Yasutomo Segawa

List of Publications by Year
in descending order

105 papers	12,351 citations	16451 64 h-index	24982 109 g-index
131 all docs	131 docs citations	131 times ranked	6888 citing authors

#	Article	IF	Citations
1	Synthesis of Extended Ï€â€Systems through Câ€“H Activation. Angewandte Chemie - International Edition, 2015, 54, 66-81.	13.8	579
2	A grossly warped nanographene and the consequences of multiple odd-membered-ring defects. Nature Chemistry, 2013, 5, 739-744.	13.6	548
3	Boryllithium: Isolation, Characterization, and Reactivity as a Boryl Anion. Science, 2006, 314, 113-115.	12.6	501
4	Structurally uniform and atomically precise carbon nanostructures. Nature Reviews Materials, 2016, 1, .	48.7	417
5	Synthesis of a carbon nanobelt. Science, 2017, 356, 172-175.	12.6	408
6	Synthesis of Cycloparaphenylenes and Related Carbon Nanorings: A Step toward the Controlled Synthesis of Carbon Nanotubes. Accounts of Chemical Research, 2012, 45, 1378-1389.	15.6	365
7	Initiation of carbon nanotube growth by well-defined carbon nanorings. Nature Chemistry, 2013, 5, 572-576.	13.6	343
8	Chemistry of Boryllithium: Synthesis, Structure, and Reactivity. Journal of the American Chemical Society, 2008, 130, 16069-16079.	13.7	315
9	Design and Synthesis of Carbon Nanotube Segments. Angewandte Chemie - International Edition, 2016, 55, 5136-5158.	13.8	300
10	Combined experimental and theoretical studies on the photophysical properties of cycloparaphenylenes. Organic and Biomolecular Chemistry, 2012, 10, 5979.	2.8	248
11	Synthesis, Structures, and Properties of Ï€-Extended Double Helicene: A Combination of Planar and Nonplanar Ï€-Systems. Journal of the American Chemical Society, 2015, 137, 7763-7768.	13.7	248
12	Theoretical Studies on the Structures and Strain Energies of Cycloparaphenylenes. Organic Letters, 2010, 12, 2262-2265.	4.6	240
13	Concise Synthesis and Crystal Structure of [12]Cycloparaphenylene. Angewandte Chemie - International Edition, 2011, 50, 3244-3248.	13.8	225
14	A Modular and Sizeâ€Selective Synthesis of [n]Cycloparaphenylenes: A Step toward the Selective Synthesis of [n,n] Singleâ€Walled Carbon Nanotubes. Angewandte Chemie - International Edition, 2010, 49, 10202-10205.	13.8	215
15	para-Câ€“H Borylation of Benzene Derivatives by a Bulky Iridium Catalyst. Journal of the American Chemical Society, 2015, 137, 5193-5198.	13.7	213
16	Syntheses of PBP Pincer Iridium Complexes: A Supporting Boryl Ligand. Journal of the American Chemical Society, 2009, 131, 9201-9203.	13.7	206
17	Boryl Anion Attacks Transitionâ€Metal Chlorides To Form Boryl Complexes: Syntheses, Spectroscopic, and Structural Studies on Groupâ€…11 Borylmetal Complexes. Angewandte Chemie - International Edition, 2007, 46, 6710-6713.	13.8	193
18	Topological molecular nanocarbons: All-benzene catenane and trefoil knot. Science, 2019, 365, 272-276.	12.6	192

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19	Synthesis, Structure of Borylmagnesium, and Its Reaction with Benzaldehyde to Form Benzoylborane. Journal of the American Chemical Society, 2007, 129, 9570-9571.	13.7	190
20	Polycyclic Arene Synthesis by Annulative Ï€-Extension. Journal of the American Chemical Society, 2019, 141, 3-10.	13.7	185
