Atsushi Wakamiya

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/7865520/publications.pdf

Version: 2024-02-01

208 papers	13,101 citations	23500 58 h-index	26548 107 g-index
231 all docs	231 docs citations	231 times ranked	12043 citing authors

#	Article	IF	Citations
1	Purely organic electroluminescent material realizing 100% conversion from electricity to light. Nature Communications, 2015, 6, 8476.	5.8	799
2	Photocarrier Recombination Dynamics in Perovskite CH₃NH₃PbI₃ for Solar Cell Applications. Journal of the American Chemical Society, 2014, 136, 11610-11613.	6.6	701
3	Boron as a key component for new Ï€-electron materials. Pure and Applied Chemistry, 2006, 78, 1413-1424.	0.9	386
4	3-Boryl-2,2â€²-bithiophene as a Versatile Core Skeleton for Full-Color Highly Emissive Organic Solids. Angewandte Chemie - International Edition, 2007, 46, 4273-4276.	7.2	355
5	Dynamic Optical Properties of CH₃NH₃PbI₃ Single Crystals As Revealed by One- and Two-Photon Excited Photoluminescence Measurements. Journal of the American Chemical Society, 2015, 137, 10456-10459.	6.6	335
6	Highly Emissive Organic Solids Containing 2,5-Diboryl-1,4-phenylene Unit. Journal of the American Chemical Society, 2006, 128, 15934-15935.	6.6	306
7	Triarylboronâ€Based Fluorescent Organic Lightâ€Emitting Diodes with External Quantum Efficiencies Exceeding 20â€‰%. Angewandte Chemie - International Edition, 2015, 54, 15231-15235.	7.2	285
8	Reproducible Fabrication of Efficient Perovskite-based Solar Cells: X-ray Crystallographic Studies on the Formation of CH₃NH₃PbI₃ Layers. Chemistry Letters, 2014, 43, 711-713.	0.7	284
9	Planarized Triarylboranes: Stabilization by Structural Constraint and Their Plane-to-Bowl Conversion. Journal of the American Chemical Society, 2012, 134, 4529-4532.	6.6	283
10	Intramolecular Bâ€“N Coordination as a Scaffold for Electron-Transporting Materials: Synthesis and Properties of Boryl-Substituted Thienylthiazoles. Angewandte Chemie - International Edition, 2006, 45, 3170-3173.	7.2	282
11	Hole-Transporting Materials with a Two-Dimensionally Expanded Ï€-System around an Azulene Core for Efficient Perovskite Solar Cells. Journal of the American Chemical Society, 2015, 137, 15656-15659.	6.6	271
12	Near-band-edge optical responses of solution-processed organicâ€“inorganic hybrid perovskite CH₃NH₃PbI₃on mesoporous TiO₂electrodes. Applied Physics Express, 2014, 7, 032302.	1.1	267
13	Designs of Functional Ï€-Electron Materials based on the Characteristic Features of Boron. Bulletin of the Chemical Society of Japan, 2015, 88, 1357-1377.	2.0	224
14	Sn(IV)-free tin perovskite films realized by in situ Sn(0) nanoparticle treatment of the precursor solution. Nature Communications, 2020, 11, 3008.	5.8	196
15	Pentaindenocorannulene and Tetraindenocorannulene:Â New Aromatic Hydrocarbon Ï€ Systems with Curvatures Surpassing That of C60. Journal of the American Chemical Society, 2007, 129, 484-485.	6.6	195
16	Optimized carrier extraction at interfaces for 23.6% efficient tinâ€“lead perovskite solar cells. Energy and Environmental Science, 2022, 15, 2096-2107.	15.6	172
17	Photoelectronic Responses in Solution-Processed Perovskite CH<inline-formula><tex-math>$_{f 3}$ </tex-math></inline-formula>NH<inline-formula><tex-math>$_{f 3}$</tex-math></inline-formula>PbI<inline-formula> <tex-math>$_{f 3}$</tex-math></inline-formula> Solar Cells Studied by Photoluminescence and Photoconductivity Measurements. IEEE Journal of Photovoltaics, 2015, 5, 401-405.	1.5	170
18	Aromatic Ï€-Systems More Curved Than C₆₀. The Complete Family of All Indenocorannulenes Synthesized by Iterative Microwave-Assisted Intramolecular Arylations. Journal of the American Chemical Society, 2009, 131, 10537-10545.	6.6	167

