Shuhei Higashibayashi

List of Publications by Year in descending order

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98 papers

1,988 citations

236925 25 h-index 276875 41 g-index

108 all docs

 $\frac{108}{\text{docs citations}}$

108 times ranked 1387 citing authors

#	Article	IF	Citations
1	Synthesis of $1 < i > H < i> -2$ -Benzopyran-5,8-dione Skeleton through a Cascade Reaction between Benzoquinone and \hat{I}^2 -Ketoester. Chemistry Letters, 2022, 51, 356-359.	1.3	O
2	1,2-Rearrangement from <i>o</i> -Quinols to Multisubstituted Catechols <i>via</i> Retro Diels-Alder Reaction of <i>o</i> -Quinol Dimers. Bulletin of the Chemical Society of Japan, 2022, 95, 663-672.	3.2	2
3	Semisynthesis of prunetin, a bioactive <i>O</i> -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
4	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
5	Theoretical Analysis of the Heterocyclic [4+2] Cycloaddition Between Pyridinium Ion and Enol Ether. ChemistryOpen, 2021, 10, 627-629.	1.9	0
6	Nickel(II)â€Mediated Câ^'S Crossâ€Coupling Between Thiols and ortho â€Substituted Arylboronic Acid. Asian Journal of Organic Chemistry, 2021, 10, 582-587.	2.7	7
7	A Concise Total Synthesis of Dehydroantofine and Its Antimalarial Activity against Chloroquineâ€Resistant <i>Plasmodium falciparum</i> . Chemistry - A European Journal, 2021, 27, 5555-5563.	3.3	3
8	Single-molecule Electric Switching Induced by Acid-Base Reaction. Chemistry Letters, 2021, 50, 1271-1273.	1.3	1
9	Analysis of Interconversion between Atropisomers of Chiral Substituted 9,9'â€Bicarbazole. European Journal of Organic Chemistry, 2021, 2021, 449-451.	2.4	15
10	Chemoenzymatic semisynthesis of caffeic acid \hat{l}^2 -phenethyl ester, an antioxidative component in propolis, from raw coffee bean extract. Bioscience, Biotechnology and Biochemistry, 2021, 85, 476-480.	1.3	2
11	Chemoselectivity-independent Cu-mediated coupling to construct the hydroquinoline skeleton of symbioimine. Scientific Reports, 2021, 11, 24078.	3.3	1
12	Stepwise approach for sterically hindered Csp3–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
13	Improved preparation of vitexin from hot water extract of <i>Basella alba</i> , the commercially available vegetable Malabar spinach ("Tsurumurasaki―in Japanese) and the application to semisynthesis of chafuroside B. Bioscience, Biotechnology and Biochemistry, 2020, 84, 1554-1559.	1.3	4
14	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
15	Synthesis of 5â€Hydroxyâ€3′,4′,7â€ŧrimethoxyflavone and Related Compounds and Elucidation of Their Reversal Effects on BCRP/ABCG2â€Mediated Anticancer Drug Resistance. ChemBioChem, 2019, 20, 210-220.	2.6	2
16	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
17	Control of Inversion Kinetics of Bowl-Shaped Aromatic Compounds. , 2019, , 65-96.		1
18	Synthesis and Property of Three-dimensional Curved Heterocyclic π-Electron Molecules with Embedded Nitrogen Atoms. Yuki Gosei Kagaku Kyokaishi/Journal of Synthetic Organic Chemistry, 2019, 77, 1209-1221.	0.1	2

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19	Molecular Arrangements of Corannulene and Sumanene in Singleâ€Walled Carbon Nanotubes. ChemNanoMat, 2018, 4, 557-561.	2.8	8
20	Triazasumanene: An Isoelectronic Heteroanalogue of Sumanene. Bulletin of the Chemical Society of Japan, 2018, 91, 531-537.	3.2	37
21	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
22	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
23	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
24	Application of Hydrazine-Embedded Heterocyclic Compounds to High Voltage Rechargeable Lithium Organic Batteries. Scientific Reports, 2018, 8, 579.	3.3	14
25	Synthesis of $3\hat{l}^2$ - <i>tert</i> -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	O
26	Synthesis of Flake-shaped [3]Cyclo-4,6-dibenzofuranylene. Chemistry Letters, 2018, 47, 95-96.	1.3	6
27	Dearomative Oxidative Rearrangement of [3]Cyclo-1,8-carbazolylene. Chemistry Letters, 2018, 47, 1357-1359.	1.3	1
28	Recent examples of the use of biocatalysts with high accessibility and availability in natural product synthesis. Tetrahedron, 2018, 74, 3469-3487.	1.9	22
29	Synthesis of fisetin and 2′,4′,6′-trihydroxydihyrochalcone 4′- <i>O</i> -β-neohesperidoside based on site-selective deacetylation and deoxygenation. Bioscience, Biotechnology and Biochemistry, 2018, 82, 1316-1322.	1.3	6
30	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
31	Synthesis of trilobatin from naringin $\langle i \rangle$ via $\langle i \rangle$ prunin as the key intermediate: acidic hydrolysis of the α-rhamnosidic linkage in naringin under improved conditions. Bioscience, Biotechnology and Biochemistry, 2018, 82, 1463-1467.	1.3	8
32	Synthesis of Oroxylin a Starting from Naturally Abundant Baicalin. Heterocycles, 2018, 97, 1165.	0.7	5
33	Electronic and vibrational structures in the $\langle i \rangle S \langle i \rangle$ and $\langle i \rangle S \langle i \rangle 1$ states of coronene. Journal of Chemical Physics, 2017, 146, 044309.	3.0	7
34	Sumanene derivatives functionalized at the internal carbon. Chemical Communications, 2017, 53, 697-700.	4.1	20
35	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
36	Nonâ€Planar [<i>n</i>]Cycloâ€1,8â€carbazolylenes (<i>n=</i> 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

