Takuji Hatakeyama

List of Publications by Year
in descending order

76 papers	9,488 citations	50170 46 h-index	71532 76 g-index
80 all docs	80 docs citations	80 times ranked	5259 citing authors

#	Article	IF	Citations
1	Ultrapure Blue Thermally Activated Delayed Fluorescence Molecules: Efficient HOMOâ€“LUMO Separation by the Multiple Resonance Effect. Advanced Materials, 2016, 28, 2777-2781.	11.1	1,177
2	Narrowband deep-blue organic light-emitting diode featuring an organoboron-based emitter. Nature Photonics, 2019, 13, 678-682.	15.6	855
3	Stable pure-blue hyperfluorescence organic light-emitting diodes with high-efficiency and narrow emission. Nature Photonics, 2021, 15, 203-207.	15.6	449
4	One-Shot Multiple Borylation toward BN-Doped Nanographenes. Journal of the American Chemical Society, 2018, 140, 1195-1198.	6.6	380
5	Oneâ€Step Borylation of 1,3â€Diaryloxybenzenes Towards Efficient Materials for Organic Lightâ€Emitting Diodes. Angewandte Chemie - International Edition, 2015, 54, 13581-13585.	7.2	322
6	Highly Selective Biaryl Cross-Coupling Reactions between Aryl Halides and Aryl Grignard Reagents: A New Catalyst Combination ofN-Heterocyclic Carbenes and Iron, Cobalt, and Nickel Fluorides. Journal of the American Chemical Society, 2009, 131, 11949-11963.	6.6	298
7	Iron-Catalyzed Suzukiâ€'Miyaura Coupling of Alkyl Halides. Journal of the American Chemical Society, 2010, 132, 10674-10676.	6.6	298
8	Synthesis of BN-Fused Polycyclic Aromatics via Tandem Intramolecular Electrophilic Arene Borylation. Journal of the American Chemical Society, 2011, 133, 18614-18617.	6.6	284
9	Iron-Catalyzed Selective Biaryl Coupling:â€‰ Remarkable Suppression of Homocoupling by the Fluoride Anion. Journal of the American Chemical Society, 2007, 129, 9844-9845.	6.6	281
10	Solutionâ€Processable Pure Green Thermally Activated Delayed Fluorescence Emitter Based on the Multiple Resonance Effect. Advanced Materials, 2020, 32, e2004072.	11.1	254
11	Azaboradibenzo[6]helicene: Carrier Inversion Induced by Helical Homochirality. Journal of the American Chemical Society, 2012, 134, 19600-19603.	6.6	231
12	Effect of TMEDA on Iron-Catalyzed Coupling Reactions of ArMgX with Alkyl Halides. Journal of the American Chemical Society, 2009, 131, 6078-6079.	6.6	216
13	Carbazoleâ€Based DABNA Analogues as Highly Efficient Thermally Activated Delayed Fluorescence Materials for Narrowband Organic Lightâ€Emitting Diodes. Angewandte Chemie - International Edition, 2021, 60, 2882-2886.	7.2	184
14	Two-Step Synthesis of Boron-Fused Double Helicenes. Journal of the American Chemical Society, 2016, 138, 5210-5213.	6.6	181
15	Microgram-Scale Testing of Reaction Conditions in Solution Using Nanoliter Plugs in Microfluidics with Detection by MALDI-MS. Journal of the American Chemical Society, 2006, 128, 2518-2519.	6.6	175
16	Ironâ€Catalyzed Alkylâ€“Alkyl Suzukiâ€“Miyaura Coupling. Angewandte Chemie - International Edition, 2012, 51, 8834-8837.	7.2	164
17	Multiple Resonance Effect-Induced Sky-Blue Thermally Activated Delayed Fluorescence with a Narrow Emission Band. Organic Letters, 2019, 21, 9311-9314.	2.4	157
18	Hypsochromic Shift of Multipleâ€Resonanceâ€Induced Thermally Activated Delayed Fluorescence by Oxygen Atom Incorporation. Angewandte Chemie - International Edition, 2021, 60, 17910-17914.	7.2	152

