

# Yasutomo Segawa

## List of Publications by Year in descending order

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105  
papers

12,351  
citations

16411

64  
h-index

24915

109  
g-index

131  
all docs

131  
docs citations

131  
times ranked

6888  
citing authors

#	ARTICLE	IF	CITATIONS
1	Synthesis of Extended $\pi$ -Systems through C-H Activation. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 66-81.	7.2	579
2	A grossly warped nanographene and the consequences of multiple odd-membered-ring defects. <i>Nature Chemistry</i> , 2013, 5, 739-744.	6.6	548
3	Boryllithium: Isolation, Characterization, and Reactivity as a Boryl Anion. <i>Science</i> , 2006, 314, 113-115.	6.0	501
4	Structurally uniform and atomically precise carbon nanostructures. <i>Nature Reviews Materials</i> , 2016, 1, .	23.8	417
5	Synthesis of a carbon nanobelt. <i>Science</i> , 2017, 356, 172-175.	6.0	408
6	Synthesis of Cycloparaphenylenes and Related Carbon Nanorings: A Step toward the Controlled Synthesis of Carbon Nanotubes. <i>Accounts of Chemical Research</i> , 2012, 45, 1378-1389.	7.6	365
7	Initiation of carbon nanotube growth by well-defined carbon nanorings. <i>Nature Chemistry</i> , 2013, 5, 572-576.	6.6	343
8	Chemistry of Boryllithium: Synthesis, Structure, and Reactivity. <i>Journal of the American Chemical Society</i> , 2008, 130, 16069-16079.	6.6	315
9	Design and Synthesis of Carbon Nanotube Segments. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 5136-5158.	7.2	300
10	Combined experimental and theoretical studies on the photophysical properties of cycloparaphenylenes. <i>Organic and Biomolecular Chemistry</i> , 2012, 10, 5979.	1.5	248
11	Synthesis, Structures, and Properties of $\pi$ -Extended Double Helicene: A Combination of Planar and Nonplanar $\pi$ -Systems. <i>Journal of the American Chemical Society</i> , 2015, 137, 7763-7768.	6.6	248
12	Theoretical Studies on the Structures and Strain Energies of Cycloparaphenylenes. <i>Organic Letters</i> , 2010, 12, 2262-2265.	2.4	240
13	Concise Synthesis and Crystal Structure of [12]Cycloparaphenylene. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 3244-3248.	7.2	225
14	A Modular and Size-Selective Synthesis of [n]Cycloparaphenylenes: A Step toward the Selective Synthesis of [n] Single-Walled Carbon Nanotubes. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 10202-10205.	7.2	215
15	C-H Borylation of Benzene Derivatives by a Bulky Iridium Catalyst. <i>Journal of the American Chemical Society</i> , 2015, 137, 5193-5198.	6.6	213
16	Syntheses of PBP Pincer Iridium Complexes: A Supporting Boryl Ligand. <i>Journal of the American Chemical Society</i> , 2009, 131, 9201-9203.	6.6	206
17	Boryl Anion Attacks Transition-Metal Chlorides To Form Boryl Complexes: Syntheses, Spectroscopic, and Structural Studies on Group 11 Borylmetal Complexes. <i>Angewandte Chemie - International Edition</i> , 2007, 46, 6710-6713.	7.2	193
18	Topological molecular nanocarbons: All-benzene catenane and trefoil knot. <i>Science</i> , 2019, 365, 272-276.	6.0	192

