Michael L Steigerwald

List of Publications by Year
in descending order

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92 papers	6,181 citations	87401 40 h-index	78623 77 g-index
100 all docs	100 docs citations	100 times ranked	7766 citing authors

#	Article	IF	Citations
1	Molecular helices as electron acceptors in high-performance bulk heterojunction solar cells. Nature Communications, 2015, 6, 8242.	5.8	525
2	Chemical principles of single-molecule electronics. Nature Reviews Materials, 2016, 1, .	23.3	442
3	Quantitative Intramolecular Singlet Fission in Bipentacenes. Journal of the American Chemical Society, 2015, 137, 8965-8972.	6.6	324
4	Helical Ribbons for Molecular Electronics. Journal of the American Chemical Society, 2014, 136, 8122-8130.	6.6	243
5	Nanoscale Atoms in Solid-State Chemistry. Science, 2013, 341, 157-160.	6.0	199
6	Stereoelectronic switching in single-molecule junctions. Nature Chemistry, 2015, 7, 215-220.	6.6	176
7	A Direct Mechanism of Ultrafast Intramolecular Singlet Fission in Pentacene Dimers. ACS Central Science, 2016, 2, 316-324.	5.3	176
8	Ligand Control of Growth, Morphology, and Capping Structure of Colloidal CdSe Nanorods. Chemistry of Materials, 2007, 19, 2573-2580.	3.2	159
9	Long, Atomically Precise Donorâ€“Acceptor Cove-Edge Nanoribbons as Electron Acceptors. Journal of the American Chemical Society, 2017, 139, 5648-5651.	6.6	150
10	Supersized contorted aromatics. Chemical Science, 2013, 4, 2018.	3.7	141
11	Solid-Solution Nanoparticles:Â Use of a Nonhydrolytic Solâ^'Gel Synthesis To Prepare HfO2and HfxZr1-xO2Nanocrystals. Chemistry of Materials, 2004, 16, 1336-1342.	3.2	139
12	Electron Delocalization in Perylene Diimide Helicenes. Angewandte Chemie - International Edition, 2016, 55, 13519-13523.	7.2	123
13	Exciton Correlations in Intramolecular Singlet Fission. Journal of the American Chemical Society, 2016, 138, 7289-7297.	6.6	117
14	A Helicene Nanoribbon with Greatly Amplified Chirality. Journal of the American Chemical Society, 2018, 140, 6235-6239.	6.6	110
15	Intramolecular Singlet Fission in Oligoacene Heterodimers. Angewandte Chemie - International Edition, 2016, 55, 3373-3377.	7.2	109
16	Conjugated Macrocycles in Organic Electronics. Accounts of Chemical Research, 2019, 52, 1068-1078.	7.6	107
17	Chiral Conjugated Corrals. Journal of the American Chemical Society, 2015, 137, 9982-9987.	6.6	104
18	High-performance organic pseudocapacitors via molecular contortion. Nature Materials, 2021, 20, 1136-1141.	13.3	103

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19	Macrocyclization in the Design of Organic n-Type Electronic Materials. Journal of the American Chemical Society, 2016, 138, 12861-12867.	6.6	101
20	Shape-shifting in contorted dibenzotetrathienocoronenes. Chemical Science, 2011, 2, 1480-1486.	3.7	100
21	Rigid, Conjugated Macrocycles for High Performance Organic Photodetectors. Journal of the American Chemical Society, 2016, 138, 16426-16431.	6.6	98
22	Plasmon Induced Photovoltage and Charge Separation in Citrate-Stabilized Gold Nanoparticles. Journal of Physical Chemistry C, 2010, 114, 12896-12899.	1.5	97
23	Helical Nanoribbons for Ultra-Narrowband Photodetectors. Journal of the American Chemical Society, 2017, 139, 5644-5647.	6.6	97
24	Directing isomerization reactions of cumulenes with electric fields. Nature Communications, 2019, 10, 4482.	5.8	97
25	Silane and Germane Molecular Electronics. Accounts of Chemical Research, 2017, 50, 1088-1095.	7.6	96
26	Three-Dimensional Graphene Nanostructures. Journal of the American Chemical Society, 2018, 140, 9341-9345.	6.6	93
27	Chirality Amplified: Long, Discrete Helicene Nanoribbons. Journal of the American Chemical Society, 2021, 143, 983-991.	6.6	85
28	Room-temperature current blockade in atomically defined single-cluster junctions. Nature Nanotechnology, 2017, 12, 1050-1054.	15.6	75
29	Enantiotropic Polymorphism in Di-indenoperylene. Journal of Physical Chemistry C, 2007, 111, 18878-18881.	1.5	70
30	Bending contorted hexabenzocoronene into a bowl. Chemical Science, 2011, 2, 132-135.	3.7	69
31	Intra- to Intermolecular Singlet Fission. Journal of Physical Chemistry C, 2015, 119, 1312-1319.	1.5	65
32	Building Diatomic and Triatomic Superatom Molecules. Nano Letters, 2016, 16, 5273-5277.	4.5	65
33	Determination of the structure and geometry of N-heterocyclic carbenes on Au(111) using high-resolution spectroscopy. Chemical Science, 2019, 10, 930-935.	3.7	64
34	van der Waals Solids from Self-Assembled Nanoscale Building Blocks. Nano Letters, 2016, 16, 1445-1449.	4.5	56
35	Resonant Transport in Single Diketopyrrolopyrrole Junctions. Journal of the American Chemical Society, 2018, 140, 13167-13170.	6.6	50
36	Influence of Molecular Conformation on Electron Transport in Giant, Conjugated Macrocycles. Journal of the American Chemical Society, 2018, 140, 10135-10139.	6.6	48