21	Synthesis and Properties of [9]Cyclo-1,4-naphthylene: A Ï€-Extended Carbon Nanoring. Journal of the American Chemical Society, 2012, 134, 2962-2965.	13.7	174
22	Synthesis and Structural Features of Quadruple Helicenes: Highly Distorted Ï€ Systems Enabled by Accumulation of Helical Repulsions. Journal of the American Chemical Society, 2016, 138, 3587-3595.	13.7	157
23	[9]Cycloparaphenylene: Nickel-mediated Synthesis and Crystal Structure. Chemistry Letters, 2011, 40, 423-425.	1.3	148
24	Direct Arylation of Polycyclic Aromatic Hydrocarbons through Palladium Catalysis. Journal of the American Chemical Society, 2011, 133, 10716-10719.	13.7	144
25	Sizeâ€Selective Complexation and Extraction of Endohedral Metallofullerenes with Cycloparaphenylene. Angewandte Chemie - International Edition, 2014, 53, 3102-3106.	13.8	144
26	Synthesis and characterization of hexaarylbenzenes with five or six different substituents enabled by programmed synthesis. Nature Chemistry, 2015, 7, 227-233.	13.6	143
27	Synthesis and Racemization Process of Chiral Carbon Nanorings: A Step toward the Chemical Synthesis of Chiral Carbon Nanotubes. Organic Letters, 2011, 13, 2480-2483.	4.6	137
28	Cycloparaphenyleneâ€Based Ionic Donorâ€“Acceptor Supramolecule: Isolation and Characterization of Li⁺@C₆₀âŠ,[10]CPP. Angewandte Chemie - International Edition, 2015, 54, 3707-3711.	13.8	137
29	A Quintuple [6]Helicene with a Corannulene Core as a C₅â€Symmetric Propellerâ€Shaped Ï€â€System. Angewandte Chemie - International Edition, 2018, 57, 1337-1341.	13.8	134
30	Size-selective synthesis of [9]â€“[11] and [13]cycloparaphenylenes. Chemical Science, 2012, 3, 2340.	7.4	132
31	Synthesis and Size-Dependent Properties of [12], [16], and [24]Carbon Nanobelts. Journal of the American Chemical Society, 2018, 140, 10054-10059.	13.7	131
32	Metal-free hydrogenation catalysis of polycyclic aromatic hydrocarbons. Chemical Communications, 2012, 48, 11963.	4.1	125
33	Synthesis and properties of all-benzene carbon nanocages: a junction unit of branched carbon nanotubes. Chemical Science, 2013, 4, 84-88.	7.4	123
34	Thiophene-Fused Ï€-Systems from Diarylacetylenes and Elemental Sulfur. Journal of the American Chemical Society, 2016, 138, 10351-10355.	13.7	112
35	Isolation of a PBPâ€Pincer Rhodium Complex Stabilized by an Intermolecular Cï£¿H Ïƒâ€…Coordination as the Fourth Ligand. Angewandte Chemie - International Edition, 2012, 51, 6956-6960.	13.8	107
36	Câ€“H activation route to dibenzo[a,e]pentalenes: annulation of arylacetylenes promoted by PdCl2â€“AgOTfâ€“o-chloranil. Chemical Science, 2013, 4, 2369.	7.4	107

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37	Synthesis and Properties of Cycloparaphenylene-2,5-pyridylidene: A Nitrogen-Containing Carbon Nanoring. Organic Letters, 2012, 14, 1888-1891.	4.6	106
38	All-Benzene Carbon Nanocages: Size-Selective Synthesis, Photophysical Properties, and Crystal Structure. Journal of the American Chemical Society, 2014, 136, 16452-16458.	13.7	103
39	A Waterâ€Soluble Warped Nanographene: Synthesis and Applications for Photoinduced Cell Death. Angewandte Chemie - International Edition, 2018, 57, 2874-2878.	13.8	102
40	Topologically Unique Molecular Nanocarbons. Accounts of Chemical Research, 2019, 52, 2760-2767.	15.6	102