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19	Synthesis, Structure of Borylmagnesium, and Its Reaction with Benzaldehyde to Form Benzoylborane. <i>Journal of the American Chemical Society</i> , 2007, 129, 9570-9571.	6.6	190
20	Polycyclic Arene Synthesis by Annulative $\pi$ -Extension. <i>Journal of the American Chemical Society</i> , 2019, 141, 3-10.	6.6	185
21	Synthesis and Properties of [9]Cyclo-1,4-naphthylene: A $\pi$ -Extended Carbon Nanoring. <i>Journal of the American Chemical Society</i> , 2012, 134, 2962-2965.	6.6	174
22	Synthesis and Structural Features of Quadruple Helicenes: Highly Distorted $\pi$ Systems Enabled by Accumulation of Helical Repulsions. <i>Journal of the American Chemical Society</i> , 2016, 138, 3587-3595.	6.6	157
23	[9]Cycloparaphenylene: Nickel-mediated Synthesis and Crystal Structure. <i>Chemistry Letters</i> , 2011, 40, 423-425.	0.7	148
24	Direct Arylation of Polycyclic Aromatic Hydrocarbons through Palladium Catalysis. <i>Journal of the American Chemical Society</i> , 2011, 133, 10716-10719.	6.6	144
25	Size-selective Complexation and Extraction of Endohedral Metallofullerenes with Cycloparaphenylene. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 3102-3106.	7.2	144
26	Synthesis and characterization of hexaarylbenzenes with five or six different substituents enabled by programmed synthesis. <i>Nature Chemistry</i> , 2015, 7, 227-233.	6.6	143
27	Synthesis and Racemization Process of Chiral Carbon Nanorings: A Step toward the Chemical Synthesis of Chiral Carbon Nanotubes. <i>Organic Letters</i> , 2011, 13, 2480-2483.	2.4	137
28	Cycloparaphenylene-Based Ionic Donor-Acceptor Supramolecule: Isolation and Characterization of Li <sup>+</sup> @C <sub>60</sub> , [10]CPP. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 3707-3711.	7.2	137
29	A Quintuple [6]Helicene with a Corannulene Core as a C <sub>5</sub> -Symmetric Propeller-Shaped $\pi$ -System. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 1337-1341.	7.2	134
30	Size-selective synthesis of [9]-[11] and [13]cycloparaphenylenes. <i>Chemical Science</i> , 2012, 3, 2340.	3.7	132
31	Synthesis and Size-Dependent Properties of [12], [16], and [24]Carbon Nanobelts. <i>Journal of the American Chemical Society</i> , 2018, 140, 10054-10059.	6.6	131
32	Metal-free hydrogenation catalysis of polycyclic aromatic hydrocarbons. <i>Chemical Communications</i> , 2012, 48, 11963.	2.2	125
33	Synthesis and properties of all-benzene carbon nanocages: a junction unit of branched carbon nanotubes. <i>Chemical Science</i> , 2013, 4, 84-88.	3.7	123
34	Thiophene-Fused $\pi$ -Systems from Diarylacetylenes and Elemental Sulfur. <i>Journal of the American Chemical Society</i> , 2016, 138, 10351-10355.	6.6	112
35	Isolation of a PBPincer Rhodium Complex Stabilized by an Intermolecular C <sub>2</sub> H <sub>2</sub> $\pi$ -...Coordination as the Fourth Ligand. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 6956-6960.	7.2	107
36	C-H activation route to dibenzo[a,e]pentalenes: annulation of arylacetylenes promoted by PdCl <sub>2</sub> @AgOTf@o-chloranil. <i>Chemical Science</i> , 2013, 4, 2369.	3.7	107