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19	Multiple heteroatom substitution to graphene nanoribbon. Science Advances, 2018, 4, eaar7181.	4.7	151
20	Divergent Synthesis of Heteroatomâ€Centered 4,8,12â€Triazatriangulenes. Angewandte Chemie - International Edition, 2017, 56, 5087-5090.	7.2	142
21	Tuning Chemoselectivity in Ironâ€Catalyzed Sonogashiraâ€Type Reactions Using a Bisphosphine Ligand with Peripheral Steric Bulk: Selective Alkynylation of Nonactivated Alkyl Halides. Angewandte Chemie - International Edition, 2011, 50, 10973-10976.	7.2	139
22	One-Shot Synthesis of Expanded Heterohelicene Exhibiting Narrowband Thermally Activated Delayed Fluorescence. Journal of the American Chemical Society, 2022, 144, 106-112.	6.6	133
23	Triplet-Energy Control of Polycyclic Aromatic Hydrocarbons by BN Replacement: Development of Ambipolar Host Materials for Phosphorescent Organic Light-Emitting Diodes. Chemistry of Materials, 2014, 26, 6265-6271.	3.2	131
24	Cross-Coupling of Non-activated Chloroalkanes with Aryl Grignard Reagents in the Presence of Iron/N-Heterocyclic Carbene Catalysts. Organic Letters, 2012, 14, 1066-1069.	2.4	124
25	Indium-Catalyzed 2-Alkenylation of 1,3-Dicarbonyl Compounds with Unactivated Alkynes. Journal of the American Chemical Society, 2007, 129, 5264-5271.	6.6	110
26	The Role of Reverse Intersystem Crossing Using a TADFâ€Type Acceptor Molecule on the Device Stability of Exciplexâ€Based Organic Lightâ€Emitting Diodes. Advanced Materials, 2020, 32, e1906614.	11.1	109
27	Transition-Metal-Free Electrophilic Amination between Aryl Grignard Reagents andN-Chloroamines. Organic Letters, 2010, 12, 1516-1519.	2.4	108
28	Construction of a Highly Distorted Benzene Ring in a Double Helicene. Angewandte Chemie - International Edition, 2014, 53, 14074-14076.	7.2	104
29	Four-Step Synthesis of B₂N₂-Embedded Corannulene. Journal of the American Chemical Society, 2018, 140, 13562-13565.	6.6	104
30	Ironâ€Catalyzed Diboration and Carboboration of Alkynes. Chemistry - A European Journal, 2015, 21, 4257-4261.	1.7	103
31	Stereospecific Cross-Coupling between Alkenylboronates and Alkyl Halides Catalyzed by Ironâ€“Bisphosphine Complexes. Journal of Organic Chemistry, 2012, 77, 1168-1173.	1.7	102
32	Iron-catalysed fluoroaromatic coupling reactions under catalytic modulation with 1,2-bis(diphenylphosphino)benzene. Chemical Communications, 2009, , 1216.	2.2	94
33	Hot Vibrational States in a High-Performance Multiple Resonance Emitter and the Effect of Excimer Quenching on Organic Light-Emitting Diodes. ACS Applied Materials & Interfaces, 2021, 13, 8643-8655.	4.0	94
34	Synthesis of Boron-Doped Polycyclic Aromatic Hydrocarbons by Tandem Intramolecular Electrophilic Arene Borylation. Organic Letters, 2015, 17, 6158-6161.	2.4	93
35	Iron-Catalyzed Enyne Cross-Coupling Reaction. Organic Letters, 2008, 10, 5341-5344.	2.4	91
36	Synthesis of Boronateâ€Based Benzo[fg]tetracene and Benzo[hi]hexacene via Demethylative Direct Borylation. Chemistry - A European Journal, 2016, 22, 11574-11577.	1.7	90

