

# Akihiro Shimizu

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

75  
papers

5,329  
citations

41  
h-index

73  
g-index

100  
ext. papers

5,912  
ext. citations

9.2  
avg, IF

5.82  
L-index

#	Paper	IF	Citations
75	Synthesis and Isolation of a Kinetically Stabilized Crystalline Triangulene. <i>Journal of the American Chemical Society</i> , <b>2021</b> , 143, 19599-19605	16.4	8
74	HOMO-LUMO Energy-Gap Tuning of $\pi$ -Conjugated Zwitterions Composed of Electron-Donating Anion and Electron-Accepting Cation. <i>Journal of Organic Chemistry</i> , <b>2021</b> , 86, 770-781	4.2	7
73	Metal-Free Twofold Electrochemical C-H Amination of Activated Arenes: Application to Medicinally Relevant Precursor Synthesis. <i>Chemistry - A European Journal</i> , <b>2020</b> , 26, 17574-17580	4.8	6
72	The Recent Developments of Electrochemical Oxidation <b>2019</b> , 409-437		
71	Azoniadibenzo[a,j]phenalenide: A Polycyclic Zwitterion with Singlet Biradical Character. <i>Angewandte Chemie - International Edition</i> , <b>2019</b> , 58, 6415-6419	16.4	10
70	Azoniadibenzo[a,j]phenalenide: A Polycyclic Zwitterion with Singlet Biradical Character. <i>Angewandte Chemie</i> , <b>2019</b> , 131, 6481-6485	3.6	2
69	Electrogenerated Cationic Reactive Intermediates: The Pool Method and Further Advances. <i>Chemical Reviews</i> , <b>2018</b> , 118, 4702-4730	68.1	312
68	Development of Electroorganic Reactions Utilizing Stabilized Reactive Species and Its Application to Organic Energy Storage Materials. <i>Electrochemistry</i> , <b>2018</b> , 86, 298-302	1.2	1
67	Metal- and Oxidant-Free Alkenyl C <sub>H</sub> /Aromatic C <sub>H</sub> Cross-Coupling Using Electrochemically Generated Iodosulfonium Ions. <i>Angewandte Chemie</i> , <b>2018</b> , 130, 13073-13077	3.6	3
66	Metal- and Oxidant-Free Alkenyl C-H/Aromatic C-H Cross-Coupling Using Electrochemically Generated Iodosulfonium Ions. <i>Angewandte Chemie - International Edition</i> , <b>2018</b> , 57, 12891-12895	16.4	7
65	Fluoreno[2,3-b]fluorene vs Indeno[2,1-b]fluorene: Unusual Relationship between the Number of $\pi$ Electrons and Excitation Energy in m-Quinodimethane-Type Singlet Diradicaloids. <i>Journal of Organic Chemistry</i> , <b>2017</b> , 82, 1380-1388	4.2	39
64	New Approach to 1,4-Benzoxazin-3-ones by Electrochemical C-H Amination. <i>Chemistry - A European Journal</i> , <b>2017</b> , 23, 12096-12099	4.8	47
63	Liquid Quinones for Solvent-Free Redox Flow Batteries. <i>Advanced Materials</i> , <b>2017</b> , 29, 1606592	24	29
62	Metal-Free Benzylic C-H Amination via Electrochemically Generated Benzylaminosulfonium Ions. <i>Chemistry - A European Journal</i> , <b>2017</b> , 23, 61-64	4.8	54
61	Generation, Characterization, and Reactions of Thionium Ions Based on the Indirect Cation Pool Method. <i>Bulletin of the Chemical Society of Japan</i> , <b>2016</b> , 89, 61-66	5.1	7
60	The Stabilized Cation Pool Method: Metal- and Oxidant-Free Benzylic C-H/Aromatic C-H Cross-Coupling. <i>Journal of the American Chemical Society</i> , <b>2016</b> , 138, 8400-3	16.4	150
59	Photostability enhancement of the pentacene derivative having two nitronyl nitroxide radical substituents. <i>Chemical Communications</i> , <b>2016</b> , 52, 2889-92	5.8	24