41	Synthesis of a zigzag carbon nanobelt. Nature Chemistry, 2021, 13, 255-259.	13.6	96
42	Design und Synthese von KohlenstoffnanorÃ¶hrensegmenten. Angewandte Chemie, 2016, 128, 5222-5245.	2.0	95
43	Excited States in Cycloparaphenylenes: Dependence of Optical Properties on Ring Length. Journal of Physical Chemistry Letters, 2012, 3, 3125-3128.	4.6	94
44	Curved Oligophenylenes as Donors in Shapeâ€Persistent Donorâ€“Acceptor Macrocycles with Solvatofluorochromic Properties. Angewandte Chemie - International Edition, 2015, 54, 9646-9649.	13.8	94
45	Selective synthesis of [7]- and [8]cycloparaphenylenes. Chemical Communications, 2014, 50, 954-956.	4.1	92
46	Î·⁶-Cycloparaphenylene Transition Metal Complexes: Synthesis, Structure, Photophysical Properties, and Application to the Selective Monofunctionalization of Cycloparaphenylenes. Journal of the American Chemical Society, 2015, 137, 1356-1361.	13.7	91
47	Diphenylphosphino- or Dicyclohexylphosphino-Tethered Boryl Pincer Ligands: Syntheses of PBP Iridium(III) Complexes and Their Conversion to Iridiumâ^'Ethylene Complexes. Organometallics, 2009, 28, 6234-6242.	2.3	90
48	Palladium-Catalyzed Câ€“H Activation Taken to the Limit. Flattening an Aromatic Bowl by Total Arylation. Journal of the American Chemical Society, 2012, 134, 15664-15667.	13.7	89
49	Aziridinofullerene: A Versatile Platform for Functionalized Fullerenes. Journal of the American Chemical Society, 2011, 133, 2402-2405.	13.7	88
50	Symmetric Multiple Carbohelicenes. Synlett, 2019, 30, 370-377.	1.8	86
51	Thiopheneâ€Based, Radial Ï€â€Conjugation: Synthesis, Structure, and Photophysical Properties of Cycloâ€1,4â€phenyleneâ€2â€²,5â€²â€thienylenes. Angewandte Chemie - International Edition, 2015, 54, 159-163.	13.8	79
52	Flexible Reaction Pocket on Bulky Diphosphineâ€“Ir Complex Controls Regioselectivity in para-Selective Câ€“H Borylation of Arenes. ACS Catalysis, 2016, 6, 7536-7546.	11.2	73
53	Syntheses and properties of triborane(5)s possessing bulky diamino substituents on terminal boron atoms. Chemical Communications, 2011, 47, 5888.	4.1	72
54	Synthetic Strategies of Carbon Nanobelts and Related Beltâ€Shaped Polycyclic Aromatic Hydrocarbons. Chemistry - A European Journal, 2020, 26, 14791-14801.	3.3	72

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55	A Theoretical Study on the Strain Energy of Carbon Nanobelts. Organic Letters, 2016, 18, 1430-1433.	4.6	71
56	Chemical Synthesis of Carbon Nanorings and Nanobelts. Accounts of Materials Research, 2021, 2, 681-691.	11.7	71
57	Crystal Structure of Boryllithium with Two THF Molecules and DFT Analysis of Its Property as a Boryl Anion. Chemistry Letters, 2008, 37, 802-803.	1.3	69
58	Synthesis, Properties, and Packing Structures of Corannuleneâ€Based Ï€â€Systems Containing Heptagons. Chemistry - an Asian Journal, 2015, 10, 1635-1639.	3.3	69
59	A Nonalternant Aromatic Belt: Methylene-Bridged [6]Cycloparaphenylene Synthesized from Pillar[6]arene. Journal of the American Chemical Society, 2020, 142, 12850-12856.	13.7	69
60	Pd(OAc)₂/o-Chloranil/M(OTf)_n: A Catalyst for the Direct Câ€“H Arylation of Polycyclic Aromatic Hydrocarbons with Boryl-, Silyl-, and Unfunctionalized Arenes. Organic Letters, 2012, 14, 418-421.	4.6	68
