Tomohiro Higashino

List of Publications by Year
in descending order

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70	2,871	236833 25	175177 52
papers	citations	h-index	g-index

83	83	83	3494
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Porphyrins as excellent dyes for dye-sensitized solar cells: recent developments and insights. Dalton Transactions, 2015, 44, 448-463.	1.6	529
2	<i>tert</i>-Butoxide-Mediated Arylation of Benzene with Aryl Halides in the Presence of a Catalytic 1,10-Phenanthroline Derivative. Journal of the American Chemical Society, 2010, 132, 15537-15539.	6.6	470
3	Renaissance of Fused Porphyrins: Substituted Methylene-Bridged Thiophene-Fused Strategy for High-Performance Dye-Sensitized Solar Cells. Journal of the American Chemical Society, 2019, 141, 9910-9919.	6.6	176
4	MÃ¶bius Antiaromatic Bisphosphorus Complexes of [30]Hexaphyrins. Angewandte Chemie - International Edition, 2010, 49, 4950-4954.	7.2	118
5	Photoconductivity in Metalâ€“Organic Framework (MOF) Thin Films. Angewandte Chemie - International Edition, 2019, 58, 9590-9595.	7.2	118
6	Tropolone as a Highâ€Performance Robust Anchoring Group for Dyeâ€Sensitized Solar Cells. Angewandte Chemie - International Edition, 2015, 54, 9052-9056.	7.2	99
7	Remarkable Dependence of the Final Charge Separation Efficiency on the Donorâ€“Acceptor Interaction in Photoinduced Electron Transfer. Angewandte Chemie - International Edition, 2016, 55, 629-633.	7.2	94
8	A new class of epitaxial porphyrin metalâ€“organic framework thin films with extremely high photocarrier generation efficiency: promising materials for all-solid-state solar cells. Journal of Materials Chemistry A, 2016, 4, 12739-12747.	5.2	75
9	Effects of Bulky Substituents of Pushâ€“Pull Porphyrins on Photovoltaic Properties of Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2016, 8, 15379-15390.	4.0	61
10	Regioisomer effects of [70]fullerene mono-adduct acceptors in bulk heterojunction polymer solar cells. Chemical Science, 2017, 8, 181-188.	3.7	52
11	A MÃ¶bius Antiaromatic Complex as a Kinetically Controlled Product in Phosphorus Insertion to a [32]Heptaphyrin. Angewandte Chemie - International Edition, 2012, 51, 13105-13108.	7.2	46
12	Effect of Ligand Structures of Copper Redox Shuttles on Photovoltaic Performance of Dye-Sensitized Solar Cells. Inorganic Chemistry, 2020, 59, 452-459.	1.9	43
13	Diprotonated [28]Hexaphyrins(1.1.1.1.1.1): Triangular Antiaromatic Macrocycles. Angewandte Chemie - International Edition, 2014, 53, 3427-3431.	7.2	41
14	Phosphorus complexes of a triply-fused [24]pentaphyrin. Chemical Science, 2012, 3, 103-107.	3.7	36
15	A single cis-2 regioisomer of ethylene-tethered indene dimerâ€“fullerene adduct as an electron-acceptor in polymer solar cells. Chemical Communications, 2015, 51, 8233-8236.	2.2	36
16	A Hydroxamic Acid Anchoring Group for Durable Dyeâ€Sensitized Solar Cells Incorporating a Cobalt Redox Shuttle. ChemSusChem, 2017, 10, 3347-3351.	3.6	35
17	Phosphorus Complexes of the First Expanded Isophlorins. Chemistry - A European Journal, 2010, 16, 55-59.	1.7	34
18	Synthesis and Isolation of <i>cis</i>-2 Regiospecific Ethylene-Tethered Indene Dimerâ€“[70]Fullerene Adduct for Polymer Solar Cell Applications. ACS Applied Materials & Interfaces, 2015, 7, 16676-16685.	4.0	34

