Shuhei Higashibayashi

List of Publications by Year
in descending order

98	1,988	236925 25	276875 41
papers	citations	h-index	g-index

108	108	108	1387
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Synthesis of Sumanene and Related Buckybowls. Chemistry Letters, 2011, 40, 122-128.	1.3	166
2	Enantioselective synthesis of a chiral nitrogen-doped buckybowl. Nature Communications, 2012, 3, 891.	12.8	166
3	Asymmetric Synthesis of a Chiral Buckybowl, Trimethylsumanene. Journal of the American Chemical Society, 2008, 130, 8592-8593.	13.7	123
4	Universal NMR Databases for Contiguous Polyols. Journal of the American Chemical Society, 2003, 125, 14379-14393.	13.7	90
5	Trimethylsumanene: Enantioselective Synthesis, Substituent Effect on Bowl Structure, Inversion Energy, and Electron Conductivity. Bulletin of the Chemical Society of Japan, 2012, 85, 450-467.	3.2	84
6	Experimental electron density of sumanene, a bowl-shaped fullerene fragment; comparison with the related corannulene hydrocarbon. Organic and Biomolecular Chemistry, 2012, 10, 2218.	2.8	59
7	Redoxâ€Dependent Transformation of a Hydrazinobuckybowl between Curved and Planar Geometries. Angewandte Chemie - International Edition, 2016, 55, 10830-10834.	13.8	56
8	Fluorinated and Trifluoromethylated Corannulenes. Chemistry - A European Journal, 2013, 19, 13872-13880.	3.3	53
9	Palladiumâ€Catalyzed Arylation of Methyleneâ€Bridged Polyarenes: Synthesis and Structures of 9â€Arylfluorene Derivatives. Advanced Synthesis and Catalysis, 2012, 354, 1551-1558.	4.3	50
10	Bowl Inversion and Electronic Switching of Buckybowls on Gold. Journal of the American Chemical Society, 2016, 138, 12142-12149.	13.7	44
11	Optical Resolution of Chiral Buckybowls by Chiral HPLC. Chemistry Letters, 2010, 39, 646-647.	1.3	42
12	Synthesis of an Enantiopuresyn-Benzocyclotrimer through Regio-selective Cyclotrimerization of a Halonorbornene Derivative under Palladium Nanocluster Conditions. Chemistry Letters, 2007, 36, 18-19.	1.3	40
13	Synthesis of Threeâ€Dimensional Butterfly Slitâ€Cyclobisazaanthracenes and Hydrazinobisanthenes through Oneâ€Step Cyclodimerization and Their Properties. Chemistry - A European Journal, 2016, 22, 663-671.	3.3	38
14	Synthetic studies on thiostrepton family of peptide antibiotics: synthesis of the pentapeptide segment containing dihydroxyisoleucine, thiazoline and dehydroamino acid. Tetrahedron Letters, 2004, 45, 3707-3712.	1.4	37
15	Acid/base-regulated reversible electron transfer disproportionation of Nâ€“N linked bicarbazole and biacridine derivatives. Chemical Science, 2015, 6, 4160-4173.	7.4	37
16	Triazasumanene: An Isoelectronic Heteroanalogue of Sumanene. Bulletin of the Chemical Society of Japan, 2018, 91, 531-537.	3.2	37
17	Stereoselective Cyclotrimerization of Enantiopure Iodonorbornenes Catalyzed by Pd Nanoclusters for C₃ or C_{3v} Symmetric syn-Tris(norborneno)benzenes. Journal of Organic Chemistry, 2010, 75, 4626-4628.	3.2	35
18	Synthesis of Substituted Sumanenes by Aromatic Electrophilic Substitution Reactions. Chemistry Letters, 2013, 42, 386-388.	1.3	34

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19	The Synthesis of Hexafluorosumanene and Its Congeners. Chemistry - A European Journal, 2013, 19, 3282-3286.	3.3	33
