons for Ultra-Narrowband Photodetectors. <i>Journal of the American Chemical Society</i> , 2017, 139, 5644-5647.	13.7	97
24	Directing isomerization reactions of cumulenes with electric fields. <i>Nature Communications</i> , 2019, 10, 4482.	12.8	97
25	Silane and Germane Molecular Electronics. <i>Accounts of Chemical Research</i> , 2017, 50, 1088-1095.	15.6	96
26	Three-Dimensional Graphene Nanostructures. <i>Journal of the American Chemical Society</i> , 2018, 140, 9341-9345.	13.7	93
27	Chirality Amplified: Long, Discrete Helicene Nanoribbons. <i>Journal of the American Chemical Society</i> , 2021, 143, 983-991.	13.7	85
28	Room-temperature current blockade in atomically defined single-cluster junctions. <i>Nature Nanotechnology</i> , 2017, 12, 1050-1054.	31.5	75
29	Enantiotropic Polymorphism in Di-indenoperylene. <i>Journal of Physical Chemistry C</i> , 2007, 111, 18878-18881.	3.1	70
30	Bending contorted hexabenzocoronene into a bowl. <i>Chemical Science</i> , 2011, 2, 132-135.	7.4	69
31	Intra- to Intermolecular Singlet Fission. <i>Journal of Physical Chemistry C</i> , 2015, 119, 1312-1319.	3.1	65
32	Building Diatomic and Triatomic Superatom Molecules. <i>Nano Letters</i> , 2016, 16, 5273-5277.	9.1	65
33	Determination of the structure and geometry of N-heterocyclic carbenes on Au(111) using high-resolution spectroscopy. <i>Chemical Science</i> , 2019, 10, 930-935.	7.4	64
34	van der Waals Solids from Self-Assembled Nanoscale Building Blocks. <i>Nano Letters</i> , 2016, 16, 1445-1449.	9.1	56
35	Resonant Transport in Single Diketopyrrolopyrrole Junctions. <i>Journal of the American Chemical Society</i> , 2018, 140, 13167-13170.	13.7	50
36	Influence of Molecular Conformation on Electron Transport in Giant, Conjugated Macrocycles. <i>Journal of the American Chemical Society</i> , 2018, 140, 10135-10139.	13.7	48

#	ARTICLE	IF	CITATIONS
37	Patterning Superatom Dopants on Transition Metal Dichalcogenides. <i>Nano Letters</i> , 2016, 16, 3385-3389.	9.1	47
38	Controlling Singlet Fission by Molecular Contortion. <i>Journal of the American Chemical Society</i> , 2019, 141, 13143-13147.	13.7	47
39	Defying strain in the synthesis of an electroactive bilayer helicene. <i>Chemical Science</i> , 2019, 10, 1029-1034.	7.4	47
40	Cumulene Wires Display Increasing Conductance with Increasing Length. <i>Nano Letters</i> , 2020, 20, 8415-8419.	9.1	47
41	High-Performance Organic Electronic Materials by Contorting Perylene Diimides. <i>Journal of the American Chemical Society</i> , 2022, 144, 42-51.	13.7	45
42	Single-Molecule Conductance in Atomically Precise Germanium Wires. <i>Journal of the American Chemical Society</i> , 2015, 137, 12400-12405.	13.7	43
43	Intramolecular Singlet Fission in Oligoacene Heterodimers. <i>Angewandte Chemie</i> , 2016, 128, 3434-3438.	2.0	38
44	Two-Dimensional Nanosheets from Redox-Active Superatoms. <i>ACS Central Science</i> , 2017, 3, 1050-1055.	11.3	38
45	Highly conducting single-molecule topological insulators based on mono- and di-radical cations. <i>Nature Chemistry</i> , 2022, 14, 1061-1067.	13.6	38
46	Quantum Soldering of Individual Quantum Dots. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 12473-12476.	13.8	37