61	Synthesis and properties of cycloparaphenylene-2,7-pyrenylene: a pyrene-containing carbon nanoring. Chemical Communications, 2014, 50, 957-959.	4.1	67
62	A Quintuple [6]Helicene with a Corannulene Core as a C₅â€Symmetric Propellerâ€Shaped Ï€â€System. Angewandte Chemie, 2018, 130, 1351-1355.	2.0	67
63	Double-Helix Supramolecular Nanofibers Assembled from Negatively Curved Nanographenes. Journal of the American Chemical Society, 2021, 143, 5465-5469.	13.7	66
64	Synthesis and Structure of a Propeller-Shaped Polycyclic Aromatic Hydrocarbon Containing Seven-Membered Rings. Organic Letters, 2018, 20, 1932-1935.	4.6	64
65	Synthesis and structural features of thiophene-fused analogues of warped nanographene and quintuple helicene. Chemical Science, 2019, 10, 2326-2330.	7.4	63
66	Synthesis and Dimerization of Chloro[10]cycloparaphenylene: A Directly Connected Cycloparaphenylene Dimer. Organic Letters, 2014, 16, 2174-2176.	4.6	62
67	Corannuleneâ€“Helicene Hybrids: Chiral Ï€-Systems Comprising Both Bowl and Helical Motifs. Organic Letters, 2016, 18, 3992-3995.	4.6	62
68	Synthesis, properties, and crystal structures of Ï€-extended double [6]helicenes: contorted multi-dimensional stacking lattice. Organic and Biomolecular Chemistry, 2017, 15, 4697-4703.	2.8	61
69	Laterally Ï€-Extended Dithia[6]helicenes with Heptagons: Saddle-Helix Hybrid Molecules. Journal of Organic Chemistry, 2017, 82, 7745-7749.	3.2	53
70	Synthesis of a MÃ¶bius carbon nanobelt. , 2022, 1, 535-541.		53
71	Pyridylidene ligand facilitates gold-catalyzed oxidative Câ€“H arylation of heterocycles. Beilstein Journal of Organic Chemistry, 2015, 11, 2737-2746.	2.2	49
72	Helically Twisted Tetracene: Synthesis, Crystal Structure, and Photophysical Properties of Hexabenzo[a,c,fg,j,l,op]tetracene. Synlett, 2016, 27, 2081-2084.	1.8	46

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73	Phenanthro[9,10-a]corannulene by one-step annulative ï€-extension of corannulene. Canadian Journal of Chemistry, 2017, 95, 329-333.	1.1	44
74	Exciton recombination dynamics in nanoring cycloparaphenylenes. Chemical Science, 2014, 5, 2293.	7.4	40
75	Negatively Curved Warped Nanographene Self-Assembled on Metal Surfaces. Journal of the American Chemical Society, 2019, 141, 13158-13164.	13.7	38
76	Synthesis and properties of [8]-, [10]-, [12]-, and [16]cyclo-1,4-naphthylenes. Chemical Science, 2017, 8, 661-667.	7.4	36
77	Creation of negatively curved polyaromatics enabled by annulative coupling that forms an eight-membered ring. Nature Catalysis, 2020, 3, 710-718.	34.4	36
78	Synthesis, Structure, and Reactivity of a Cylinder-Shaped Cyclo[12]orthophenylene[6]ethynylene: Toward the Synthesis of Zigzag Carbon Nanobelts. Organic Letters, 2016, 18, 5352-5355.	4.6	34
79	1,3,5-Triaryl 2-pyridylidene: base-promoted generation and complexation. Chemical Communications, 2012, 48, 6642.	4.1	31
80	Synthesis of open-shell ladder ï€-systems by catalytic Câ€“H annulation of diarylacetylenes. Chemical Science, 2016, 7, 650-654.	7.4	31
81	Two-step synthesis of a red-emissive warped nanographene derivative via a ten-fold Câ€“H borylation. Chemical Science, 2019, 10, 9038-9041.	7.4	28
82	A Waterâ€Soluble Warped Nanographene: Synthesis and Applications for Photoinduced Cell Death. Angewandte Chemie, 2018, 130, 2924-2928.	2.0	27