20	Stereoelectronic Effect of Curved Aromatic Structures: Favoring the Unexpected endo Conformation of Benzylicâ€Substituted Sumanene. Angewandte Chemie - International Edition, 2013, 52, 7314-7316.	13.8	32
21	Preparation of C₃â€Symmetric Homochiral synâ€Trisnorbornabenzenes through Regioselective Cyclotrimerization of Enantiopure Iodonorbornenes. Chemistry - an Asian Journal, 2009, 4, 1329-1337.	3.3	31
22	Synthesis of Triaryltriazasumanenes. Chemistry Letters, 2017, 46, 146-148.	1.3	29
23	Correlation between bowl-inversion energy and bowl depth in substituted sumanenes. Pure and Applied Chemistry, 2014, 86, 747-753.	1.9	28
24	Assignment of the relative and absolute configurations of acyclic secondary 1,2-diols. Tetrahedron, 2004, 60, 11977-11982.	1.9	26
25	Total synthesis of siomycin A. Tetrahedron Letters, 2007, 48, 1331-1335.	1.4	25
26	Total Synthesis of Siomycin A: Construction of Synthetic Segments. Chemistry - an Asian Journal, 2008, 3, 984-1012.	3.3	25
27	Selective Synthesis of C3 Symmetric Functionalized Sumanenes. Chemistry Letters, 2012, 41, 84-86.	1.3	25
28	Redoxâ€Dependent Transformation of a Hydrazinobuckybowl between Curved and Planar Geometries. Angewandte Chemie, 2016, 128, 10988-10992.	2.0	25
29	Tris(2-hydroxyphenyl)triazasumanene: bowl-shaped excited-state intramolecular proton transfer (ESIPT) fluorophore coupled with aggregation-induced enhanced emission (AIEE). Materials Chemistry Frontiers, 2018, 2, 514-519.	5.9	25
30	Recent examples of the use of biocatalysts with high accessibility and availability in natural product synthesis. Tetrahedron, 2018, 74, 3469-3487.	1.9	22
31	Synthesis of a C₇₀ Fragment Buckybowl C₂₈H₁₄ from a C₆₀ Fragment Sumanene. Chemistry Letters, 2017, 46, 1556-1559.	1.3	21
32	Sumanene derivatives functionalized at the internal carbon. Chemical Communications, 2017, 53, 697-700.	4.1	20
33	Total Synthesis of Siomycin A: Completion of the Total Synthesis. Chemistry - an Asian Journal, 2008, 3, 1013-1025.	3.3	19
34	Synthetic studies on thiostrepton family of peptide antibiotics: synthesis of the cyclic core portion containing the dehydropiperidine, dihydroquinoline, l-valine, and masked dehydroalanine segments. Tetrahedron Letters, 2005, 46, 6423-6427.	1.4	18
35	Emission amplification by sumanene nanocrystals in an onigiri-type organicâ€“organic assembly. Chemical Communications, 2012, 48, 9050.	4.1	16
36	Synthetic studies on thiostrepton family of peptide antibiotics: synthesis of the dihydroquinoline portion of thiostrepton, the siomycins, and the thiopeptins. Tetrahedron Letters, 2005, 46, 6417-6422.	1.4	15

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37	Sumanenylferrocenes and their solid state self-assembly. Dalton Transactions, 2013, 42, 13809.	3.3	15
38	Analysis of Interconversion between Atropisomers of Chiral Substituted 9,9â€™â€Bicarbazole. European Journal of Organic Chemistry, 2021, 2021, 449-451.	2.4	15
39	Columnar/herringbone dual crystal packing of pyrenylsumanene and its photophysical properties. Beilstein Journal of Organic Chemistry, 2014, 10, 841-847.	2.2	14
40	DFT Studies of Mechanism and Origin of Stereoselectivity of Palladium-Catalyzed Cyclotrimerization Reactions Affording syn-Tris(norborneno)benzenes. Organometallics, 2014, 33, 3060-3068.	2.3	14
41	Eclipsed Columnar Packing in Crystal Structure of Sumanenetrione. Chemistry Letters, 2014, 43, 1294-1296.	1.3	14