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37	Synthesis of a C ₇₀ Fragment Buckybowl C ₂₈ H ₁₄ from a C ₆₀ Fragment Sumanene. Chemistry Letters, 2017, 46, 1556-1559.	1.3	21
38	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
39	Synthesis of Triaryltriazasumanenes. Chemistry Letters, 2017, 46, 146-148.	1.3	29
40	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
41	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
42	Thermal stability, solubility, and fluorescence property of poly(arylene vinylene ketone)s bearing $1,1\hat{a}\in^2$ -binaphthylene units. Reactive and Functional Polymers, 2016, 100, 123-129.	4.1	2
43	Redoxâ€Dependent Transformation of a Hydrazinobuckybowl between Curved and Planar Geometries. Angewandte Chemie - International Edition, 2016, 55, 10830-10834.	13.8	56
44	Bowl Inversion and Electronic Switching of Buckybowls on Gold. Journal of the American Chemical Society, 2016, 138, 12142-12149.	13.7	44
45	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
46	Redoxâ€Dependent Transformation of a Hydrazinobuckybowl between Curved and Planar Geometries. Angewandte Chemie, 2016, 128, 10988-10992.	2.0	25
47	Intra- and Intermolecular Reactivity of Triplet Sumanenetrione. Bulletin of the Chemical Society of Japan, 2015, 88, 1612-1617.	3.2	2
48	Synthesis and Acid-responsive Electron-transfer Disproportionation of Non- and Tetramesityl-substituted 1,1′,9,9′-Bicarbazole. Chemistry Letters, 2015, 44, 1336-1338.	1.3	10
49	Acid-regulated Electron-transfer Disproportionation of a Nonsubstituted Tetramethyl-biacridine Derivative. Chemistry Letters, 2015, 44, 1229-1231.	1.3	10
50	Synthesis and Characterization of Poly(arylene vinylene ketone)s Bearing 1,1′-Binaphthylene Units through Mizoroki–Heck Coupling Polymerization. Chemistry Letters, 2015, 44, 1780-1782.	1.3	3
51	Chiral Sumanene, Triazasumanene, and Related Buckybowls., 2015,, 91-106.		0
52	Acid/base-regulated reversible electron transfer disproportionation of N–N linked bicarbazole and biacridine derivatives. Chemical Science, 2015, 6, 4160-4173.	7.4	37
53	Investigation of the Dynamic Behavior of Bisumanenyl. Asian Journal of Organic Chemistry, 2015, 4, 62-68.	2.7	4
54	Comments on "Characterization of four new designer drugs, 5-chloro-NNEI, NNEI indazole analog, α-PHPP and α-POP, with 11 newly distributed designer drugs in illegal products― Forensic Science International, 2015, 251, e15-e17.	2.2	5