58	Heterocyclization Approach for Electrooxidative Coupling of Functional Primary Alkylamines with Aromatics. <i>Journal of the American Chemical Society</i> , <b>2015</b> , 137, 9816-9	16.4	109
57	Automated electrochemical assembly of the protected potential TMG-chitotriomycin precursor based on rational optimization of the carbohydrate building block. <i>Organic Letters</i> , <b>2015</b> , 17, 1525-8	6.2	47
56	Non-alternant non-benzenoid kekulenes: the birth of a new kekulene family. <i>Chemical Society Reviews</i> , <b>2015</b> , 44, 6560-77	58.5	83
55	Tetracyclopenta[def,jkl,pqr,vwx]tetraphenylene: A Potential Tetraradicaloid Hydrocarbon. <i>Angewandte Chemie</i> , <b>2015</b> , 127, 2118-2122	3.6	26
54	Innentitelbild: Tetracyclopenta[def,jkl,pqr,vwx]tetraphenylene: A Potential Tetraradicaloid Hydrocarbon (Angew. Chem. 7/2015). <i>Angewandte Chemie</i> , <b>2015</b> , 127, 2000-2000	3.6	
53	Reaction Integration Using Electrogenerated Cationic Intermediates. <i>Bulletin of the Chemical Society of Japan</i> , <b>2015</b> , 88, 763-775	5.1	28
52	PPV Polymerization through the Gilch Route: Diradical Character of Monomers. <i>Chemistry - A European Journal</i> , <b>2015</b> , 21, 19176-85	4.8	8
51	Switching the reaction pathways of electrochemically generated $\beta$ haloalkoxysulfonium ions - synthesis of halohydrins and epoxides. <i>Beilstein Journal of Organic Chemistry</i> , <b>2015</b> , 11, 242-8	2.5	22
50	Tetracyclopenta[def,jkl,pqr,vwx]tetraphenylene: a potential tetraradicaloid hydrocarbon. <i>Angewandte Chemie - International Edition</i> , <b>2015</b> , 54, 2090-4	16.4	77
49	Electrochemical intramolecular C-H amination: synthesis of benzoxazoles and benzothiazoles. <i>Chemistry - A European Journal</i> , <b>2015</b> , 21, 3211-4	4.8	64
48	Nitrogen-Containing Polycyclic Quinones as Cathode Materials for Lithium-ion Batteries with Increased Voltage. <i>Energy Technology</i> , <b>2014</b> , 2, 155-158	3.5	47
47	Benz[c]indeno[2,1-a]fluorene: a 2,3-naphthoquinodimethane incorporated into an indenofluorene frame. <i>Chemical Science</i> , <b>2014</b> , 5, 163-168	9.4	67
46	Transformation of octadehydrodibenzo[12]annulene to benzonaphthopentalene by successive nucleophilic and electrophilic transannular cyclizations. <i>Tetrahedron</i> , <b>2014</b> , 70, 8474-8479	2.4	7
45	Direct C-N coupling of imidazoles with aromatic and benzylic compounds via Electrooxidative C-H functionalization. <i>Journal of the American Chemical Society</i> , <b>2014</b> , 136, 4496-9	16.4	144
44	Redox active dendronized polystyrenes equipped with peripheral triarylaminines. <i>Beilstein Journal of Organic Chemistry</i> , <b>2014</b> , 10, 3097-103	2.5	8
43	Excited-State Dynamics of Pentacene Derivatives with Stable Radical Substituents. <i>Angewandte Chemie</i> , <b>2014</b> , 126, 6833-6837	3.6	6
42	Innenraktitelbild: Excited-State Dynamics of Pentacene Derivatives with Stable Radical Substituents (Angew. Chem. 26/2014). <i>Angewandte Chemie</i> , <b>2014</b> , 126, 6945-6945	3.6	1
41	Indenofluorene congeners: Biradicaloids and beyond. <i>Pure and Applied Chemistry</i> , <b>2014</b> , 86, 517-528	2.1	31