42	Application of Hydrazine-Embedded Heterocyclic Compounds to High Voltage Rechargeable Lithium Organic Batteries. Scientific Reports, 2018, 8, 579.	3.3	14
43	Nonâ€Planar [n]Cycloâ€1,8â€carbazolylenes (n=3,4,6) and [3]Cycloâ€1,8â€carbazolylenyl B, P, PO, SiPh Complexes. Chemistry - A European Journal, 2017, 23, 14011-14016.	3.3	12
44	Synthesis of Hydroxysumanene and Substituent Effect of Hydroxy Group on Bowl Inversion Dynamics and Electronic Structure. Journal of Organic Chemistry, 2016, 81, 11978-11981.	3.2	11
45	Formal total synthesis of (â^')-hamigeran B from a chemo-enzymatically prepared building block with quaternary chiral center. Tetrahedron, 2018, 74, 740-745.	1.9	11
46	Synthesis of Sulfinimines by Direct Condensation of Sulfinamides with Aldehydes Using Cs2CO3as an Activating and Dehydrating Reagent. Synlett, 2004, 2004, 457-460.	1.8	10
47	Chiral phenylazomethine cage. Tetrahedron Letters, 2012, 53, 783-785.	1.4	10
48	Jet spectroscopy of buckybowl: Electronic and vibrational structures in the S and S1 states of triphenylene and sumanene. Journal of Chemical Physics, 2013, 139, 044313.	3.0	10
49	Synthesis and Acid-responsive Electron-transfer Disproportionation of Non- and Tetramesityl-substituted 1,1â€²,9,9â€²-Bicarbazole. Chemistry Letters, 2015, 44, 1336-1338.	1.3	10
50	Acid-regulated Electron-transfer Disproportionation of a Nonsubstituted Tetramethyl-biacridine Derivative. Chemistry Letters, 2015, 44, 1229-1231.	1.3	10
51	Synthesis of the 1,2-seco fusicoccane diterpene skeleton by Stille coupling reaction between the highly functionalized A and C ring segments of cotylenin A. Tetrahedron, 2017, 73, 6039-6045.	1.9	10
52	Synthesis of Aromatic Polyketones Bearing 1,1â€²-Binaphthyl-2,2â€²-dioxy Units through Suzukiâ€“Miyaura Coupling Polymerization. Chemistry Letters, 2011, 40, 1445-1446.	1.3	9
53	Synthesis of thermally stable, wholly aromatic polyketones with 2,2â€²-dimethoxy-1,1â€²-binaphthyl-6,6â€²-diyl units through nanosized-palladium-cluster-catalyzed Suzukiâ€“Miyaura coupling polymerization. Reactive and Functional Polymers, 2014, 79, 24-28.	4.1	8
54	Molecular Arrangements of Corannulene and Sumanene in Singleâ€Walled Carbon Nanotubes. ChemNanoMat, 2018, 4, 557-561.	2.8	8

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55	Synthesis of trilobatin from naringin via prunin as the key intermediate: acidic hydrolysis of the Î±-rhamnosidic linkage in naringin under improved conditions. Bioscience, Biotechnology and Biochemistry, 2018, 82, 1463-1467.	1.3	8
56	Nanosized palladium-catalyzed Suzukiâ€“Miyaura coupling polymerization: synthesis of soluble aromatic poly(ether ketone)s. Polymer Journal, 2013, 45, 401-405.	2.7	7
57	Electronic and vibrational structures in the S and S1 states of coronene. Journal of Chemical Physics, 2017, 146, 044309.	3.0	7
58	Synthesis and Properties of Hydrazineâ€Embedded Biphenothiazines and Application of Hydrazineâ€Embedded Heterocyclic Compounds to Fluorescence Cell Imaging. Asian Journal of Organic Chemistry, 2018, 7, 1797-1801.	2.7	7
59	Metal-free thermal organocatalytic pinacol coupling of arylaldehydes using an isonicotinate catalyst with bis(pinacolato)diboron. RSC Advances, 2021, 11, 24652-24655.	3.6	7
60	Nickel(II)â€Mediated Câˆ’S Crossâ€Coupling Between Thiols and ortho â€Substituted Arylboronic Acid. Asian Journal of Organic Chemistry, 2021, 10, 582-587.	2.7	7