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37	Iron-Catalyzed Negishi Coupling Toward an Effective Olefin Synthesis. Organic Letters, 2009, 11, 4496-4499.	2.4	86
38	Kumadaâ€“Tamaoâ€“Corriu Coupling of Alkyl Halides Catalyzed by an Ironâ€“Bisphosphine Complex. Chemistry Letters, 2011, 40, 1030-1032.	0.7	86
39	Light Amplification in Molecules Exhibiting Thermally Activated Delayed Fluorescence. Advanced Optical Materials, 2017, 5, 1700051.	3.6	84
40	Tandem Phospha-Friedelâ^'Crafts Reaction toward Curved Ï€-Conjugated Frameworks with a Phosphorus Ring Junction. Organic Letters, 2011, 13, 2130-2133.	2.4	68
41	Iron-Catalyzed Aromatic Amination for Nonsymmetrical Triarylamine Synthesis. Journal of the American Chemical Society, 2012, 134, 20262-20265.	6.6	67
42	Development of Pure Green Thermally Activated Delayed Fluorescence Material by Cyano Substitution. Advanced Materials, 2022, 34, .	11.1	62
43	High-efficiency ultrapure green organic light-emitting diodes. Materials Chemistry Frontiers, 2018, 2, 704-709.	3.2	60
44	Carbazoleâ€Based DABNA Analogues as Highly Efficient Thermally Activated Delayed Fluorescence Materials for Narrowband Organic Lightâ€Emitting Diodes. Angewandte Chemie, 2021, 133, 2918-2922.	1.6	59
45	Enantioselective Synthesis of Î±-Substituted Ketones by Asymmetric Addition of Chiral Zinc Enamides to 1-Alkenes. Journal of the American Chemical Society, 2003, 125, 6362-6363.	6.6	56
46	Investigating HOMO Energy Levels of Terminal Emitters for Realizing Highâ€Brightness and Stable TADFâ€Assisted Fluorescence Organic Lightâ€Emitting Diodes. Advanced Electronic Materials, 2021, 7, 2001090.	2.6	55
47	Î±-Alkylation of Ketones by Addition of Zinc Enamides to Unactivated Olefins. Journal of the American Chemical Society, 2004, 126, 11820-11825.	6.6	50
48	Laterally Mobile, Functionalized Self-Assembled Monolayers at the Fluorousâ^'Aqueous Interface in a Plug-Based Microfluidic System: Characterization and Testing with Membrane Protein Crystallization. Journal of the American Chemical Society, 2009, 131, 6042-6043.	6.6	50
49	Investigation of Organoiron Catalysis in Kumadaâ€“Tamaoâ€“Corriu-Type Cross-Coupling Reaction Assisted by Solution-Phase X-ray Absorption Spectroscopy. Bulletin of the Chemical Society of Japan, 2015, 88, 410-418.	2.0	46
50	Nickel-Catalyzed Alkenylative Cross-Coupling Reaction of Alkyl Sulfides. Journal of the American Chemical Society, 2010, 132, 13117-13119.	6.6	45
51	Alkylation of Magnesium Enamide with Alkyl Chlorides and Fluorides. Journal of the American Chemical Society, 2005, 127, 14192-14193.	6.6	44
52	Divergent Synthesis of Heteroatomâ€Centered 4,8,12â€Triazatriangulenes. Angewandte Chemie, 2017, 129, 5169-5172.	1.6	42
53	Solventâ€Vaporâ€Induced Reversible Singleâ€Crystalâ€toâ€Singleâ€Crystal Transformation of a Triphosphaazatrianguleneâ€Based Metalâ€“Organic Framework. Angewandte Chemie - International Edition, 2020, 59, 1435-1439.	7.2	40
54	Hypsochromic Shift of Multipleâ€Resonanceâ€Induced Thermally Activated Delayed Fluorescence by Oxygen Atom Incorporation. Angewandte Chemie, 2021, 133, 18054-18058.	1.6	39