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37	Synthesis and Properties of Cycloparaphenylene-2,5-pyridylidene: A Nitrogen-Containing Carbon Nanoring. <i>Organic Letters</i> , 2012, 14, 1888-1891.	2.4	106
38	All-Benzene Carbon Nanocages: Size-Selective Synthesis, Photophysical Properties, and Crystal Structure. <i>Journal of the American Chemical Society</i> , 2014, 136, 16452-16458.	6.6	103
39	A Water-Soluble Warped Nanographene: Synthesis and Applications for Photoinduced Cell Death. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 2874-2878.	7.2	102
40	Topologically Unique Molecular Nanocarbons. <i>Accounts of Chemical Research</i> , 2019, 52, 2760-2767.	7.6	102
41	Synthesis of a zigzag carbon nanobelt. <i>Nature Chemistry</i> , 2021, 13, 255-259.	6.6	96
42	Design und Synthese von Kohlenstoffnanoröhrensegmenten. <i>Angewandte Chemie</i> , 2016, 128, 5222-5245.	1.6	95
43	Excited States in Cycloparaphenylenes: Dependence of Optical Properties on Ring Length. <i>Journal of Physical Chemistry Letters</i> , 2012, 3, 3125-3128.	2.1	94
44	Curved Oligophenylenes as Donors in Shape-Persistent Donor-Acceptor Macrocycles with Solvatofluorochromic Properties. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 9646-9649.	7.2	94
45	Selective synthesis of [7]- and [8]cycloparaphenylenes. <i>Chemical Communications</i> , 2014, 50, 954-956.	2.2	92
46	$\text{C}_{60}$ -Cycloparaphenylene Transition Metal Complexes: Synthesis, Structure, Photophysical Properties, and Application to the Selective Monofunctionalization of Cycloparaphenylenes. <i>Journal of the American Chemical Society</i> , 2015, 137, 1356-1361.	6.6	91
47	Diphenylphosphino- or Dicyclohexylphosphino-Tethered Boryl Pincer Ligands: Syntheses of PBP Iridium(III) Complexes and Their Conversion to Iridium-Ethylene Complexes. <i>Organometallics</i> , 2009, 28, 6234-6242.	1.1	90
48	Palladium-Catalyzed C-H Activation Taken to the Limit. Flattening an Aromatic Bowl by Total Arylation. <i>Journal of the American Chemical Society</i> , 2012, 134, 15664-15667.	6.6	89
49	Aziridinofullerene: A Versatile Platform for Functionalized Fullerenes. <i>Journal of the American Chemical Society</i> , 2011, 133, 2402-2405.	6.6	88
50	Symmetric Multiple Carbohelicenes. <i>Synlett</i> , 2019, 30, 370-377.	1.0	86
51	Thiophene-Based, Radial $\pi$ -Conjugation: Synthesis, Structure, and Photophysical Properties of Cyclo[1,4]phenylene-2,5-dithienylenes. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 159-163.	7.2	79
52	Flexible Reaction Pocket on Bulky Diphosphine-Ir Complex Controls Regioselectivity in <i>para</i> -Selective C-H Borylation of Arenes. <i>ACS Catalysis</i> , 2016, 6, 7536-7546.	5.5	73
53	Syntheses and properties of triborane(5)s possessing bulky diamino substituents on terminal boron atoms. <i>Chemical Communications</i> , 2011, 47, 5888.	2.2	72
54	Synthetic Strategies of Carbon Nanobelts and Related Belt-Shaped Polycyclic Aromatic Hydrocarbons. <i>Chemistry - A European Journal</i> , 2020, 26, 14791-14801.	1.7	72