47	Transition from Molecular Vibrations to Phonons in Atomically Precise Cadmium Selenide Quantum Dots. <i>Journal of the American Chemical Society</i> , 2016, 138, 16754-16763.	13.7	36
48	Weaving Nanoscale Cloth through Electrostatic Templating. <i>Journal of the American Chemical Society</i> , 2017, 139, 11718-11721.	13.7	36
49	Properties of Poly- and Oligopentacenes Synthesized from Modular Building Blocks. <i>Macromolecules</i> , 2016, 49, 1279-1285.	4.8	34
50	Hollow organic capsules assemble into cellular semiconductors. <i>Nature Communications</i> , 2018, 9, 1957.	12.8	34
51	Extreme Conductance Suppression in Molecular Siloxanes. <i>Journal of the American Chemical Society</i> , 2017, 139, 10212-10215.	13.7	33
52	Quantum Chemical Investigation of Cluster Models for TiO ₂ Nanoparticles with Water-Derived Ligand Passivation: Studies of Excess Electron States and Implications for Charge Transport in the Gratzel Cell. <i>Journal of Physical Chemistry C</i> , 2009, 113, 19806-19811.	3.1	32
53	Electron Delocalization in Perylene Diimide Helicenes. <i>Angewandte Chemie</i> , 2016, 128, 13717-13721.	2.0	32
54	A new and more powerfully activating diamine for practical and scalable enantioselective aldehyde crotylsilylation reactions. <i>Chemical Science</i> , 2013, 4, 2413.	7.4	31

#	ARTICLE	IF	CITATIONS
55	Solvent-dependent conductance decay constants in single cluster junctions. <i>Chemical Science</i> , 2016, 7, 2701-2705.	7.4	31
56	Functionalizing molecular wires: a tunable class of β -diphenyl- α -dicyano-oligoenes. <i>Chemical Science</i> , 2012, 3, 1007.	7.4	29
57	Mechanism for Si-Si Bond Rupture in Single Molecule Junctions. <i>Journal of the American Chemical Society</i> , 2016, 138, 16159-16164.	13.7	29
58	Ligand Control of Manganese Telluride Molecular Cluster Core Nuclearity. <i>Inorganic Chemistry</i> , 2015, 54, 8348-8355.	4.0	28
59	Tuning Conductance in Single-Molecule Wires. <i>Journal of the American Chemical Society</i> , 2016, 138, 7791-7795.	13.7	27
60	Engineering stable radicals using photochromic triggers. <i>Nature Communications</i> , 2020, 11, 945.	12.8	25
61	Voltage-Induced Single-Molecule Junction Planarization. <i>Nano Letters</i> , 2021, 21, 673-679.	9.1	25
62	Conformations of cyclopentasilane stereoisomers control molecular junction conductance. <i>Chemical Science</i> , 2016, 7, 5657-5662.	7.4	24
63	Electron Cartography in Clusters. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 13815-13820.	13.8	24
64	Dimensional Control in Contorted Aromatic Materials. <i>Chemical Record</i> , 2019, 19, 1050-1061.	5.8	24
65	A single-molecule blueprint for synthesis. <i>Nature Reviews Chemistry</i> , 2021, 5, 695-710.	30.2	24
66	Bidentate Phenoxides as Ideal Activating Ligands for Living Ring-Opening Alkyne Metathesis Polymerization. <i>Macromolecules</i> , 2012, 45, 5040-5044.	4.8	23
67	In Situ Coupling of Single Molecules Driven by Gold-Catalyzed Electrooxidation. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 16008-16012.	13.8	23
68	Stringing the Perylene Diimide Bow. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 14303-14307.	13.8	23
69	Two-Dimensional Hierarchical Semiconductor with Addressable Surfaces. <i>Journal of the American Chemical Society</i> , 2018, 140, 9369-9373.	13.7	22