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55	Iron Fluoride/N-Heterocyclic Carbene Catalyzed Cross CouplingÂ-between Deactivated Aryl Chlorides and Alkyl Grignard Reagents with or without Î²-Hydrogens. Synthesis, 2015, 47, 1733-1740.	1.2	35
56	Regioselective Allylzincation of Alkenylboronate. Organic Letters, 2001, 3, 3137-3140.	2.4	33
57	Sequential Coupling of Zincated Hydrazone, Alkenylboronate, and Electrophile That Creates Several Contiguous Stereogenic Centers. Journal of the American Chemical Society, 2004, 126, 14344-14345.	6.6	33
58	Iron-catalyzed Suzukiâ€“Miyaura Coupling Reaction of Unactivated Alkyl Halides with Lithium Alkynylborates. Chemistry Letters, 2015, 44, 486-488.	0.7	32
59	Tetracoordinate Boron-Fused Double [5]Helicenes as Cathode Active Materials for Lithium Batteries. Organic Letters, 2019, 21, 1770-1773.	2.4	30
60	Diastereoselective Addition of Zincated Hydrazones to Alkenylboronates and Stereospecific Trapping of Boron/Zinc Bimetallic Intermediates by Carbon Electrophiles. Journal of the American Chemical Society, 2008, 130, 15688-15701.	6.6	28
61	Syntheses and Physical Properties of Cationic BNâ€Embedded Polycyclic Aromatic Hydrocarbons. Angewandte Chemie - International Edition, 2021, 60, 12835-12840.	7.2	26
62	Multiple Electrophilic Câ€“H Borylation of Arenes Using Boron Triiodide. Organic Letters, 2020, 22, 700-704.	2.4	24
63	Synthesis of 2,7-Disubstituted 5,10-Diaryl-5,10-dihydrophenazines via Iron-Catalyzed Intramolecular Ring-Closing Câ€“H Amination. Heterocycles, 2015, 90, 893.	0.4	16
64	Iron-Catalyzed Cross Coupling of Aryl Chlorides with Alkyl Grignard Reagents: Synthetic Scope and FeII/FeIV Mechanism Supported by X-ray Absorption Spectroscopy and Density Functional Theory Calculations. Bulletin of the Chemical Society of Japan, 2019, 92, 381-390.	2.0	16
65	DFT Study of a 5-endo-trig-Type Cyclization of 3-Alkenoic Acids by Using Pd-Spiro-bis(isoxazoline) as Catalyst: Importance of the Rigid Spiro Framework for Both Selectivity and Reactivity. Chemistry - A European Journal, 2013, 19, 9518-9525.	1.7	15
66	Regioselective Î±-alkylation of ketones with alkyl chlorides and fluorides via highly nucleophilic magnesium enamides. Tetrahedron, 2007, 63, 8440-8448.	1.0	12
67	Syntheses and Physical Properties of Cationic BNâ€Embedded Polycyclic Aromatic Hydrocarbons. Angewandte Chemie, 2021, 133, 12945-12950.	1.6	11
68	5,9-Dioxa-13b-Oxophosphanaphtho[3,2,1-de]anthracenes Prepared by Tandem Phospha-Friedelâ€“Crafts Reaction as Hole-/Exciton-Blocking Materials for OLEDs. Organometallics, 2017, 36, 2622-2631.	1.1	9
69	Ï€-Stacked Polymer Consisting of a Pseudoâ€“metaâ€“[2.2]Paracyclophane Skeleton. Polymers, 2018, 10, 1140.	2.0	9
70	Synthesis of Tetracoordinate Boronâ€Fused Benzoaceanthrylene Analogs via Tandem Electrophilic Câ€“H Borylation. Chemistry - an Asian Journal, 2019, 14, 1657-1661.	1.7	9
71	Iron promoted conjugate addition: implication of the six-centered mechanism based on the isolation of the iron-enolate intermediate. Chemical Communications, 2012, 48, 12231.	2.2	8
72	Triangulene-based Efficient Exciton Blocking Material for Organic Light-emitting Diodes. Chemistry Letters, 2018, 47, 920-922.	0.7	7

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73	Solventâ€Vaporâ€Induced Reversible Singleâ€Crystalâ€toâ€Singleâ€Crystal Transformation of a Triphosphaazatrianguleneâ€Based Metalâ€“Organic Framework. Angewandte Chemie, 2020, 132, 1451-1455.	1.6	5
74	Efficient HOMO-LUMO separation by multiple resonance effect toward ultrapure blue thermally activated delayed fluorescence. Proceedings of SPIE, 2016, , .	0.8	0
75	RÃ¼cktitelbild: Divergent Synthesis of Heteroatomâ€Centered 4,8,12â€Triazatriangulenes (Angew. Chem.) Tj ETQq1 1 0.784314 rgBT	1.6	0
76	RÃ¼cktitelbild: Solventâ€Vaporâ€Induced Reversible Singleâ€Crystalâ€toâ€Singleâ€Crystal Transformation of a Triphosphaazatrianguleneâ€Based Metalâ€“Organic Framework (Angew. Chem. 4/2020). Angewandte Chemie, 2020, 132, 1760-1760.	1.6	0