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55	A Theoretical Study on the Strain Energy of Carbon Nanobelts. <i>Organic Letters</i> , 2016, 18, 1430-1433.	2.4	71
56	Chemical Synthesis of Carbon Nanorings and Nanobelts. <i>Accounts of Materials Research</i> , 2021, 2, 681-691.	5.9	71
57	Crystal Structure of Boryllithium with Two THF Molecules and DFT Analysis of Its Property as a Boryl Anion. <i>Chemistry Letters</i> , 2008, 37, 802-803.	0.7	69
58	Synthesis, Properties, and Packing Structures of Corannulene-Based $\pi$ -Systems Containing Heptagons. <i>Chemistry - an Asian Journal</i> , 2015, 10, 1635-1639.	1.7	69
59	A Nonalternant Aromatic Belt: Methylene-Bridged [6]Cycloparaphenylene Synthesized from Pillar[6]arene. <i>Journal of the American Chemical Society</i> , 2020, 142, 12850-12856.	6.6	69
60	$\text{Pd}(\text{OAc})_2$ -Chloranil/ $\text{M}(\text{OTf})_n$ : A Catalyst for the Direct C-H Arylation of Polycyclic Aromatic Hydrocarbons with Boryl-, Silyl-, and Unfunctionalized Arenes. <i>Organic Letters</i> , 2012, 14, 418-421.	2.4	68
61	Synthesis and properties of cycloparaphenylene-2,7-pyrenylene: a pyrene-containing carbon nanoring. <i>Chemical Communications</i> , 2014, 50, 957-959.	2.2	67
62	A Quintuple [6]Helicene with a Corannulene Core as a $C_5$ -Symmetric Propeller-Shaped $\pi$ -System. <i>Angewandte Chemie</i> , 2018, 130, 1351-1355.	1.6	67
63	Double-Helix Supramolecular Nanofibers Assembled from Negatively Curved Nanographenes. <i>Journal of the American Chemical Society</i> , 2021, 143, 5465-5469.	6.6	66
64	Synthesis and Structure of a Propeller-Shaped Polycyclic Aromatic Hydrocarbon Containing Seven-Membered Rings. <i>Organic Letters</i> , 2018, 20, 1932-1935.	2.4	64
65	Synthesis and structural features of thiophene-fused analogues of warped nanographene and quintuple helicene. <i>Chemical Science</i> , 2019, 10, 2326-2330.	3.7	63
66	Synthesis and Dimerization of Chloro[10]cycloparaphenylene: A Directly Connected Cycloparaphenylene Dimer. <i>Organic Letters</i> , 2014, 16, 2174-2176.	2.4	62
67	Corannulene-Helicene Hybrids: Chiral $\pi$ -Systems Comprising Both Bowl and Helical Motifs. <i>Organic Letters</i> , 2016, 18, 3992-3995.	2.4	62
68	Synthesis, properties, and crystal structures of $\pi$ -extended double [6]helicenes: contorted multi-dimensional stacking lattice. <i>Organic and Biomolecular Chemistry</i> , 2017, 15, 4697-4703.	1.5	61
69	Laterally $\pi$ -Extended Dithia[6]helicenes with Heptagons: Saddle-Helix Hybrid Molecules. <i>Journal of Organic Chemistry</i> , 2017, 82, 7745-7749.	1.7	53
70	Synthesis of a M $\ddot{u}$ bius carbon nanobelt. , 2022, 1, 535-541.		53
71	Pyridylidene ligand facilitates gold-catalyzed oxidative C-H arylation of heterocycles. <i>Beilstein Journal of Organic Chemistry</i> , 2015, 11, 2737-2746.	1.3	49
72	Helically Twisted Tetracene: Synthesis, Crystal Structure, and Photophysical Properties of Hexabenz[a,c,fg,j,l,op]tetracene. <i>Synlett</i> , 2016, 27, 2081-2084.	1.0	46

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73	Phenanthro[9,10- <i>a</i> ]corannulene by one-step annulative $\pi$ -extension of corannulene. Canadian Journal of Chemistry, 2017, 95, 329-333.	0.6	44
74	Exciton recombination dynamics in nanoring cycloparaphenylenes. Chemical Science, 2014, 5, 2293.	3.7	40
75	Negatively Curved Warped Nanographene Self-Assembled on Metal Surfaces. Journal of the American Chemical Society, 2019, 141, 13158-13164.	6.6	38
76	Synthesis and properties of [8]-, [10]-, [12]-, and [16]cyclo-1,4-naphthylenes. Chemical Science, 2017, 8, 661-667.	3.7	36
77	Creation of negatively curved polyaromatics enabled by annulative coupling that forms an eight-membered ring. Nature Catalysis, 2020, 3, 710-718.	16.1	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.	2.4	34
79	1,3,5-Triaryl 2-pyridylidene: base-promoted generation and complexation. Chemical Communications, 2012, 48, 6642.	2.2	31
80	Synthesis of open-shell ladder $\pi$ -systems by catalytic $C\text{-}H$ annulation of diarylacetylenes. Chemical Science, 2016, 7, 650-654.	3.7	31
81	Two-step synthesis of a red-emissive warped nanographene derivative via a ten-fold $C\text{-}H$ borylation. Chemical Science, 2019, 10, 9038-9041.	3.7	28
82	A Water-Soluble Warped Nanographene: Synthesis and Applications for Photoinduced Cell Death. Angewandte Chemie, 2018, 130, 2924-2928.	1.6	27
83	Emerging Disordered Layered-Herringbone Phase in Organic Semiconductors Unveiled by Electron Crystallography. Chemistry of Materials, 2022, 34, 72-83.	3.2	26
84	Palladium-free synthesis of [10]cycloparaphenylene. Tetrahedron, 2015, 71, 4500-4503.	1.0	24
85	Synthesis and Structure of [9]Cycloparaphenylene Catenane: An All-Benzene Catenane Consisting of Small Rings. Organic Letters, 2020, 22, 1067-1070.	2.4	24
86	Selective Transformation of Strychnine and 1,2-Disubstituted Benzenes by $C\text{-}H$ Borylation. Chem, 2020, 6, 985-993.	5.8	24
87	Selective Introduction of Organic Groups to $C_{60}$ and $C_{70}$ 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
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.	1.0	23
89	Synthesis of cycloptycenes from carbon nanobelts. Chemical Science, 2020, 11, 6775-6779.	3.7	20
90	Six-fold $C\text{-}H$ borylation of hexa-peri-hexabenzocoronene. Beilstein Journal of Organic Chemistry, 2020, 16, 391-397.	1.3	18