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19	Peripheral Arylation of Subporphyrazines. Chemistry - A European Journal, 2013, 19, 10353-10359.	1.7	31
20	Singly <i>N</i>-Fused MÃ¶bius Aromatic [28]Hexaphyrins(1.1.1.1.1.1). Journal of Organic Chemistry, 2010, 75, 7958-7961.	1.7	29
21	Combined Experimental and Theoretical Investigations on Optical Activities of MÃ¶bius Aromatic and MÃ¶bius Antiaromatic Hexaphyrin Phosphorus Complexes. Journal of Physical Chemistry A, 2016, 120, 4241-4248.	1.1	29
22	2,3,17,18â€Tetrahalohexaphyrins and the First Phlorinâ€type Hexaphyrins. Chemistry - an Asian Journal, 2013, 8, 1994-2002.	1.7	27
23	Covalently Linked 5,15â€Diazaporphyrin Dimers: Promising Scaffolds for a Highly Conjugated Azaporphyrin Ï€ System. Chemistry - A European Journal, 2014, 20, 3342-3349.	1.7	27
24	Fusing Porphyrins and Phospholes: Synthesis and Analysis of a Phosphorusâ€Containing Porphyrin. Angewandte Chemie - International Edition, 2016, 55, 12311-12315.	7.2	26
25	2,3,17,18-Tetraethylsulfanyl [30]hexaphyrin(1.1.1.1.1.1) as the first aromatic isophlorin-type free-base. Chemical Science, 2013, 4, 1087.	3.7	25
26	Emergence of Copper(I/II) Complexes as Third-Generation Redox Shuttles for Dye-Sensitized Solar Cells. ACS Energy Letters, 2022, 7, 1926-1938.	8.8	25
27	Photovoltaic Properties and Long-Term Durability of Porphyrin-Sensitized Solar Cells with Silicon-Based Anchoring Groups. ACS Omega, 2017, 2, 6958-6967.	1.6	22
28	A MÃ¶bius Aromatic [28]Hexaphyrin Bearing a Diethylamine Group: A Rigid but Smooth Conjugation Circuit. Angewandte Chemie - International Edition, 2015, 54, 5456-5459.	7.2	21
29	Effects of Immersion Solvent on Photovoltaic and Photophysical Properties of Porphyrin-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2015, 7, 18689-18696.	4.0	18
30	Cleaner synthesis and systematical characterization of sustainable poly(isosorbide-co-ethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 30 483-497.	4.6	18
31	Conformation dynamics of non-, singly- and doubly-N-fused [28]hexaphyrins revealed by photophysical studies. Chemical Communications, 2011, 47, 3960.	2.2	16
32	Remarkable Dependence of Exciplex Decay Rate on Through-Space Separation Distance between Porphyrin and Chemically Converted Graphene. Journal of Physical Chemistry C, 2016, 120, 28337-28344.	1.5	16
33	Hexaphyrin as a Potential Theranostic Dye for Photothermal Therapy and ¹⁹F Magnetic Resonance Imaging. ChemBioChem, 2017, 18, 951-959.	1.3	16
34	Enhanced Donorâ€"Ï€â€"Acceptor Character of a Porphyrin Dye Incorporating Naphthobisthiadiazole for Efficient Nearâ€Infrared Light Absorption. European Journal of Organic Chemistry, 2018, 2018, 2537-2547.	1.2	16
35	PhotoleitfÃ¤higkeit in DÃ¼nnfilmen Metallâ€organischer GerÃ¼ste. Angewandte Chemie, 2019, 131, 9691-9696.	1.6	16
36	Heavy Metal Effects on the Photovoltaic Properties of Metallocorroles in Dye-Sensitized Solar Cells. ACS Applied Energy Materials, 2020, 3, 12460-12467.	2.5	16

