Takuji Hatakeyama

List of Publications by Citations

74 papers	6,304 citations	42 h-index	79 g-index
80 ext. papers	7,939 ext. citations	11 avg, IF	6.28 L-index

#	Paper	IF	Citations
74	Ultrapure Blue Thermally Activated Delayed Fluorescence Molecules: Efficient HOMO-LUMO Separation by the Multiple Resonance Effect. *Advanced Materials*, **2016**, 28, 2777-81	24	651
73	Narrowband deep-blue organic light-emitting diode featuring an organoboron-based emitter. *Nature Photonics*, **2019**, 13, 678-682	33.9	390
72	Highly selective biaryl cross-coupling reactions between aryl halides and aryl Grignard reagents: a new catalyst combination of N-heterocyclic carbenes and iron, cobalt, and nickel fluorides. *Journal of the American Chemical Society*, **2009**, 131, 11949-63	16.4	278
71	Iron-catalyzed selective biaryl coupling: remarkable suppression of homocoupling by the fluoride anion. *Journal of the American Chemical Society*, **2007**, 129, 9844-5	16.4	267
70	Iron-catalyzed Suzuki-Miyaura coupling of alkyl halides. *Journal of the American Chemical Society*, **2010**, 132, 10674-6	16.4	264
69	Synthesis of BN-fused polycyclic aromatics via tandem intramolecular electrophilic arene borylation. *Journal of the American Chemical Society*, **2011**, 133, 18614-7	16.4	248
68	One-Shot Multiple Borylation toward BN-Doped Nanographenes. *Journal of the American Chemical Society*, **2018**, 140, 1195-1198	16.4	221
67	Effect of TMEDA on iron-catalyzed coupling reactions of ArMgX with alkyl halides. *Journal of the American Chemical Society*, **2009**, 131, 6078-9	16.4	205
66	One-Step Borylation of 1,3-Diaryloxybenzenes Towards Efficient Materials for Organic Light-Emitting Diodes. *Angewandte Chemie - International Edition*, **2015**, 54, 13581-5	16.4	204
65	Azaboradibenzo[6]helicene: carrier inversion induced by helical homochirality. *Journal of the American Chemical Society*, **2012**, 134, 19600-3	16.4	196
64	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, 2518-9	16.4	163
63	Stable pure-blue hyperfluorescence organic light-emitting diodes with high-efficiency and narrow emission. *Nature Photonics*, **2021**, 15, 203-207	33.9	151
62	Iron-catalyzed alkyl-alkyl Suzuki-Miyaura coupling. *Angewandte Chemie - International Edition*, **2012**, 51, 8834-7	16.4	143
61	Two-Step Synthesis of Boron-Fused Double Helicenes. *Journal of the American Chemical Society*, **2016**, 138, 5210-3	16.4	141
60	Tuning chemoselectivity in iron-catalyzed Sonogashira-type reactions using a bisphosphine ligand with peripheral steric bulk: selective alkynylation of nonactivated alkyl halides. *Angewandte Chemie - International Edition*, **2011**, 50, 10973-6	16.4	131
59	Cross-coupling of non-activated chloroalkanes with aryl Grignard reagents in the presence of iron/N-heterocyclic carbene catalysts. *Organic Letters*, **2012**, 14, 1066-9	6.2	115
58	Multiple heteroatom substitution to graphene nanoribbon. *Science Advances*, **2018**, 4, eaar7181	14.3	105