#	Article	IF	Citations
19	Highly Efficient and Stable Perovskite Solar Cells by Interfacial Engineering Using Solution-Processed Polymer Layer. Journal of Physical Chemistry C, 2017, 121, 1562-1568.	1.5	166
20	General Synthesis of Thiophene and Selenophene-Based Heteroacenes. Organic Letters, 2005, 7, 5301-5304.	2.4	163
21	Kinetically stabilized dibenzoborole as an electron-accepting building unit. Chemical Communications, 2008, , 579-581.	2.2	157
22	Synthesis and Structural Characterization of Pentaarylboroles and Their Dianions. Organometallics, 2008, 27, 3496-3501.	1.1	133
23	Benzene-fused BODIPY and fully-fused BODIPY dimer: impacts of the ring-fusing at the b bond in the BODIPY skeleton. Chemical Science, 2013, 4, 1002-1007.	3.7	132
24	Ladder Oligo(p-phenylenevinylene)s with Silicon and Carbon Bridges. Journal of the American Chemical Society, 2005, 127, 1638-1639.	6.6	122
25	Photon Emission and Reabsorption Processes in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>CH</mml:mi></mml:mrow><mml:mrow><mml:mn>3</mml:mn></ Single Crystals Revealed by Time-Resolved Two-Photon-Ex. Physical Review Applied, 2017, 7, .	1.5	116
26	Synthesis of a distinct water dimer inside fullerene C70. Nature Chemistry, 2016, 8, 435-441.	6.6	114
27	High Fidelity Self-Sorting Assembling ofmeso-Cinchomeronimide Appendedmeso-mesoLinked Zn(II) Diporphyrins. Journal of the American Chemical Society, 2006, 128, 7670-7678.	6.6	111
28	Fast Freeâ€Carrier Diffusion in CH₃NH₃PbBr₃ Single Crystals Revealed by Timeâ€Resolved Oneâ€•and Twoâ€Photon Excitation Photoluminescence Spectroscopy. Advanced Electronic Materials, 2016, 2, 1500290.	2.6	111
29	Leadâ€Free Solar Cells based on Tin Halide Perovskite Films with High Coverage and Improved Aggregation. Angewandte Chemie - International Edition, 2018, 57, 13221-13225.	7.2	111
30	Highly Emissive Poly(aryleneethynylene)s Containing 2,5-Diboryl-1,4-phenylene as a Building Unit. Macromolecules, 2007, 40, 3898-3900.	2.2	108
31	Highly stable perovskite solar cells with an all-carbon hole transport layer. Nanoscale, 2016, 8, 11882-11888.	2.8	107
32	General Synthesis of Extended Fused Oligothiophenes Consisting of an Even Number of Thiophene Rings. Chemistry - A European Journal, 2007, 13, 548-556.	1.7	105
33	A Crystalline Porous Coordination Polymer Decorated with Nitroxyl Radicals Catalyzes Aerobic Oxidation of Alcohols. Journal of the American Chemical Society, 2014, 136, 7543-7546.	6.6	105
34	Inâ€...Situ Solidâ€State Generation of (BN)₂â€Pyrenes and Electroluminescent Devices. Angewandte Chemie - International Edition, 2015, 54, 15074-15078.	7.2	105
35	Highly Emissive Diborylphenyleneâ€Containing Bis(phenylethynyl)benzenes: Structureâ€“Photophysical Property Correlations and Fluoride Ion Sensing. Chemistry - A European Journal, 2009, 15, 10603-10612.	1.7	91
36	Charge Injection Mechanism at Heterointerfaces in CH₃NH₃PbI₃ Perovskite Solar Cells Revealed by Simultaneous Time-Resolved Photoluminescence and Photocurrent Measurements. Journal of Physical Chemistry Letters, 2017, 8, 954-960.	2.1	91

#	Article	IF	Citations
37	Crystal Structures and Spectroscopic Characterization of Radical Cations and Dications of Oligothiophenes Stabilized by Annelation with Bicyclo[2.2.2]octene Units:â€‰ Sterically Segregated Cationic Oligothiophenes. Journal of the American Chemical Society, 2004, 126, 3163-3174.	6.6	90
38	Free Excitons and Excitonâ€“Phonon Coupling in CH₃NH₃PbI₃ Single Crystals Revealed by Photocurrent and Photoluminescence Measurements at Low Temperatures. Journal of Physical Chemistry Letters, 2016, 7, 4905-4910.	2.1	88
39	Onâ€Top Ï€â€Stacking of Quasiplanar Molecules in Holeâ€Transporting Materials: Inducing Anisotropic Carrier Mobility in Amorphous Films. Angewandte Chemie - International Edition, 2014, 53, 5800-5804.	7.2	87
40	Solvent-Coordinated Tin Halide Complexes as Purified Precursors for Tin-Based Perovskites. ACS Omega, 2017, 2, 7016-7021.	1.6	85
41	Spontaneous Defect Annihilation in CH₃NH₃PbI₃ Thin Films at Room Temperature Revealed by Time-Resolved Photoluminescence Spectroscopy. Journal of Physical Chemistry Letters, 2015, 6, 482-486.	2.1	83
42	Single-crystal field-effect transistors of benzoannulated fused oligothiophenes and oligoselenophenes. Applied Physics Letters, 2007, 90, 072102.	1.5	82
43	Intramolecular Reductive Double Cyclization of o,oâ€²-Bis(arylcarbonyl)diphenylacetylenes: Synthesis of Ladder Ï€-Conjugated Skeletons. Organic Letters, 2009, 11, 3076-3079.	2.4	82
44	Ladder Distyrylbenzenes with Silicon and Chalcogen Bridges:Â Synthesis, Structures, and Properties. Organic Letters, 2007, 9, 93-96.	2.4	80
45	Free Carriers versus Excitons in CH₃NH₃PbI₃ Perovskite Thin Films at Low Temperatures: Charge Transfer from the Orthorhombic Phase to the Tetragonal Phase. Journal of Physical Chemistry Letters, 2016, 7, 2316-2321.	2.1	79
46	Regioselective Unsymmetrical Tetraallylation of C₆₀ through Palladium Catalysis. Journal of the American Chemical Society, 2009, 131, 15112-15113.	6.6	77
47	Toward Ï€-Conjugated Molecule Bundles:Â Synthesis of a Series ofB,Bâ€²,Bâ€³-Trianthryl-N,Nâ€²,Nâ€³-triarylborazines and the Bundle Effects on Their Properties. Journal of the American Chemical Society, 2005, 127, 14859-14866.	6.6	74
48	Synthesis of a Library of Fluorescent 2â€Arylâ€3â€trifluoromethylnaphthofurans from Naphthols by Using a Sequential Pummererâ€Annulation/Crossâ€Coupling Strategy and their Photophysical Properties. Chemistry - A European Journal, 2012, 18, 12690-12697.	1.7	72
49	Synthesis and Properties of Endohedral Aza[60]fullerenes: H₂O@C₅₉N and H₂@C₅₉N as Their Dimers and Monomers. Journal of the American Chemical Society, 2016, 138, 4096-4104.	6.6	72
50	Doping Polycyclic Arenes with Nitrogenâ€“Boronâ€“Nitrogen (NBN) Units. Organic Letters, 2018, 20, 6741-6745.	2.4	72
51	Electronic Tuning of Thiazolyl-Capped Ï€-Conjugated Compounds via a Coordination/Cyclization Protocol with B(C₆F₅)₃. Organic Letters, 2010, 12, 5470-5473.	2.4	70
52	A Bâ‹¯B Bond-Containing Polycyclic Ï€-Electron System: Dithieno-1,2-dihydro-1,2-diborin and Its Dianion. Journal of the American Chemical Society, 2009, 131, 10850-10851.	6.6	66
53	Ladder Bis-Silicon-Bridged Stilbenes as a New Building Unit for Fluorescent Ï€-Conjugated Polymers. Macromolecules, 2004, 37, 8978-8983.	2.2	63
54	Photo-excitation intensity dependent electron and hole injections from lead iodide perovskite to nanocrystalline TiO₂ and spiro-OMeTAD. Chemical Communications, 2016, 52, 673-676.	2.2	63