61	Synthesis of Bowl-shaped Aromatic Hydrocarbons, Buckybowl. Yuki Gosei Kagaku Kyokaishi/Journal of Synthetic Organic Chemistry, 2009, 67, 38-50.	0.1	7
62	Magnetic circular dichroism spectroscopy and electronic structures of C3 symmetry buckybowls. Chemical Physics Letters, 2013, 556, 188-194.	2.6	6
63	Synthesis of organosoluble and fluorescent aromatic polyketones bearing 1,1â€²-binaphthyl units through Suzukiâ€“Miyaura coupling polymerization. Polymer Bulletin, 2015, 72, 2903-2916.	3.3	6
64	Synthesis of Flake-shaped [3]Cyclo-4,6-dibenzofuranylene. Chemistry Letters, 2018, 47, 95-96.	1.3	6
65	Synthesis of fisetin and 2â€²,4â€²,6â€²-trihydroxydihyrochalcone 4â€²-O-Î²-neohesperidoside based on site-selective deacetylation and deoxygenation. Bioscience, Biotechnology and Biochemistry, 2018, 82, 1316-1322.	1.3	6
66	Sumanenetrione Anions Generated by Electrochemical and Chemical Reduction. Chemistry Letters, 2014, 43, 1297-1299.	1.3	5
67	Comments on â€œCharacterization of four new designer drugs, 5-chloro-NNEI, NNEI indazole analog, Î±-PHPP and Î±-POP, with 11 newly distributed designer drugs in illegal productsâ€• Forensic Science International, 2015, 251, e15-e17.	2.2	5
68	Elucidation of the fluorine substitution position on the phenyl ring of synthetic cannabinoids by electron ionization-triple quadrupole mass spectrometry. Japanese Journal of Forensic Science and Technology, 2017, 22, 133-143.	0.1	5
69	Synthesis of Oroxylin a Starting from Naturally Abundant Baicalin. Heterocycles, 2018, 97, 1165.	0.7	5
70	Beam-induced graphitic carbon cage transformation from sumanene aggregates. Applied Physics Letters, 2014, 104, 043107.	3.3	4
71	Investigation of the Dynamic Behavior of Bisumanenyl. Asian Journal of Organic Chemistry, 2015, 4, 62-68.	2.7	4
72	Improved preparation of vitexin from hot water extract of Basella alba, the commercially available vegetable Malabar spinach (â€œTsurumurasakiâ€•in Japanese) and the application to semisynthesis of chafuroside B. Bioscience, Biotechnology and Biochemistry, 2020, 84, 1554-1559.	1.3	4

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73	Semisynthesis of prunetin, a bioactive O-methylated isoflavone from naringenin, by the sequential deacetylation of chalcone intermediates and oxidative rearrangement. Bioscience, Biotechnology and Biochemistry, 2021, 85, 143-147.	1.3	4
74	Enantioselective Synthesis of Chiral Buckybowl and Chiral Azabuckybowl. Yuki Gosei Kagaku Kyokaishi/Journal of Synthetic Organic Chemistry, 2014, 72, 26-38.	0.1	4
75	Synthesis of (2S*,4R*,5S*)-Piperidinetricarboxylic Acid, a Non-proteinogenic Amino Acid Isolated from Clitocybe acromelalga. Heterocycles, 1997, 46, 581.	0.7	3
76	Synthesis and Characterization of Poly(arylene vinylene ketone)s Bearing 1,1â€²-Binaphthylene Units through Mizorokiâ€“Heck Coupling Polymerization. Chemistry Letters, 2015, 44, 1780-1782.	1.3	3
77	A Concise Total Synthesis of Dehydroantofine and Its Antimalarial Activity against Chloroquineâ€Resistant Plasmodium falciparum. Chemistry - A European Journal, 2021, 27, 5555-5563.	3.3	3
78	Intra- and Intermolecular Reactivity of Triplet Sumanenetrione. Bulletin of the Chemical Society of Japan, 2015, 88, 1612-1617.	3.2	2
79	Thermal stability, solubility, and fluorescence property of poly(arylene vinylene ketone)s bearing 1,1â€²-binaphthylene units. Reactive and Functional Polymers, 2016, 100, 123-129.	4.1	2