57	Solution-Processable Pure Green Thermally Activated Delayed Fluorescence Emitter Based on the Multiple Resonance Effect. *Advanced Materials*, **2020**, 32, e2004072	24	104
56	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	9.6	103
55	Indium-catalyzed 2-alkenylation of 1,3-dicarbonyl compounds with unactivated alkynes. *Journal of the American Chemical Society*, **2007**, 129, 5264-71	16.4	102
54	Transition-metal-free electrophilic amination between aryl Grignard reagents and N-chloroamines. *Organic Letters*, **2010**, 12, 1516-9	6.2	99
53	Divergent Synthesis of Heteroatom-Centered 4,8,12-Triazatriangulenes. *Angewandte Chemie - International Edition*, **2017**, 56, 5087-5090	16.4	93
52	Multiple Resonance Effect-Induced Sky-Blue Thermally Activated Delayed Fluorescence with a Narrow Emission Band. *Organic Letters*, **2019**, 21, 9311-9314	6.2	91
51	Construction of a highly distorted benzene ring in a double helicene. *Angewandte Chemie - International Edition*, **2014**, 53, 14074-6	16.4	88
50	Stereospecific cross-coupling between alkenylboronates and alkyl halides catalyzed by iron-bisphosphine complexes. *Journal of Organic Chemistry*, **2012**, 77, 1168-73	4.2	87
49	Iron-catalysed fluoroaromatic coupling reactions under catalytic modulation with 1,2-bis(diphenylphosphino)benzene. *Chemical Communications*, **2009**, 1216-8	5.8	87
48	Iron-catalyzed diboration and carboboration of alkynes. *Chemistry - A European Journal*, **2015**, 21, 4257-61	4.8	86
47	Iron-catalyzed enyne cross-coupling reaction. *Organic Letters*, **2008**, 10, 5341-4	6.2	81
46	Kumada□Tamao□Corriu Coupling of Alkyl Halides Catalyzed by an Iron□Bisphosphine Complex. *Chemistry Letters*, **2011**, 40, 1030-1032	1.7	79
45	Iron-catalyzed Negishi coupling toward an effective olefin synthesis. *Organic Letters*, **2009**, 11, 4496-9	6.2	78
44	Synthesis of Boronate-Based Benzo[fg]tetracene and Benzo[hi]hexacene via Demethylative Direct Borylation. *Chemistry - A European Journal*, **2016**, 22, 11574-7	4.8	71
43	Four-Step Synthesis of BN-Embedded Corannulene. *Journal of the American Chemical Society*, **2018**, 140, 13562-13565	16.4	70
42	Synthesis of Boron-Doped Polycyclic Aromatic Hydrocarbons by Tandem Intramolecular Electrophilic Arene Borylation. *Organic Letters*, **2015**, 17, 6158-61	6.2	68
41	Light Amplification in Molecules Exhibiting Thermally Activated Delayed Fluorescence. *Advanced Optical Materials*, **2017**, 5, 1700051	8.1	63
40	The Role of Reverse Intersystem Crossing Using a TADF-Type Acceptor Molecule on the Device Stability of Exciplex-Based Organic Light-Emitting Diodes. *Advanced Materials*, **2020**, 32, e1906614	24	63

39	Carbazole-Based DABNA Analogues as Highly Efficient Thermally Activated Delayed Fluorescence Materials for Narrowband Organic Light-Emitting Diodes. *Angewandte Chemie - International Edition*, **2021**, 60, 2882-2886	16.4	63
38	Tandem phospha-Friedel-Crafts reaction toward curved π-conjugated frameworks with a phosphorus ring junction. *Organic Letters*, **2011**, 13, 2130-3	6.2	61
37	Iron-catalyzed aromatic amination for nonsymmetrical triarylamine synthesis. *Journal of the American Chemical Society*, **2012**, 134, 20262-5	16.4	56
36	Enantioselective synthesis of alpha-substituted ketones by asymmetric addition of chiral zinc enamides to 1-alkenes. *Journal of the American Chemical Society*, **2003**, 125, 6362-3	16.4	49
35	High-efficiency ultrapure green organic light-emitting diodes. *Materials Chemistry Frontiers*, **2018**, 2, 704-709	7.8	47
34	Laterally mobile, functionalized self-assembled monolayers at the fluorous-aqueous interface in a plug-based microfluidic system: characterization and testing with membrane protein crystallization. *Journal of the American Chemical Society*, **2009**, 131, 6042-3	16.4	46
33	Hypsochromic Shift of Multiple-Resonance-Induced Thermally Activated Delayed Fluorescence by Oxygen Atom Incorporation. *Angewandte Chemie - International Edition*, **2021**, 60, 17910-17914	16.4	42
32	Alpha-alkylation of ketones by addition of zinc enamides to unactivated olefins. *Journal of the American Chemical Society*, **2004**, 126, 11820-5	16.4	40
31	Investigation of Organoiron Catalysis in Kumada–Tamao–Corriu-Type Cross-Coupling Reaction Assisted by Solution-Phase X-ray Absorption Spectroscopy. *Bulletin of the Chemical Society of Japan* , **2015**, 88, 410-418	5.1	38
30	Nickel-catalyzed alkenylative cross-coupling reaction of alkyl sulfides. *Journal of the American Chemical Society*, **2010**, 132, 13117-9	16.4	37
29	Alkylation of magnesium enamide with alkyl chlorides and fluorides. *Journal of the American Chemical Society*, **2005**, 127, 14192-3	16.4	36
28	Regioselective allylzincation of alkenylboronate. *Organic Letters*, **2001**, 3, 3137-40	6.2	29
27	Iron Fluoride/N-Heterocyclic Carbene Catalyzed Cross Coupling between Deactivated Aryl Chlorides and Alkyl Grignard Reagents with or without β-Hydrogens. *Synthesis*, **2015**, 47, 1733-1740	2.9	27
26	Iron-catalyzed Suzuki–Miyaura Coupling Reaction of Unactivated Alkyl Halides with Lithium Alkynylborates. *Chemistry Letters*, **2015**, 44, 486-488	1.7	27
25	Divergent Synthesis of Heteroatom-Centered 4,8,12-Triazatriangulenes. *Angewandte Chemie*, **2017**, 129, 5169-5172	3.6	26
24	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	9.5	26
23	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, 15688-701	16.4	25
22	Solvent-Vapor-Induced Reversible Single-Crystal-to-Single-Crystal Transformation of a Triphosphaazatriangulene-Based Metal-Organic Framework. *Angewandte Chemie - International Edition*, **2020**, 59, 1435-1439	16.4	23