40	Introduction of two lithiooxycarbonyl groups enhances cyclability of lithium batteries with organic cathode materials. <i>Journal of Power Sources</i> , <b>2014</b> , 260, 211-217	8.9	114
39	Automated solution-phase synthesis of oligosaccharides via iterative electrochemical assembly of thioglycosides. <i>Organic Letters</i> , <b>2013</b> , 15, 4520-3	6.2	83
38	Halogen and chalcogen cation pools stabilized by DMSO. Versatile reagents for alkene difunctionalization. <i>Journal of the American Chemical Society</i> , <b>2013</b> , 135, 16070-3	16.4	121
37	Synthesis and physical properties of zethrene derivatives bearing donor/acceptor substituents at 7,14-positions. <i>Organic and Biomolecular Chemistry</i> , <b>2013</b> , 11, 8256-61	3.9	15
36	Electrochemical C-H amination: synthesis of aromatic primary amines via N-arylpyridinium ions. <i>Journal of the American Chemical Society</i> , <b>2013</b> , 135, 5000-3	16.4	191
35	Oxidative cyclodimerization after tandem cyclization of dehydrobenzo[14]annulenes induced by alkyllithium. <i>Angewandte Chemie - International Edition</i> , <b>2013</b> , 52, 4184-8	16.4	10
34	Indeno[2,1-b]fluorene: a 20- $\pi$ -electron hydrocarbon with very low-energy light absorption. <i>Angewandte Chemie - International Edition</i> , <b>2013</b> , 52, 6076-9	16.4	189
33	Oxidative Cyclodimerization After Tandem Cyclization of Dehydrobenzo[14]annulenes Induced by Alkyllithium. <i>Angewandte Chemie</i> , <b>2013</b> , 125, 4278-4282	3.6	4
32	Indeno[2,1-b]fluorene: A 20- $\pi$ -Electron Hydrocarbon with Very Low-Energy Light Absorption. <i>Angewandte Chemie</i> , <b>2013</b> , 125, 6192-6195	3.6	71
31	Rücktitelbild: Indeno[2,1-b]fluorene: A 20- $\pi$ -Electron Hydrocarbon with Very Low-Energy Light Absorption (Angew. Chem. 23/2013). <i>Angewandte Chemie</i> , <b>2013</b> , 125, 6228-6228	3.6	
30	Innentitelbild: Oxidative Cyclodimerization After Tandem Cyclization of Dehydrobenzo[14]annulenes Induced by Alkyllithium (Angew. Chem. 15/2013). <i>Angewandte Chemie</i> , <b>2013</b> , 125, 4134-4134	3.6	
29	Polymer-bound pyrene-4,5,9,10-tetraone for fast-charge and -discharge lithium-ion batteries with high capacity. <i>Journal of the American Chemical Society</i> , <b>2012</b> , 134, 19694-700	16.4	359
28	Metal- and Chemical-Oxidant-Free C <sup>•</sup> H/C <sup>•</sup> H Cross-Coupling of Aromatic Compounds: The Use of Radical-Cation Pools. <i>Angewandte Chemie</i> , <b>2012</b> , 124, 7371-7374	3.6	64
27	Metal- and chemical-oxidant-free C-H/C-H cross-coupling of aromatic compounds: the use of radical-cation pools. <i>Angewandte Chemie - International Edition</i> , <b>2012</b> , 51, 7259-62	16.4	153
26	Aromaticity and $\pi$ -bond covalency: prominent intermolecular covalent bonding interaction of a Kekulé hydrocarbon with very significant singlet biradical character. <i>Chemical Communications</i> , <b>2012</b> , 48, 5629-31	5.8	100
25	Theoretical consideration of singlet open-shell character of polyperiacenes using Clar's aromatic sextet valence bond model and quantum chemical calculations <b>2012</b> ,		52
24	Singlet Open-Shell Character of Polyperiacenes <b>2011</b> , 45-57		
23	Experimental consideration of covalent-bonding interactions in stacks of singlet biradicals having Kekulé structures. <i>Journal of Physical Organic Chemistry</i> , <b>2011</b> , 24, 876-882	2.1	24