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37	Patterning Superatom Dopants on Transition Metal Dichalcogenides. Nano Letters, 2016, 16, 3385-3389.	4.5	47
38	Controlling Singlet Fission by Molecular Contortion. Journal of the American Chemical Society, 2019, 141, 13143-13147.	6.6	47
39	Defying strain in the synthesis of an electroactive bilayer helicene. Chemical Science, 2019, 10, 1029-1034.	3.7	47
40	Cumulene Wires Display Increasing Conductance with Increasing Length. Nano Letters, 2020, 20, 8415-8419.	4.5	47
41	High-Performance Organic Electronic Materials by Contorting Perylene Diimides. Journal of the American Chemical Society, 2022, 144, 42-51.	6.6	45
42	Single-Molecule Conductance in Atomically Precise Germanium Wires. Journal of the American Chemical Society, 2015, 137, 12400-12405.	6.6	43
43	Intramolecular Singlet Fission in Oligoacene Heterodimers. Angewandte Chemie, 2016, 128, 3434-3438.	1.6	38
44	Two-Dimensional Nanosheets from Redox-Active Superatoms. ACS Central Science, 2017, 3, 1050-1055.	5.3	38
45	Highly conducting single-molecule topological insulators based on mono- and di-radical cations. Nature Chemistry, 2022, 14, 1061-1067.	6.6	38
46	Quantum Soldering of Individual Quantum Dots. Angewandte Chemie - International Edition, 2012, 51, 12473-12476.	7.2	37
47	Transition from Molecular Vibrations to Phonons in Atomically Precise Cadmium Selenide Quantum Dots. Journal of the American Chemical Society, 2016, 138, 16754-16763.	6.6	36
48	Weaving Nanoscale Cloth through Electrostatic Templating. Journal of the American Chemical Society, 2017, 139, 11718-11721.	6.6	36
49	Properties of Poly- and Oligopentacenes Synthesized from Modular Building Blocks. Macromolecules, 2016, 49, 1279-1285.	2.2	34
50	Hollow organic capsules assemble into cellular semiconductors. Nature Communications, 2018, 9, 1957.	5.8	34
51	Extreme Conductance Suppression in Molecular Siloxanes. Journal of the American Chemical Society, 2017, 139, 10212-10215.	6.6	33
52	Quantum Chemical Investigation of Cluster Models for TiO₂ Nanoparticles with Water-Derived Ligand Passivation: Studies of Excess Electron States and Implications for Charge Transport in the Gratzel Cell. Journal of Physical Chemistry C, 2009, 113, 19806-19811.	1.5	32
53	Electron Delocalization in Perylene Diimide Helicenes. Angewandte Chemie, 2016, 128, 13717-13721.	1.6	32
54	A new and more powerfully activating diamine for practical and scalable enantioselective aldehyde crotylsilylation reactions. Chemical Science, 2013, 4, 2413.	3.7	31