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91	Pyridine-based dicarbene ligand: synthesis and structure of a bis-2-pyridylidene palladium complex. <i>Chemical Communications</i> , 2013, 49, 5648.	2.2	16
92	Hole-transporting materials based on thiophene-fused arenes from sulfur-mediated thienannulations. <i>Materials Chemistry Frontiers</i> , 2018, 2, 275-280.	3.2	16
93	Perfluorocycloparaphenylenes. <i>Nature Communications</i> , 2022, 13, .	5.8	16
94	Synthesis, Structure, and Electrochemical Property of a Bimetallic Bis-2-pyridylidene Palladium Acetate Complex. <i>Chemistry Letters</i> , 2017, 46, 587-590.	0.7	13
95	A theoretical study on the strain energy of helicene-containing carbon nanobelts. <i>Chemical Communications</i> , 2020, 56, 15044-15047.	2.2	12
96	Stepwise Generation of Mono-, Di-, and Triply-Reduced Warped Nanographenes: Charge-Dependent Aromaticity, Surface Nonequivalence, Swing Distortion, and Metal Binding Sites. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 25445-25453.	7.2	12
97	Chemical Synthesis of Cycloparaphenylenes. <i>ChemistrySelect</i> , 2017, 2, .	0.7	7
98	Armchair and Chiral Carbon Nanobelts: Scholl Reaction in Strained Nanorings. <i>CheM</i> , 2019, 5, 746-748.	5.8	6
99	Ni-Catalyzed $\pm$ -Selective C-H Borylations of Naphthalene-Based Aromatic Compounds. <i>Journal of Organic Chemistry</i> , 2019, 84, 14354-14359.	1.7	5
100	Exciton Spatial Dynamics and Self-Trapping in Carbon Nanocages. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 224-231.	2.1	3
101	Stepwise Generation of Mono-, Di-, and Triply-Reduced Warped Nanographenes: Charge-Dependent Aromaticity, Surface Nonequivalence, Swing Distortion, and Metal Binding Sites. <i>Angewandte Chemie</i> , 2021, 133, 25649-25657.	1.6	3
102	Catalytic Hydroaminoalkylation of Alkenes. <i>Yuki Gosei Kagaku Kyokaiishi/Journal of Synthetic Organic Chemistry</i> , 2009, 67, 843-844.	0.0	2
103	A photochromic carbazolyl-imidazolyl radical complex. <i>Chemical Communications</i> , 2022, , .	2.2	1
104	3. Chemical Synthesis of Cycloparaphenylenes. , 2017, , .		0
105	Frontispiece: Synthetic Strategies of Carbon Nanobelts and Related Belt-Shaped Polycyclic Aromatic Hydrocarbons. <i>Chemistry - A European Journal</i> , 2020, 26, .	1.7	0