83	Emerging Disordered Layered-Herringbone Phase in Organic Semiconductors Unveiled by Electron Crystallography. Chemistry of Materials, 2022, 34, 72-83.	6.7	26
84	Palladium-free synthesis of [10]cycloparaphenylene. Tetrahedron, 2015, 71, 4500-4503.	1.9	24
85	Synthesis and Structure of [9]Cycloparaphenylene Catenane: An All-Benzene Catenane Consisting of Small Rings. Organic Letters, 2020, 22, 1067-1070.	4.6	24
86	Selective Transformation of Strychnine and 1,2-Disubstituted Benzenes by Câ€“H Borylation. CheM, 2020, 6, 985-993.	11.7	24
87	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.	3.3	23
88	Palladium-catalyzed direct phenylation of perylene: structural and optical properties of 3,4,9-triphenylperylene and 3,4,9,10-tetraphenylperylene. Tetrahedron, 2013, 69, 4371-4374.	1.9	23
89	Synthesis of cycloiptycenes from carbon nanobelts. Chemical Science, 2020, 11, 6775-6779.	7.4	20
90	Six-fold Câ€“H borylation of hexa-peri-hexabenzocoronene. Beilstein Journal of Organic Chemistry, 2020, 16, 391-397.	2.2	18

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91	Pyridine-based dicarbene ligand: synthesis and structure of a bis-2-pyridylidene palladium complex. Chemical Communications, 2013, 49, 5648.	4.1	16
92	Hole-transporting materials based on thiophene-fused arenes from sulfur-mediated thienannulations. Materials Chemistry Frontiers, 2018, 2, 275-280.	5.9	16
93	Perfluorocycloparaphenylenes. Nature Communications, 2022, 13, .	12.8	16
94	Synthesis, Structure, and Electrochemical Property of a Bimetallic Bis-2-pyridylidene Palladium Acetate Complex. Chemistry Letters, 2017, 46, 587-590.	1.3	13
95	A theoretical study on the strain energy of helicene-containing carbon nanobelts. Chemical Communications, 2020, 56, 15044-15047.	4.1	12
96	Stepwise Generation of Monoâ€, Diâ€, and Triplyâ€Reduced Warped Nanographenes: Chargeâ€Dependent Aromaticity, Surface Nonequivalence, Swing Distortion, and Metal Binding Sites. Angewandte Chemie - International Edition, 2021, 60, 25445-25453.	13.8	12
97	Chemical Synthesis of Cycloparaphenylenes. ChemistrySelect, 2017, 2, .	1.5	7
98	Armchair and Chiral Carbon Nanobelts: Scholl Reaction in Strained Nanorings. CheM, 2019, 5, 746-748.	11.7	6
99	Ni-Catalyzed Î±-Selective Câ€"H Borylations of Naphthalene-Based Aromatic Compounds. Journal of Organic Chemistry, 2019, 84, 14354-14359.	3.2	5
100	Exciton Spatial Dynamics and Self-Trapping in Carbon Nanocages. Journal of Physical Chemistry Letters, 2021, 12, 224-231.	4.6	3
101	Stepwise Generation of Monoâ€, Diâ€, and Triplyâ€Reduced Warped Nanographenes: Chargeâ€Dependent Aromaticity, Surface Nonequivalence, Swing Distortion, and Metal Binding Sites. Angewandte Chemie, 2021, 133, 25649-25657.	2.0	3
102	Catalytic Hydroaminoalkylation of Alkenes. Yuki Gosei Kagaku Kyokaishi/Journal of Synthetic Organic Chemistry, 2009, 67, 843-844.	0.1	2
103	A photochromic carbazolyl-imidazolyl radical complex. Chemical Communications, 2022, , .	4.1	1
104	3. Chemical Synthesis of Cycloparaphenylenes. , 2017, , .		0
105	Frontispiece: Synthetic Strategies of Carbon Nanobelts and Related Beltâ€Shaped Polycyclic Aromatic Hydrocarbons. Chemistry - A European Journal, 2020, 26, .	3.3	0