22	Indeno[2,1-a]fluorene: An Air-Stable ortho-Quinodimethane Derivative. <i>Angewandte Chemie</i> , <b>2011</b> , 123, 7038-7042	3.6	59
21	Indeno[2,1-a]fluorene: an air-stable ortho-quinodimethane derivative. <i>Angewandte Chemie - International Edition</i> , <b>2011</b> , 50, 6906-10	16.4	194
20	Synthesis, crystal structure, and physical properties of sterically unprotected hydrocarbon radicals. <i>Journal of the American Chemical Society</i> , <b>2011</b> , 133, 14240-3	16.4	67
19	Singlet Diradical Character from Experiment. <i>Journal of Physical Chemistry Letters</i> , <b>2010</b> , 1, 937-940	6.4	154
18	Alternating covalent bonding interactions in a one-dimensional chain of a phenalenyl-based singlet biradical molecule having Kekulé structures. <i>Journal of the American Chemical Society</i> , <b>2010</b> , 132, 14421-8	16.4	142
17	Electronic structure of delocalized singlet biradical Ph <sub>2</sub> -IDPL solid film. <i>Physical Chemistry Chemical Physics</i> , <b>2010</b> , 12, 12570-7	3.6	14
16	Synthesis and characterization of teranthene: a singlet biradical polycyclic aromatic hydrocarbon having Kekulé structures. <i>Journal of the American Chemical Society</i> , <b>2010</b> , 132, 11021-3	16.4	249
15	Signature of multiradical character in second hyperpolarizabilities of rectangular graphene nanoflakes. <i>Chemical Physics Letters</i> , <b>2010</b> , 489, 212-218	2.5	88
14	Synthesis, Structure, and Photophysical Properties of Dibenzo[de,mn]naphthalenes. <i>Angewandte Chemie</i> , <b>2010</b> , 122, 7213-7216	3.6	23
13	Synthesis, structure, and photophysical properties of dibenzo[de,mn]naphthalenes. <i>Angewandte Chemie - International Edition</i> , <b>2010</b> , 49, 7059-62	16.4	77
12	Chemistry of Phenalenyl-based Delocalized Singlet Biradicals. <i>Yuki Gosei Kagaku Kyokaiishi/Journal of Synthetic Organic Chemistry</i> , <b>2010</b> , 68, 64-74	0.2	5
11	Resonance Balance Shift in Stacks of Delocalized Singlet Biradicals. <i>Angewandte Chemie</i> , <b>2009</b> , 121, 5590-5594	3.6	43
10	Resonance balance shift in stacks of delocalized singlet biradicals. <i>Angewandte Chemie - International Edition</i> , <b>2009</b> , 48, 5482-6	16.4	131
9	Third-order nonlinear optical properties of trigonal, rhombic and bow-tie graphene nanoflakes with strong structural dependence of diradical character. <i>Chemical Physics Letters</i> , <b>2009</b> , 480, 278-283	2.5	47
8	Scanning Tunneling Microscopy Study of a Phenalenyl-Based Singlet Biradical on Graphite. <i>Journal of Physical Chemistry C</i> , <b>2009</b> , 113, 1515-1519	3.8	14
7	Theoretical study of third-order nonlinear optical properties in square nanographenes with open-shell singlet ground states. <i>Chemical Physics Letters</i> , <b>2008</b> , 467, 120-125	2.5	93
6	Singlet biradical character of phenalenyl-based Kekulé hydrocarbon with naphthoquinoid structure. <i>Organic Letters</i> , <b>2007</b> , 9, 81-4	6.2	138
5	Strong two-photon absorption of singlet diradical hydrocarbons. <i>Angewandte Chemie - International Edition</i> , <b>2007</b> , 46, 3544-6	16.4	241

- 4 Strong Two-Photon Absorption of Singlet Diradical Hydrocarbons. *Angewandte Chemie*, **2007**, 119, 3614-3616 46
- 3 Ambipolar organic field-effect transistors based on a low band gap semiconductor with balanced hole and electron mobilities. *Applied Physics Letters*, **2007**, 91, 043506 3.4 108
- 2 Synthesis, intermolecular interaction, and semiconductive behavior of a delocalized singlet biradical hydrocarbon. *Angewandte Chemie - International Edition*, **2005**, 44, 6564-8 16.4 276
- 1 Synthesis, Intermolecular Interaction, and Semiconductive Behavior of a Delocalized Singlet Biradical Hydrocarbon. *Angewandte Chemie*, **2005**, 117, 6722-6726 3.6 85