#	Article	IF	Citations
55	Palladium-Catalyzed Cyclization: Regioselectivity and Structure of Arene-Fused C60 Derivatives. Journal of the American Chemical Society, 2017, 139, 16350-16358.	6.6	63
56	Synthesis, properties, and crystal structures of Ï€-extended double [6]helicenes: contorted multi-dimensional stacking lattice. Organic and Biomolecular Chemistry, 2017, 15, 4697-4703.	1.5	61
57	Oxygen-Bridged Diphenylnaphthylamine as a Scaffold for Full-Color Circularly Polarized Luminescent Materials. Journal of Organic Chemistry, 2017, 82, 5242-5249.	1.7	60
58	Roles of Polymer Layer in Enhanced Photovoltaic Performance of Perovskite Solar Cells via Interface Engineering. Advanced Materials Interfaces, 2018, 5, 1701256.	1.9	60
59	Synthesis, structures, and photophysical properties of silicon and carbon-bridged ladder oligo(p-phenylenevinylene)s and related Ï€-electron systems. Journal of Organometallic Chemistry, 2005, 690, 5365-5377.	0.8	58
60	Interfacial Charge-Carrier Trapping in CH₃NH₃PbI₃-Based Heterolayered Structures Revealed by Time-Resolved Photoluminescence Spectroscopy. Journal of Physical Chemistry Letters, 2016, 7, 1972-1977.	2.1	58
61	Synthesis and Properties of Novel Oligothiophenes Surrounded by Bicyclo[2.2.2]octene Frameworks. Journal of Organic Chemistry, 2003, 68, 8305-8314.	1.7	57
62	General Silaindene Synthesis Based on Intramolecular Reductive Cyclization toward New Fluorescent Silicon-Containing Ï€-Electron Materials. Organic Letters, 2004, 6, 3707-3710.	2.4	57
63	4,7â€Bis[3â€(dimesitylboryl)thienâ€2â€yl]benzothiadiazole: Solvatoâ€, Thermoâ€, and Mechanochromism Based on the Reversible Formation of an Intramolecular Bâ”N Bond. Chemistry - A European Journal, 2017, 23, 3784-3791.	1.7	57
64	Electronâ€Deficient Tetrabenzoâ€Fused Pyracylene and Conversions into Curved and Planar Ï€â€Systems Having Distinct Emission Behaviors. Angewandte Chemie - International Edition, 2015, 54, 9308-9312.	7.2	56
65	X-ray observation of a helium atom and placing a nitrogen atom inside He@C60 and He@C70. Nature Communications, 2013, 4, 1554.	5.8	55
66	Constraint-induced structural deformation of planarized triphenylboranes in the excited state. Chemical Science, 2014, 5, 1296-1304.	3.7	54
67	Quantifying Hole Transfer Yield from Perovskite to Polymer Layer: Statistical Correlation of Solar Cell Outputs with Kinetic and Energetic Properties. ACS Photonics, 2016, 3, 1678-1688.	3.2	54
68	Elucidating Mechanisms behind Ambient Storage-Induced Efficiency Improvements in Perovskite Solar Cells. ACS Energy Letters, 2021, 6, 925-933.	8.8	52
69	Electronic Modulation of Fused Oligothiophenes by Chemical Oxidation. Organic Letters, 2008, 10, 3393-3396.	2.4	51
70	Expansion of Orifices of Open C₆₀ Derivatives and Formation of an Open C₅₉S Derivative by Reaction with Sulfur. Organic Letters, 2013, 15, 2750-2753.	2.4	50
71	High-order harmonic generation from hybrid organicâ€“inorganic perovskite thin films. APL Materials, 2019, 7, .	2.2	49
72	Excimer emission based on the control of molecular structure and intermolecular interactions. Journal of Materials Chemistry C, 2016, 4, 2784-2792.	2.7	47