70	Strain-Induced Stereoselective Formation of Blue-Emitting Cyclostilbenes. <i>Journal of the American Chemical Society</i> , 2015, 137, 12282-12288.	13.7	20
71	Dimensional Control of Assembling Metal Chalcogenide Clusters. <i>European Journal of Inorganic Chemistry</i> , 2020, 2020, 1245-1254.	2.0	19
72	Single-Electron Currents in Designer Single-Cluster Devices. <i>Journal of the American Chemical Society</i> , 2020, 142, 14924-14932.	13.7	16

#	ARTICLE	IF	CITATIONS
73	Superatomic solid solutions. <i>Nature Chemistry</i> , 2021, 13, 607-613.	13.6	15
74	Supramolecular Assemblies for Electronic Materials. <i>Chemistry - A European Journal</i> , 2020, 26, 3744-3748.	3.3	14
75	Solution-Processable Superatomic Thin-Films. <i>Journal of the American Chemical Society</i> , 2019, 141, 10967-10971.	13.7	11
76	Shape Matching in Superatom Chemistry and Assembly. <i>Journal of the American Chemical Society</i> , 2020, 142, 11993-11998.	13.7	11
77	Site-Selective Surface Modification of 2D Superatomic Re_6Se_8 . <i>Journal of the American Chemical Society</i> , 2022, 144, 74-79.	13.7	10
78	Controlling Ligand Coordination Spheres and Cluster Fusion in Superatoms. <i>Journal of the American Chemical Society</i> , 2022, 144, 306-313.	13.7	10
79	The importance of intramolecular conductivity in three dimensional molecular solids. <i>Chemical Science</i> , 2019, 10, 9339-9344.	7.4	7
80	Superatom Regiochemistry Dictates the Assembly and Surface Reactivity of a Two-Dimensional Material. <i>Journal of the American Chemical Society</i> , 2022, 144, 1119-1124.	13.7	6
81	Stringing the Perylene Diimide Bow. <i>Angewandte Chemie</i> , 2020, 132, 14409-14413.	2.0	5
82	Electron Cartography in Clusters. <i>Angewandte Chemie</i> , 2018, 130, 14011-14016.	2.0	4
83	A Stable Tetraalkyl Complex of Nickel(IV). <i>Angewandte Chemie - International Edition</i> , 2009, 48, 3384-3384.	13.8	3
84	In Situ Coupling of Single Molecules Driven by Gold-Catalyzed Electrooxidation. <i>Angewandte Chemie</i> , 2019, 131, 16154-16158.	2.0	3
85	Intermolecular Resonance Correlates Electron Pairs Down a Supermolecular Chain: Antiferromagnetism in K-Doped p-Terphenyl. <i>Journal of the American Chemical Society</i> , 2020, 142, 20624-20630.	13.7	3
86	Electrical conductivity in a non-covalent two-dimensional porous organic material with high crystallinity. <i>Chemical Science</i> , 2021, 12, 2955-2959.	7.4	3
87	Broad-band Chiral Absorbance of Visible Light. <i>Journal of the American Chemical Society</i> , 2022, 144, 5263-5267.	13.7	3
88	A Stable Tetraalkyl Complex of Nickel(IV). <i>Angewandte Chemie</i> , 2009, 121, 3435-3435.	2.0	1
89	Inside Cover: Photovoltaic Universal Joints: Ball-and-Socket Interfaces in Molecular Photovoltaic Cells (<i>ChemPhysChem</i> 4/2010). <i>ChemPhysChem</i> , 2010, 11, 742-742.	2.1	0
90	Innenrücktitelbild: Quantum Soldering of Individual Quantum Dots (<i>Angew. Chem.</i> 50/2012). <i>Angewandte Chemie</i> , 2012, 124, 12797-12797.	2.0	0

#	ARTICLE	IF	CITATIONS
91	Innentitelbild: Alcohol-Promoted Ring-Opening Alkyne Metathesis Polymerization (Angew. Chem.) Tj ETQq1 1 0.784314 rgBT /Overlo	2.0	0
92	Dimensional Control of Assembling Metal Chalcogenide Clusters. European Journal of Inorganic Chemistry, 2020, 2020, 1243-1243.	2.0	0