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55	Synthesis of organosoluble and fluorescent aromatic polyketones bearing 1,1′-binaphthyl units through Suzuki–Miyaura coupling polymerization. Polymer Bulletin, 2015, 72, 2903-2916.	3.3	6
56	Columnar/herringbone dual crystal packing of pyrenylsumanene and its photophysical properties. Beilstein Journal of Organic Chemistry, 2014, 10, 841-847.	2.2	14
57	Correlation between bowl-inversion energy and bowl depth in substituted sumanenes. Pure and Applied Chemistry, 2014, 86, 747-753.	1.9	28
58	Beam-induced graphitic carbon cage transformation from sumanene aggregates. Applied Physics Letters, 2014, 104, 043107.	3.3	4
59	DFT Studies of Mechanism and Origin of Stereoselectivity of Palladium-Catalyzed Cyclotrimerization Reactions Affording <i>syn</i> -Tris(norborneno)benzenes. Organometallics, 2014, 33, 3060-3068.	2.3	14
60	Synthesis of thermally stable, wholly aromatic polyketones with 2,2′-dimethoxy-1,1′-binaphthyl-6,6′-diyl units through nanosized-palladium-cluster-catalyzed Suzuki–Miyaura coupling polymerization. Reactive and Functional Polymers, 2014, 79, 24-28.	4.1	8
61	Eclipsed Columnar Packing in Crystal Structure of Sumanenetrione. Chemistry Letters, 2014, 43, 1294-1296.	1.3	14
62	Sumanenetrione Anions Generated by Electrochemical and Chemical Reduction. Chemistry Letters, 2014, 43, 1297-1299.	1.3	5
63	Enantioselective Synthesis of Chiral Buckybowl and Chiral Azabuckybowl. Yuki Gosei Kagaku Kyokaishi/Journal of Synthetic Organic Chemistry, 2014, 72, 26-38.	0.1	4
64	Magnetic circular dichroism spectroscopy and electronic structures of C3 symmetry buckybowls. Chemical Physics Letters, 2013, 556, 188-194.	2.6	6
65	Fluorinated and Trifluoromethylated Corannulenes. Chemistry - A European Journal, 2013, 19, 13872-13880.	3.3	53
66	Sumanenylferrocenes and their solid state self-assembly. Dalton Transactions, 2013, 42, 13809.	3.3	15
67	The Synthesis of Hexafluorosumanene and Its Congeners. Chemistry - A European Journal, 2013, 19, 3282-3286.	3.3	33
68	Nanosized palladium-catalyzed Suzuki–Miyaura coupling polymerization: synthesis of soluble aromatic poly(ether ketone)s. Polymer Journal, 2013, 45, 401-405.	2.7	7
69	Stereoelectronic Effect of Curved Aromatic Structures: Favoring the Unexpected ⟨i⟩endo⟨/i⟩ Conformation of Benzylicâ€ S ubstituted Sumanene. Angewandte Chemie - International Edition, 2013, 52, 7314-7316.	13.8	32
70	Jet spectroscopy of buckybowl: Electronic and vibrational structures in the <i>S</i> and <i>S</i> states of triphenylene and sumanene. Journal of Chemical Physics, 2013, 139, 044313.	3.0	10
71	Synthesis of Substituted Sumanenes by Aromatic Electrophilic Substitution Reactions. Chemistry Letters, 2013, 42, 386-388.	1.3	34
72	Emission amplification by sumanene nanocrystals in an onigiri-type organic–organic assembly. Chemical Communications, 2012, 48, 9050.	4.1	16

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73	Selective Synthesis of <i>C</i> 3 Symmetric Functionalized Sumanenes. Chemistry Letters, 2012, 41, 84-86.	1.3	25
74	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
75	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
76	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
77	Enantioselective synthesis of a chiral nitrogen-doped buckybowl. Nature Communications, 2012, 3, 891.	12.8	166
78	Chiral phenylazomethine cage. Tetrahedron Letters, 2012, 53, 783-785.	1.4	10
79	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
80	Synthesis of Sumanene and Related Buckybowls. Chemistry Letters, 2011, 40, 122-128.	1.3	166
81	Synthesis of Aromatic Polyketones Bearing 1,1′-Binaphthyl-2,2′-dioxy Units through Suzuki–Miyaura Coupling Polymerization. Chemistry Letters, 2011, 40, 1445-1446.	1.3	9
82	Optical Resolution of Chiral Buckybowls by Chiral HPLC. Chemistry Letters, 2010, 39, 646-647.	1.3	42
83	Stereoselective Cyclotrimerization of Enantiopure Iodonorbornenes Catalyzed by Pd Nanoclusters for <i>C</i> < ₃ or <i>CSub>3 or <i>CSub>3 or <i>C3 or <i>C34626-4628.</i></i></i></i>	3.2	35
84	Preparation of <i>C</i> ₃ â€Symmetric Homochiral <i>syn</i> â€Trisnorbornabenzenes through Regioselective Cyclotrimerization of Enantiopure Iodonorbornenes. Chemistry - an Asian Journal, 2009, 4, 1329-1337.	3.3	31
85	Synthesis of Bowl-shaped Aromatic Hydrocarbons, Buckybowl. Yuki Gosei Kagaku Kyokaishi/Journal of Synthetic Organic Chemistry, 2009, 67, 38-50.	0.1	7
86	Total Synthesis of Siomycin A: Construction of Synthetic Segments. Chemistry - an Asian Journal, 2008, 3, 984-1012.	3.3	25
87	Total Synthesis of Siomycin A: Completion of the Total Synthesis. Chemistry - an Asian Journal, 2008, 3, 1013-1025.	3.3	19
88	Asymmetric Synthesis of a Chiral Buckybowl, Trimethylsumanene. Journal of the American Chemical Society, 2008, 130, 8592-8593.	13.7	123
89	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
90	Total synthesis of siomycin A. Tetrahedron Letters, 2007, 48, 1331-1335.	1.4	25

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91	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
92	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
93	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
94	Universal NMR Databases for Contiguous Polyols ChemInform, 2004, 35, no.	0.0	0
95	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
96	Assignment of the relative and absolute configurations of acyclic secondary 1,2-diols. Tetrahedron, 2004, 60, 11977-11982.	1.9	26
97	Universal NMR Databases for Contiguous Polyols. Journal of the American Chemical Society, 2003, 125, 14379-14393.	13.7	90
98	Synthesis of (2S*,4R*,5S*)-Piperidinetricarboxylic Acid, a Non-proteinogenic Amino Acid Isolated from Clitocybe acromelalga. Heterocycles, 1997, 46, 581.	0.7	3