#	Article	IF	Citations
73	Red-emissive Polyphenylated BODIPY Derivatives: Effect of Peripheral Phenyl Groups on the Photophysical and Electrochemical Properties. Chemistry Letters, 2008, 37, 1094-1095.	0.7	46
74	A Purified, Solventâ€Intercalated Precursor Complex for Wideâ€Processâ€Window Fabrication of Efficient Perovskite Solar Cells and Modules. Angewandte Chemie - International Edition, 2019, 58, 9389-9393.	7.2	46
75	1,2-Dithiin Annelated with Bicyclo[2.2.2]octene Frameworks. One-Electron and Two-Electron Oxidations and Formation of a Novel 2,3,5,6-Tetrathiabicyclo[2.2.2]oct-7-ene Radical Cation with Remarkable Stability Owing to a Strong Transannular Interaction. Journal of the American Chemical Society, 2002, 124, 15038-15050.	6.6	45
76	Unsymmetric Twofold Scholl Cyclization of a 5,11â€Dinaphthyltetracene: Selective Formation of Pentagonal and Hexagonal Rings via Dicationic Intermediates. Angewandte Chemie - International Edition, 2017, 56, 5082-5086.	7.2	45
77	Minute-Scale Degradation and Shift of Valence-Band Maxima of (CH₃NH₃)SnI₃ and HC(NH₂)₂SnI₃ Perovskites upon Air Exposure. Journal of Physical Chemistry C, 2017, 121, 19650-19656.	1.5	44
78	Planarized B-phenylborataanthracene anions: structural and electronic impacts of coplanar constraint. Chemical Communications, 2012, 48, 10715.	2.2	43
79	Excimer formation in organic emitter films associated with a molecular orientation promoted by steric hindrance. Chemical Communications, 2014, 50, 14145-14148.	2.2	43
80	Design, Synthesis, and Characterization of Functionalized Silepins: High Quantum Yield Blue Emitters. Organometallics, 2011, 30, 1719-1729.	1.1	41
81	Trapping N₂ and CO₂ on the Subâ€Nano Scale in the Confined Internal Spaces of Openâ€Cage C₆₀ Derivatives: Isolation and Structural Characterization of the Hostâ€“Guest Complexes. Angewandte Chemie - International Edition, 2015, 54, 14791-14794.	7.2	40
82	A Stable, Soluble, and Crystalline Supramolecular System with a Triplet Ground State. Angewandte Chemie - International Edition, 2017, 56, 4261-4265.	7.2	40
83	Molecular Orientation Change in Naphthalene Diimide Thin Films Induced by Removal of Thermally Cleavable Substituents. Chemistry of Materials, 2019, 31, 1729-1737.	3.2	40
84	Radiative recombination and electron-phonon coupling in lead-free <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">C</mml:mi><mml:msub><mml:mi mathvariant="normal">H</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:mi mathvariant="normal">N</mml:mi><mml:msub><mml:mi mathvariant="normal">H</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:mi>Sn</mml:mi><mml:msub><mml:mi	0.9	40
85	Isolation of the simplest hydrated acid. Science Advances, 2017, 3, e1602833.	4.7	39
86	Synthesis of 1â€Phosphaâ€2â€boraacenaphthenes: Reductive 1,2â€Aryl Migration of 1â€Diarylborylâ€8â€dichlorophosphinonaphthalenes. Angewandte Chemie - International Edition, 2011, 50, 10940-10943.	7.2	38
87	Synthesis of Open-Cage Ketolactam Derivatives of Fullerene C₆₀ Encapsulating a Hydrogen Molecule. Organic Letters, 2014, 16, 2970-2973.	2.4	38
88	Charge Injection at the Heterointerface in Perovskite CH₃NH₃PbI₃ Solar Cells Studied by Simultaneous Microscopic Photoluminescence and Photocurrent Imaging Spectroscopy. Journal of Physical Chemistry Letters, 2016, 7, 3186-3191.	2.1	38
89	Photorefractive Effect in Organicâ€“Inorganic Hybrid Perovskites and Its Application to Optical Phase Shifter. Advanced Optical Materials, 2018, 6, 1701366.	3.6	38
90	Identifying an Optimum Perovskite Solar Cell Structure by Kinetic Analysis: Planar, Mesoporous Based, or Extremely Thin Absorber Structure. ACS Applied Energy Materials, 2018, 1, 3722-3732.	2.5	36

#	Article	IF	Citations
91	NIR-Absorbing Dye Based on BF₂-Bridged Azafulvene Dimer as a Strong Electron-Accepting Unit. Organic Letters, 2018, 20, 5135-5138.	2.4	36
92	Leadâ€Free Solar Cells based on Tin Halide Perovskite Films with High Coverage and Improved Aggregation. Angewandte Chemie, 2018, 130, 13405-13409.	1.6	36
93	Materials Chemistry Approach for Efficient Lead-Free Tin Halide Perovskite Solar Cells. ACS Applied Electronic Materials, 2020, 2, 3794-3804.	2.0	36
94	Mixed leadâ€“tin perovskite films with >7 Î¼s charge carrier lifetimes realized by maltol post-treatment. Chemical Science, 2021, 12, 13513-13519.	3.7	36
95	Enhancing the Hot-Phonon Bottleneck Effect in a Metal Halide Perovskite by Terahertz Phonon Excitation. Physical Review Letters, 2021, 126, 077401.	2.9	34
96	Highly Electron-Donating 3,3â€²-Diaryl-1,1â€²-bi(isobenzofuran)s Synthesized by Photochemical Exocyclic [2 + 2 + 2] Cycloaddition. Organic Letters, 2008, 10, 3591-3594.	2.4	33
97	Site-selective sequential coupling reactions controlled by â€œElectrochemical Reaction Site Switchingâ€: a straightforward approach to 1,4-bis(diaryl)buta-1,3-diynes. Organic and Biomolecular Chemistry, 2012, 10, 9562.	1.5	33
98	Palladium-catalyzed tetraallylation of C60 with allyl chloride and allylstannane: mechanism, regioselectivity, and enantioselectivity. Chemical Science, 2012, 3, 3474.	3.7	33
99	Experimental Evidence of Localized Shallow States in Orthorhombic Phase of CH₃NH₃PbI₃ Perovskite Thin Films Revealed by Photocurrent Beat Spectroscopy. Journal of Physical Chemistry C, 2016, 120, 5347-5352.	1.5	33
100	Water Entrapped inside Fullerene Cages: A Potential Probe for Evaluation of Bond Polarization. Angewandte Chemie - International Edition, 2016, 55, 13109-13113.	7.2	32
101	Photophysics of lead-free tin halide perovskite films and solar cells. APL Materials, 2019, 7, .	2.2	32
102	Iodine-rich mixed composition perovskites optimised for tin(<scp>iv</scp>) oxide transport layers: the influence of halide ion ratio, annealing time, and ambient air aging on solar cell performance. Journal of Materials Chemistry A, 2019, 7, 16947-16953.	5.2	32
103	Degradation mechanism of perovskite CH₃NH₃PbI₃ diode devices studied by electroluminescence and photoluminescence imaging spectroscopy. Applied Physics Express, 2015, 8, 102302.	1.1	31
104	Highly efficient pyrene blue emitters for OLEDs based on substitution position effect. Dyes and Pigments, 2018, 158, 42-49.	2.0	31
105	Dithieno-Fused Polycyclic Aromatic Hydrocarbon with a Pyracylene Moiety: Strong Antiaromatic Contribution to the Electronic Structure. Organic Letters, 2017, 19, 826-829.	2.4	30
106	Origin of Open-Circuit Voltage Loss in Polymer Solar Cells and Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2017, 9, 19988-19997.	4.0	30
107	Synthesis and Structure of an Open-Cage Thiafullerene C₆₉S: Reactivity Differences of an Open-Cage C₇₀ Tetraketone Relative to Its C₆₀ Analogue. Journal of the American Chemical Society, 2014, 136, 8193-8196.	6.6	29
108	Synthesis and Properties of Dithieno-Fused 1,4-Azaborine Derivatives. Organic Letters, 2018, 20, 7336-7340.	2.4	29