21	Sequential coupling of zincated hydrazone, alkenylboronate, and electrophile that creates several contiguous stereogenic centers. *Journal of the American Chemical Society*, **2004**, 126, 14344-5	16.4	22
20	Carbazole-Based DABNA Analogues as Highly Efficient Thermally Activated Delayed Fluorescence Materials for Narrowband Organic Light-Emitting Diodes. *Angewandte Chemie*, **2021**, 133, 2918-2922	3.6	21
19	Investigating HOMO Energy Levels of Terminal Emitters for Realizing High-Brightness and Stable TADF-Assisted Fluorescence Organic Light-Emitting Diodes. *Advanced Electronic Materials*, **2021**, 7, 2001090	6.4	19
18	One-Shot Synthesis of Expanded Heterohelicene Exhibiting Narrowband Thermally Activated Delayed Fluorescence.. *Journal of the American Chemical Society*, **2021**,	16.4	17
17	Tetracoordinate Boron-Fused Double [5]Helicenes as Cathode Active Materials for Lithium Batteries. *Organic Letters*, **2019**, 21, 1770-1773	6.2	16
16	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, 9518-25	4.8	14
15	Multiple Electrophilic C-H Borylation of Arenes Using Boron Triiodide. *Organic Letters*, **2020**, 22, 700-704	6.2	12
14	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	5.1	11
13	Synthesis of 2,7-Disubstituted 5,10-Diaryl-5,10-dihydrophenazines via Iron-Catalyzed Intramolecular Ring-Closing C□H Amination. *Heterocycles*, **2015**, 90, 893	0.8	10
12	Syntheses and Physical Properties of Cationic BN-Embedded Polycyclic Aromatic Hydrocarbons. *Angewandte Chemie - International Edition*, **2021**, 60, 12835-12840	16.4	10
11	Hypsochromic Shift of Multiple-Resonance-Induced Thermally Activated Delayed Fluorescence by Oxygen Atom Incorporation. *Angewandte Chemie*, **2021**, 133, 18054-18058	3.6	10
10	Regioselective □-alkylation of ketones with alkyl chlorides and fluorides via highly nucleophilic magnesium enamides. *Tetrahedron*, **2007**, 63, 8440-8448	2.4	9
9	Iron promoted conjugate addition: implication of the six-centered mechanism based on the isolation of the iron-enolate intermediate. *Chemical Communications*, **2012**, 48, 12231-3	5.8	8
8	5,9-Dioxa-13b-Oxophosphanaphtho[3,2,1-de]anthracenes Prepared by Tandem Phospha-Friedel□rafts Reaction as Hole-/Exciton-Blocking Materials for OLEDs. *Organometallics*, **2017**, 36, 2622-2631	3.8	7
7	Synthesis of Tetracoordinate Boron-Fused Benzoaceanthrylene Analogs via Tandem Electrophilic C-H Borylation. *Chemistry - an Asian Journal*, **2019**, 14, 1657-1661	4.5	7
6	Syntheses and Physical Properties of Cationic BN-Embedded Polycyclic Aromatic Hydrocarbons. *Angewandte Chemie*, **2021**, 133, 12945-12950	3.6	5
5	Triangulene-based Efficient Exciton Blocking Material for Organic Light-emitting Diodes. *Chemistry Letters*, **2018**, 47, 920-922	1.7	5
4	□Stacked Polymer Consisting of a Pseudo??[2.2]Paracyclophane Skeleton. *Polymers*, **2018**, 10,	4.5	3

3	Solvent-Vapor-Induced Reversible Single-Crystal-to-Single-Crystal Transformation of a Triphosphaazatriangulene-Based Metal□Organic Framework. *Angewandte Chemie*, **2020**, 132, 1451-1455	3.6	2
2	R□cktitelbild: Divergent Synthesis of Heteroatom-Centered 4,8,12-Triazatriangulenes (Angew. Chem. 18/2017). *Angewandte Chemie*, **2017**, 129, 5214-5214	3.6	
1	R□cktitelbild: Solvent-Vapor-Induced Reversible Single-Crystal-to-Single-Crystal Transformation of a Triphosphaazatriangulene-Based Metal□Organic Framework (Angew. Chem. 4/2020). *Angewandte Chemie*, **2020**, 132, 1760-1760	3.6	