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55	Solvent-dependent conductance decay constants in single cluster junctions. Chemical Science, 2016, 7, 2701-2705.	3.7	31
56	Functionalizing molecular wires: a tunable class of Î±,Ï‰-diphenyl-Î¼,Î½-dicyano-oligoenes. Chemical Science, 2012, 3, 1007.	3.7	29
57	Mechanism for Siâ€“Si Bond Rupture in Single Molecule Junctions. Journal of the American Chemical Society, 2016, 138, 16159-16164.	6.6	29
58	Ligand Control of Manganese Telluride Molecular Cluster Core Nuclearity. Inorganic Chemistry, 2015, 54, 8348-8355.	1.9	28
59	Tuning Conductance in Ï€â€“Ïƒâ€“Ï€ Single-Molecule Wires. Journal of the American Chemical Society, 2016, 138, 7791-7795.	6.6	27
60	Engineering stable radicals using photochromic triggers. Nature Communications, 2020, 11, 945.	5.8	25
61	Voltage-Induced Single-Molecule Junction Planarization. Nano Letters, 2021, 21, 673-679.	4.5	25
62	Conformations of cyclopentasilane stereoisomers control molecular junction conductance. Chemical Science, 2016, 7, 5657-5662.	3.7	24
63	Electron Cartography in Clusters. Angewandte Chemie - International Edition, 2018, 57, 13815-13820.	7.2	24
64	Dimensional Control in Contorted Aromatic Materials. Chemical Record, 2019, 19, 1050-1061.	2.9	24
65	A single-molecule blueprint for synthesis. Nature Reviews Chemistry, 2021, 5, 695-710.	13.8	24
66	Bidentate Phenoxides as Ideal Activating Ligands for Living Ring-Opening Alkyne Metathesis Polymerization. Macromolecules, 2012, 45, 5040-5044.	2.2	23
67	In Situ Coupling of Single Molecules Driven by Goldâ€Catalyzed Electrooxidation. Angewandte Chemie - International Edition, 2019, 58, 16008-16012.	7.2	23
68	Stringing the Perylene Diimide Bow. Angewandte Chemie - International Edition, 2020, 59, 14303-14307.	7.2	23
69	Two-Dimensional Hierarchical Semiconductor with Addressable Surfaces. Journal of the American Chemical Society, 2018, 140, 9369-9373.	6.6	22
70	Strain-Induced Stereoselective Formation of Blue-Emitting Cyclostilbenes. Journal of the American Chemical Society, 2015, 137, 12282-12288.	6.6	20
71	Dimensional Control of Assembling Metal Chalcogenide Clusters. European Journal of Inorganic Chemistry, 2020, 2020, 1245-1254.	1.0	19
72	Single-Electron Currents in Designer Single-Cluster Devices. Journal of the American Chemical Society, 2020, 142, 14924-14932.	6.6	16

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73	Superatomic solid solutions. Nature Chemistry, 2021, 13, 607-613.	6.6	15
74	Supramolecular Assemblies for Electronic Materials. Chemistry - A European Journal, 2020, 26, 3744-3748.	1.7	14
75	Solution-Processable Superatomic Thin-Films. Journal of the American Chemical Society, 2019, 141, 10967-10971.	6.6	11
76	Shape Matching in Superatom Chemistry and Assembly. Journal of the American Chemical Society, 2020, 142, 11993-11998.	6.6	11
77	Site-Selective Surface Modification of 2D Superatomic Re₆Se₈. Journal of the American Chemical Society, 2022, 144, 74-79.	6.6	10
78	Controlling Ligand Coordination Spheres and Cluster Fusion in Superatoms. Journal of the American Chemical Society, 2022, 144, 306-313.	6.6	10
79	The importance of intramolecular conductivity in three dimensional molecular solids. Chemical Science, 2019, 10, 9339-9344.	3.7	7
80	Superatom Regiochemistry Dictates the Assembly and Surface Reactivity of a Two-Dimensional Material. Journal of the American Chemical Society, 2022, 144, 1119-1124.	6.6	6
81	Stringing the Perylene Diimide Bow. Angewandte Chemie, 2020, 132, 14409-14413.	1.6	5
82	Electron Cartography in Clusters. Angewandte Chemie, 2018, 130, 14011-14016.	1.6	4
83	A Stable Tetraalkyl Complex of Nickel(IV). Angewandte Chemie - International Edition, 2009, 48, 3384-3384.	7.2	3
84	In Situ Coupling of Single Molecules Driven by Goldâ€Catalyzed Electrooxidation. Angewandte Chemie, 2019, 131, 16154-16158.	1.6	3
85	Intermolecular Resonance Correlates Electron Pairs Down a Supermolecular Chain: Antiferromagnetism in K-Doped p-Terphenyl. Journal of the American Chemical Society, 2020, 142, 20624-20630.	6.6	3
86	Electrical conductivity in a non-covalent two-dimensional porous organic material with high crystallinity. Chemical Science, 2021, 12, 2955-2959.	3.7	3
87	Broad-band Chiral Absorbance of Visible Light. Journal of the American Chemical Society, 2022, 144, 5263-5267.	6.6	3
88	A Stable Tetraalkyl Complex of Nickel(IV). Angewandte Chemie, 2009, 121, 3435-3435.	1.6	1
89	Inside Cover: Photovoltaic Universal Joints: Ball-and-Socket Interfaces in Molecular Photovoltaic Cells (ChemPhysChem 4/2010). ChemPhysChem, 2010, 11, 742-742.	1.0	0
90	InnenrÃ¼cktitelbild: Quantum Soldering of Individual Quantum Dots (Angew. Chem. 50/2012). Angewandte Chemie, 2012, 124, 12797-12797.	1.6	0

#	Article	IF	Citations
91	Innentitelbild: Alcohol-Promoted Ring-Opening Alkyne Metathesis Polymerization (Angew. Chem.) Tj ETQq1 1 0.784314 rgBT /Overlock	1.6	0
92	Dimensional Control of Assembling Metal Chalcogenide Clusters. European Journal of Inorganic Chemistry, 2020, 2020, 1243-1243.	1.0	0