#	Article	IF	Citations
109	Rh-Catalyzed Dehydrogenative Cyclization Leading to Benzosilolothiophene Derivatives via Siâ€“H/Câ€“H Bond Cleavage. Organic Letters, 2017, 19, 2564-2567.	2.4	28
110	High Bending Durability of Efficient Flexible Perovskite Solar Cells Using Metal Oxide Electron Transport Layer. Journal of Physical Chemistry C, 2018, 122, 17088-17095.	1.5	28
111	The first isolation of the hexafluoroantimonate salt of a 1,4-dithiin radical cation stabilized by bicyclo[2.2.2]octene annelation. Tetrahedron Letters, 1999, 40, 4375-4378.	0.7	26
112	Optical characterization of voltage-accelerated degradation in CH_3NH_3PbI_3 perovskite solar cells. Optics Express, 2016, 24, A917.	1.7	26
113	Recycled Utilization of a Nanoporous Au Electrode for Reduced Fabrication Cost of Perovskite Solar Cells. Advanced Science, 2020, 7, 1902474.	5.6	26
114	The stable radical cation of thiophene annelated with bicyclo[2.2.2]octene and its reaction with triplet oxygen to give a protonated cation of 2-butene-1,4-dione derivative. Chemical Communications, 2002, , 1192-1193.	2.2	25
115	Synthesis and photovoltaic properties of acceptor materials based on the dimerization of fullerene C60 for use in efficient polymer solar cells. Chemical Communications, 2013, 49, 3670.	2.2	25
116	Dâ€“Ï€â€“A Dyes with an Intramolecular Bâ€“N Coordination Bond as a Key Scaffold for Electronic Structural Tuning and Their Application in Dye-Sensitized Solar Cells. Bulletin of the Chemical Society of Japan, 2017, 90, 441-450.	2.0	25
117	Structureâ€“property relations in Agâ€“Biâ€“I compounds: potential Pb-free absorbers in solar cells. Journal of Materials Chemistry A, 2019, 7, 5583-5588.	5.2	25
118	Encapsulation and Dynamic Behavior of Methanol and Formaldehyde inside Openâ€Cage C₆₀ Derivatives. Angewandte Chemie - International Edition, 2017, 56, 2758-2762.	7.2	24
119	Antiaromatic Dithieno-1,2-dihydro-1,2-diborin Splits Diatomic Hydrogen. Chemistry Letters, 2017, 46, 1714-1717.	0.7	24
120	Enhanced performance of CH3NH3PbI3-based perovskite solar cells by tuning the electrical and structural properties of mesoporous TiO2 layer via Al and Mg doping. Solar Energy, 2019, 177, 374-381.	2.9	24
121	Selective Introduction of Organic Groups to C₆₀ and C₇₀ Using Organoboron Compounds and Rhodium Catalyst: A New Synthetic Approach to Organo(hydro)fullerenes. Chemistry - an Asian Journal, 2011, 6, 590-598.	1.7	23
122	Elucidation of Ï€â€Conjugation Modes in Dianeâ€Fused 1,2â€Dihydroâ€1,2â€diborin Dianions. Chemistry - an Asian Journal, 2012, 7, 1594-1603.	1.7	23
123	Elucidation of the Structureâ€“Property Relationship of p-Type Organic Semiconductors through Rapid Library Construction via a One-Pot, Suzukiâ€“Miyaura Coupling Reaction. ACS Combinatorial Science, 2014, 16, 494-499.	3.8	23
124	Light Intensity Dependence of Performance of Lead Halide Perovskite Solar Cells. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2017, 30, 577-582.	0.1	23
125	Crystallographic and Chiroptical Studies on Tetraarylferrocenes for Use as Chiral Rotary Modules for Molecular Machines. Chemistry - A European Journal, 2007, 13, 1724-1730.	1.7	22
126	A designed fluorescent anthracene derivative: Theory, calculation, synthesis, and characterization. Chemical Physics Letters, 2014, 602, 80-83.	1.2	22