80	Construction of 2,6,9,11-tetraoxatricyclo[6.2.1.03,8]undecane containing 4-keto-d-glucose skeleton. Tetrahedron, 2017, 73, 7217-7222.	1.9	2
81	Synthesis of 5â€Hydroxyâ€3â€²,4â€²,7â€trimethoxyflavone and Related Compounds and Elucidation of Their Reversal Effects on BCRP/ABCG2â€Mediated Anticancer Drug Resistance. ChemBioChem, 2019, 20, 210-220.	2.6	2
82	Chemoenzymatic synthesis of hydroxytyrosol monoesters and their suppression effect on nitric oxide production stimulated by lipopolysaccharides. Bioscience, Biotechnology and Biochemistry, 2019, 83, 185-191.	1.3	2
83	Stepwise approach for sterically hindered Csp3â€“Csp3 bond formation by dehydrogenative O-alkylation and Lewis acid-catalyzed [1,3]-rearrangement towards the arylalkylcyclopentane skeleton of sesquiterpenes. Chemical Communications, 2020, 56, 3621-3624.	4.1	2
84	Chemoenzymatic semisynthesis of caffeic acid Î²-phenethyl ester, an antioxidative component in propolis, from raw coffee bean extract. Bioscience, Biotechnology and Biochemistry, 2021, 85, 476-480.	1.3	2
85	Synthesis and Property of Three-dimensional Curved Heterocyclic Ï€-Electron Molecules with Embedded Nitrogen Atoms. Yuki Gosei Kagaku Kyokaishi/Journal of Synthetic Organic Chemistry, 2019, 77, 1209-1221.	0.1	2
86	1,2-Rearrangement from o-Quinols to Multisubstituted Catechols via Retro Diels-Alder Reaction of o-Quinol Dimers. Bulletin of the Chemical Society of Japan, 2022, 95, 663-672.	3.2	2
87	Microwave-assisted synthesis of methyl (1S,2R,4S,5S)-7-aza-5-hydroxybicyclo[2.2.1]heptane-2-carboxylate through unexpected stereoselective substitution reaction. Tetrahedron Letters, 2012, 53, 3710-3712.	1.4	1
88	Chemoenzymatic approaches to the synthesis of the (1 S ,2 R)-isomer of benzyl 2-hydroxycyclohexanecarboxylate. Molecular Catalysis, 2018, 444, 84-89.	2.0	1
89	Dearomative Oxidative Rearrangement of [3]Cyclo-1,8-carbazolylene. Chemistry Letters, 2018, 47, 1357-1359.	1.3	1
90	Control of Inversion Kinetics of Bowl-Shaped Aromatic Compounds. , 2019, , 65-96.		1

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91	Comprehensive semisyntheses of catathelasmols C, D, and E from D-glutamic acid, utilizing lipase-catalyzed site-selective reactions on intermediates. Bioscience, Biotechnology and Biochemistry, 2020, 84, 1339-1344.	1.3	1
92	Single-molecule Electric Switching Induced by Acid-Base Reaction. Chemistry Letters, 2021, 50, 1271-1273.	1.3	1
93	Chemoselectivity-independent Cu-mediated coupling to construct the hydroquinoline skeleton of symbioimine. Scientific Reports, 2021, 11, 24078.	3.3	1
94	Universal NMR Databases for Contiguous Polyols.. ChemInform, 2004, 35, no.	0.0	0
95	Chiral Sumanene, Triazasumanene, and Related Buckybowls. , 2015, , 91-106.		0
96	Synthesis of 3Î²-tert-Butyldimethylsiloxy-22-phenylthio-23,24-bisnorchola-5,9(11)-diene and Reductive Nucleophilic Attack on a Branched Aliphatic Aldehyde. Chemical and Pharmaceutical Bulletin, 2018, 66, 334-338.	1.3	0
97	Theoretical Analysis of the Heterocyclic [4+2] Cycloaddition Between Pyridinium Ion and Enol Ether. ChemistryOpen, 2021, 10, 627-629.	1.9	0
98	Synthesis of 1H-2-Benzopyran-5,8-dione Skeleton through a Cascade Reaction between Benzoquinone and Î²-Ketoester. Chemistry Letters, 2022, 51, 356-359.	1.3	0