#	Article	IF	Citations
127	Synthesis of Hexa(furan-2-yl)benzenes and Their Ï€-Extended Derivatives. Journal of Organic Chemistry, 2013, 78, 2763-2768.	1.7	21
128	Influence of Alkoxy Chain Length on the Properties of Twoâ€Dimensionally Expanded Azuleneâ€Coreâ€Based Holeâ€Transporting Materials for Efficient Perovskite Solar Cells. Chemistry - A European Journal, 2019, 25, 6741-6752.	1.7	21
129	Synthesis and Photophysical Properties of Aryl-Substituted 2-Borylbenzaldimines and Their Extended Ï€-Conjugated Congeners. Journal of Organic Chemistry, 2012, 77, 2176-2184.	1.7	20
130	Impacts of Dibenzo- and Dithieno-fused Structures at the b, g Bonds in the BODIPY Skeleton. Chemistry Letters, 2013, 42, 986-988.	0.7	20
131	Development of Transparent Organic Hole-transporting Materials Using Partially Oxygen-bridged Triphenylamine Skeletons. Chemistry Letters, 2017, 46, 817-820.	0.7	20
132	1,4-Dithiin annelated with bicyclo[2.2.2]octene units: experimental and theoretical evidence for the aromaticity in 1,4-dithiin dication. Chemical Communications, 1999, , 777-778.	2.2	19
133	Relative stereochemistries of the ether rings and sugar moieties in durinskiol A. Tetrahedron Letters, 2007, 48, 3429-3432.	0.7	19
134	How the Mixed Cations (Guanidium, Formamidinium, and Phenylethylamine) in Tin Iodide Perovskites Affect Their Charge Carrier Dynamics and Solar Cell Characteristics. Journal of Physical Chemistry Letters, 2020, 11, 4043-4051.	2.1	19
135	Unsymmetric Twofold Scholl Cyclization of a 5,11â€Dinaphthyltetracene: Selective Formation of Pentagonal and Hexagonal Rings via Dicationic Intermediates. Angewandte Chemie, 2017, 129, 5164-5168.	1.6	18
136	Planar Perovskite Solar Cells with High Efficiency and Fill Factor Obtained Using Two-Step Growth Process. ACS Applied Materials & Interfaces, 2019, 11, 15680-15687.	4.0	18
137	Inhomogeneous Deactivation with UV Excitation in Submicron Grains of Lead Iodide Perovskite-based Solar Cell as Revealed by Femtosecond Transient Absorption Microscopy. Chemistry Letters, 2014, 43, 1656-1658.	0.7	17
138	Fullerene C₇₀ as a Nanoflask that Reveals the Chemical Reactivity of Atomic Nitrogen. Angewandte Chemie - International Edition, 2017, 56, 6488-6491.	7.2	17
139	How to Make Dense and Flat Perovskite Layers for >20% Efficient Solar Cells: Oriented, Crystalline Perovskite Intermediates and Their Thermal Conversion. Bulletin of the Chemical Society of Japan, 2019, 92, 1972-1979.	2.0	17
140	Donorâ€“acceptor polymers containing thiazole-fused benzothiadiazole acceptor units for organic solar cells. RSC Advances, 2019, 9, 7107-7114.	1.7	17
141	Additive-free, Cost-Effective Hole-Transporting Materials for Perovskite Solar Cells Based on Vinyl Triarylamines. ACS Applied Materials & Interfaces, 2020, 12, 32994-33003.	4.0	17
142	Progress in recycling organicâ€“inorganic perovskite solar cells for eco-friendly fabrication. Journal of Materials Chemistry A, 2021, 9, 2612-2627.	5.2	17
143	Metal-free ferroelectric halide perovskite exhibits visible photoluminescence correlated with local ferroelectricity. Science Advances, 2022, 8, .	4.7	17
144	Synthesis, Structure, and Dynamic Behavior of Cyclopentadienyl-Lithium, -Sodium, and -Potassium Annelated with Bicyclo[2.2.2]octene Units:Â A Systematic Study on Site Exchange of Alkali Metals on a Cyclopentadienyl Ring in Tetrahydrofuran. Journal of the American Chemical Society, 2003, 125, 7324-7335.	6.6	16

#	Article	IF	Citations
145	Structural Modification of Siliconâ€Bridged Ladder Stilbene Oligomers and Distyrylbenzenes. Macromolecular Chemistry and Physics, 2009, 210, 904-916.	1.1	16
146	Halichonines A, B, and C, novel sesquiterpene alkaloids from the marine sponge Halichondria okadai Kadota. Chemical Communications, 2011, 47, 12453.	2.2	16
147	Dâ€“Îâ€“A Dyes with Diketopyrrolopyrrole and Boryl-substituted Thienylthiazole Units for Dye-sensitized Solar Cells with High J_{SC} Values. Chemistry Letters, 2017, 46, 715-718.	0.7	16
148	Hole-transporting materials based on thiophene-fused arenes from sulfur-mediated thienannulations. Materials Chemistry Frontiers, 2018, 2, 275-280.	3.2	16
149	Ag-(Bi, Sb, In, Ga)-I Solar Cells: Impacts of Elemental Composition and Additives on the Charge Carrier Dynamics and Crystal Structures. ACS Applied Energy Materials, 2020, 3, 8224-8232.	2.5	16
150	1,3,5,7-Tetra(Bpin)azulene by Exhaustive Direct Borylation of Azulene and 5,7-Di(Bpin)azulene by Selective Subsequent Deborylation. Synlett, 2015, 26, 1578-1580.	1.0	15
151	Iodide-Mediated or Iodide-Catalyzed Demethylation and Friedelâ€“Crafts Câ€“H Borylative Cyclization Leading to Thiophene-Fused 1,2-Oxaborine Derivatives. Organic Letters, 2019, 21, 2171-2175.	2.4	14
152	The Influence of Quasiplanar Structures of Partially Oxygen-Bridged Triphenylamine Dimers on the Properties of Their Bulk Films. Bulletin of the Chemical Society of Japan, 2016, 89, 726-732.	2.0	13
153	Orientation of a Water Molecule: Effects on Electronic Nature of the C₅₉N Cage. Journal of Organic Chemistry, 2017, 82, 4465-4469.	1.7	13
154	Co(I)-Mediated Removal of Addends on the C₆₀ Cage and Formation of the Monovalent Cobalt Complex CpCo(CO)(Î·²-C₆₀). Organic Letters, 2016, 18, 6348-6351.	2.4	12
155	Near-infrared Emissive Donorâ€“Acceptor-type Molecules Containing Thiazole-fused Benzothiadiazole as an Electron-acceptor Moiety. Chemistry Letters, 2016, 45, 892-894.	0.7	12
156	Direct observation of charge transfer at the interface between PEDOT:PSS and perovskite layers. Applied Physics Express, 2019, 12, 041002.	1.1	12
157	large thermal expansion leads to negative thermo-optic coefficient of halide perovskite <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">C</mml:mi><mml:msub><mml:mi mathvariant="normal">H</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:mi mathvariant="normal">N</mml:mi><mml:msub><mml:mi mathvariant="normal">H</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:mi>PbC</mml:mi><mml:msub><mml:mi	0.9	12
158	Synthesis and X-ray Structure of Endohedral Fullerene C60 Dimer Encapsulating a Water Molecule in Each C60 Cage. Chemistry Letters, 2013, 42, 879-881.	0.7	11
159	Efficient Synthesis of Oneâ€•and Twoâ€Dimensional Multimetallic Goldâ€“Bis(dithiolene) Complexes. European Journal of Inorganic Chemistry, 2016, 2016, 3228-3232.	1.0	11
160	Unprecedented photochemical rearrangement of an open-cage C₆₀ derivative. Chemical Communications, 2017, 53, 1712-1714.	2.2	11
161	Characterization of dye-sensitized solar cells using five pure anthocyanidin 3-O-glucosides possessing different chromophores. Journal of Photochemistry and Photobiology A: Chemistry, 2017, 335, 230-238.	2.0	11
162	Near-Ultraviolet Transparent Organic Hole-Transporting Materials Containing Partially Oxygen-Bridged Triphenylamine Skeletons for Efficient Perovskite Solar Cells. ACS Applied Energy Materials, 2021, 4, 1484-1495.	2.5	11

#	Article	IF	Citations
163	Anti-Stokes photoluminescence from <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>CsPbBr</mml:mi><mml:mn>3</mml:mn></mml:msub></ nanostructures embedded in a <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Cs</mml:mi><mml:mn>4</mml:mn></mml:mr crystal. Physical Review Materials, 2022, 6, .	0.9	11
164	Facile Synthesis of 1,4â€Bis(diaryl)â€1,3â€butadiynes Bearing Two Amino Moieties by Electrochemical Reactionâ€Site Switching, and Their Solvatochromic Fluorescence. Asian Journal of Organic Chemistry, 2016, 5, 373-379.	1.3	10
165	Structural modification of open-cage fullerene C₆₀ derivatives having a small molecule inside their cavities. Canadian Journal of Chemistry, 2017, 95, 320-328.	0.6	10
166	Excitation Wavelength Dependent Interfacial Charge Transfer Dynamics in a CH₃NH₃PbI₃ Perovskite Film. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2018, 31, 633-642.	0.1	10
167	Phthalimideâ€Based Transparent Electronâ€Transport Materials with Orientedâ€Amorphous Structures: Preparation from Solutionâ€Processed Precursor Films. ChemPlusChem, 2019, 84, 1396-1404.	1.3	10
168	Immediate and Temporal Enhancement of Power Conversion Efficiency in Surface-Passivated Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 39178-39185.	4.0	10
169	Calixazulenes: azulene-based calixarene analogues â€“ an overview and recent supramolecular complexation studies. Beilstein Journal of Organic Chemistry, 2018, 14, 2488-2494.	1.3	9
170	Ultrastrong coupling between THz phonons and photons caused by an enhanced vacuum electric field. Physical Review Research, 2021, 3, .	1.3	9
171	Multivariate Analysis of Mixed Ternary and Quaternary A-Site Organic Cations in Tin Iodide Perovskite Solar Cells. , 2022, 4, 1124-1131.		9
172	Design and Synthesis of Boron-containing Functional .PI.-Electron Materials. Yuki Gosei Kagaku Kyokaishi/Journal of Synthetic Organic Chemistry, 2008, 66, 858-868.	0.0	8
173	Synthesis of 8-Aryl-O-methylcyanidins and Their Usage for Dye-Sensitized Solar Cell Devices. International Journal of Molecular Sciences, 2017, 18, 427.	1.8	8
174	Tetraaryl Tetradecahydroporphyrazins: Novel Porphyrin Derivatives Featuring a Cyclic Benzeneâ€Ring Tetramer. Chemistry - A European Journal, 2009, 15, 10457-10463.	1.7	7
175	Partially Oxygen-Bridged Triphenylamines with a Quasiplanar Structure as a Key Scaffold for Hole-Transporting Materials. Yuki Gosei Kagaku Kyokaishi/Journal of Synthetic Organic Chemistry, 2016, 74, 1128-1135.	0.0	7
176	Efficient Synthesis and Properties of [1]Benzothieno[3,2â€•b]thieno[2,3â€•d]furans and [1]Benzothieno[3,2â€•b]thieno[2,3â€•d]thiophenes. Asian Journal of Organic Chemistry, 2018, 7, 1635-1641.	1.3	7
177	Synthesis and Electronic Spectra of Disilatriptycene Oligomers: Evidence for Electronic Delocalization along the One-Dimensional Arrangement of Bridge-Head Disilanes. Organometallics, 2008, 27, 5441-5445.	1.1	6
178	Modification and Unexpected Reactivity of 2-Borylbenzaldimines: Acylated and Silylated Derivatives as Well as Dimeric Compounds. Journal of Organic Chemistry, 2013, 78, 11747-11755.	1.7	6
179	Dibenzo[a,f]perylene Bisimide: Effects of Introducing Two Fused Rings. Chemistry - an Asian Journal, 2014, 9, 3136-3140.	1.7	6
180	Mechanochemically-generated solid state complex of C₆₀-fullerene with tetra-(5,7-diphenyl)calix[4]azulene, NMR, XRD and DFT studies. Supramolecular Chemistry, 2018, 30, 575-582.	1.5	6

#	Article	IF	Citations
181	Starburst Carbazole Derivatives as Efficient Hole Transporting Materials for Perovskite Solar Cells. Solar Rrl, 2022, 6, 2100877.	3.1	6
182	3,4â€Dihydroâ€3Hâ€pyrrolâ€2â€imines as Conformationally Restrained 1,3â€Diazabutadienes: Synthesis, Structural Properties and Protonation. European Journal of Organic Chemistry, 2009, 2009, 2077-2087.	1.2	5
183	Synthesis and Structure of an Open-cage C₆₉O Derivative. Chemistry Letters, 2017, 46, 543-546.	0.7	5
184	A Purified, Solventâ€Intercalated Precursor Complex for Wideâ€Processâ€Window Fabrication of Efficient Perovskite Solar Cells and Modules. Angewandte Chemie, 2019, 131, 9489-9493.	1.6	5
185	Arylâ^'Aryl Bond Formation by Flash Vacuum Pyrolysis of Benzannulated Thiopyrans. Journal of Organic Chemistry, 2008, 73, 5119-5122.	1.7	4
186	Thiazole-fused Benzothiadiazole as a Key Skeleton for T-Shaped Electron-accepting Building Blocks. Chemistry Letters, 2014, 43, 1386-1388.	0.7	4
187	Synthesis of Azole-fused Benzothiadiazoles as Key Units for Functional Ï€-Conjugated Compounds. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2017, 30, 561-568.	0.1	4
188	Hole-Transporting Polymers Containing Partially Oxygen-Bridged Triphenylamine Units and Their Application for Perovskite Solar Cells. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2020, 33, 505-516.	0.1	4
189	Coordination-Induced Intramolecular Double Cyclization: Synthesis of Boron-Bridged Dipyridylvinylenes and Dithiazolylvinylenes. Synthesis, 2009, 2009, 127-132.	1.2	3
190	Cycloaddition of Benzyne to Naphthalene-fused Tetracene with a Twisted Ï€-Surface. Chemistry Letters, 2017, 46, 591-593.	0.7	3
191	Single crystal structure and electroluminescence efficiency of blue fluorescence OLED emitters using triple core chromophores. Organic Electronics, 2019, 73, 261-265.	1.4	3
192	Cover Picture: 3-Boryl-2,2â€²-bithiophene as a Versatile Core Skeleton for Full-Color Highly Emissive Organic Solids (Angew. Chem. Int. Ed. 23/2007). Angewandte Chemie - International Edition, 2007, 46, 4193-4193.	7.2	2
193	Low temperature TiOx compact layer by chemical bath deposition method for vapor deposited perovskite solar cells. , 2014, , .		2
194	Formation of trans-Poly(thienylenevinylene) Thin Films by Solid-State Thermal Isomerization. Chemistry of Materials, 2021, 33, 5631-5638.	3.2	2
195	Carrier lifetime measurement of perovskite films by differential microwave photoconductivity decay. Japanese Journal of Applied Physics, 2022, 61, 068001.	0.8	2
196	Operational stability, low light performance, and long-lived transients in mixed-halide perovskite solar cells with a monolayer-based hole extraction layer. Solar Energy Materials and Solar Cells, 2022, 245, 111885.	3.0	2
197	Ir-Catalyzed Direct Borylation of Arenes. Yuki Gosei Kagaku Kyokaishi/Journal of Synthetic Organic Chemistry, 2006, 64, 1304-1305.	0.0	1
198	Carrier injection and recombination processes in perovskite CH₃NH₃PbI₃solar cells studied by electroluminescence spectroscopy. Proceedings of SPIE, 2016, , .	0.8	1

#	Article	IF	Citations
199	New blue emitting materials based on triple-core chromophores for organic light-emitting diodes. Molecular Crystals and Liquid Crystals, 2017, 654, 40-46.	0.4	1
200	Propeller-Shaped Aluminum Complexes with an Azaperylene Core in the Ligands. Inorganics, 2019, 7, 109.	1.2	1
201	Synthesis and Properties of Novel Oligothiophenes Surrounded by Bicyclo[2.2.2]octene Frameworks.. ChemInform, 2004, 35, no.	0.1	0
202	Macromol. Chem. Phys. 11/2009. Macromolecular Chemistry and Physics, 2009, 210, NA-NA.	1.1	0
203	Recent progress on perovskite solar cells and our materials science. , 2016, , .		0
204	Impact of photon recycling on carrier recombination processes in CH<inf>3</inf>NH<inf>3</inf>PbBr<inf>3</inf> single crystals revealed by time-resolved two-photon-excitation microscopy. , 2017, , .		0
205	White emission based on excimer emission control of triple core chromophores. , 2017, , .		0
206	Photoelectronic properties of lead-free CH3NH3SnI3 perovskite solar cell materials and devices. , 2018, , .		0
207	Highly Purified Materials for Sn-and Pb-Based Perovskite Solar Cells. ECS Meeting Abstracts, 2020, MA2020-02, 1863-1863.	0.0	0
208	Transparent Hole-Transporting Materials Containing Partially Oxygen-Bridged Triphenylamine Skeletons for Efficient Perovskite Solar Cells. ECS Meeting Abstracts, 2020, MA2020-02, 1867-1867.	0.0	0