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37	Synthesis of pushâ€“pull porphyrin with two electron-donating and two electron-withdrawing groups and its application to dye-sensitized solar cell. Journal of Porphyrins and Phthalocyanines, 2015, 19, 140-149.	0.4	15
38	Boron and Phosphorus Complexes of meso-Aryl Expanded Porphyrins. Heterocycles, 2013, 87, 31.	0.4	12
39	Phospholeâ€“Thiophene Hybrid: A Dual Role of Dithieno[3,4-<i>b</i>:3â€²,4â€²-<i>d</i>]phosphole as Electron Acceptor and Electron Donor. Journal of Organic Chemistry, 2018, 83, 3397-3402.	1.7	12
40	Simple Processing Additive-Driven 20% Efficiency for Inverted Planar Heterojunction Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 18431-18436.	4.0	12
41	Pluripotent Features of Doubly Thiopheneâ€Fused Benzodiphospholes as Organic Functional Materials. Chemistry - A European Journal, 2019, 25, 6425-6438.	1.7	11
42	ABCâ€“ABCâ€Type Directly <i>meso</i>â€“<i>meso</i> Linked Porphyrin Dimers. Chemistry - A European Journal, 2019, 25, 538-547.	1.7	11
43	A Pushâ€“Pull Porphyrin Dimer with Multiple Electron-donating Groups for Dye-sensitized Solar Cells: Excellent Light-harvesting in Near-infrared Region. Chemistry Letters, 2016, 45, 1126-1128.	0.7	10
44	Enantiomerically Separated Î±-[70]PCBM for Organic Photovoltaics. Chemistry Letters, 2017, 46, 1001-1003.	0.7	10
45	Thiophene-fused dithiaoctaphyrins: Ï€-system switching between cross-conjugated and macrocyclic Ï€-networks. Chemical Communications, 2017, 53, 5091-5094.	2.2	10
46	Exploration on the Combination of Push-Pull Porphyrin Dyes and Copper(I/II) Redox Shuttles toward High-performance Dye-sensitized Solar Cells. Chemistry Letters, 2020, 49, 936-939.	0.7	10
47	<i>cis</i>-1 Isomers of tethered bismethano[70]fullerene as electron acceptors in organic photovoltaics. RSC Advances, 2018, 8, 18316-18326.	1.7	9
48	Hybrid [5]Radialenes with Bispyrroloheteroles: New Electronâ€Donating Units. Chemistry - A European Journal, 2015, 21, 13375-13381.	1.7	8
49	Unsymmetrically Substituted Donorâ€“Ï€â€“Acceptorâ€Type 5,15â€Diazaporphyrin Sensitizers: Synthesis, Optical and Photovoltaic Properties. ChemPlusChem, 2017, 82, 695-704.	1.3	8
50	Calix[5]phyrin for Fluoride Ion Sensing with Visible and Near Infrared Optical Responses. Chemistry - an Asian Journal, 2018, 13, 2019-2022.	1.7	8
51	Reversible Ï€-system switching of thiophene-fused thiahexaphyrins by solvent and oxidation/reduction. Chemical Science, 2018, 9, 7528-7539.	3.7	8
52	Structural Effects on the Incident Photon-to-Current Conversion Efficiency of Zn Porphyrin Dyes on the Low-Index Planes of TiO₂. ACS Omega, 2017, 2, 128-135.	1.6	7
53	Effects of <i>meso</i>-diarylamino group of porphyrins on optical and electrochemical properties. Journal of Porphyrins and Phthalocyanines, 2020, 24, 67-74.	0.4	7
54	Synthesis of thiophene-fused porphyrin dimers as effective Ï€-extended helical chromophores. Chemical Communications, 2021, 57, 9606-9609.	2.2	7

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55	Pushâ€“Pull Bacteriochlorin: Panchromatic Sensitizer for Dye-sensitized Solar Cell. Chemistry Letters, 2015, 44, 1395-1397.	0.7	6
56	Fusing Porphyrins and Phospholes: Synthesis and Analysis of a Phosphorusâ€Containing Porphyrin. Angewandte Chemie, 2016, 128, 12499-12503.	1.6	6
57	Thiazolocatechol: Electronâ€Withdrawing Catechol Anchoring Group for Dyeâ€Sensitized Solar Cells. ChemPhysChem, 2019, 20, 2689-2695.	1.0	5
58	Facile synthesis of an ambient stable pyreno[4,5-b]pyrrole monoanion and pyreno[4,5-b:9,10-bâ€²]dipyrrole dianion: from serendipity to design. Chemical Science, 2022, 13, 1594-1599.	3.7	5
59	Unique Role of Heteroleâ€Fused Structures in Aromaticity and Physicochemical Properties of 7,8â€Dehydropurpurins. Chemistry - A European Journal, 2020, 26, 12043-12049.	1.7	4
60	Synthesis of Phosphole-bridged Porphyrin Dimers. Chemistry Letters, 2019, 48, 257-259.	0.7	2
61	Modulation of Frontier Molecular Orbitals on Dithieno[3,4-<i>b</i>:3â€²,4â€²-<i>d</i>]phosphole Derivatives by Donor-Ï€-Acceptor Interaction. Chemistry Letters, 2020, 49, 272-275.	0.7	2
62	Thiopheneâ€Fused Naphthodiphospholes: Modulation of the Structural and Electronic Properties of Polycyclic Aromatics by Precise Fusion of Heteroles. ChemPlusChem, 2021, 86, 130-136.	1.3	2
63	Truxenone Triimide: Twoâ€Dimensional Molecular Arrangements of Triangular Molecules for Air Stable nâ€Type Semiconductors. Advanced Electronic Materials, 0, , 2101390.	2.6	2
64	Synthesis of Partially <i>meso</i>-Free 2,3-Di(arylethynyl)porphyrins. Chemistry Letters, 2017, 46, 976-978.	0.7	1
65	Development of Efficient Sensitizers Based on Porphyrin Dimers and Fused Porphyrins for Dye-Sensitized Solar Cells. ECS Meeting Abstracts, 2021, MA2021-01, 769-769.	0.0	1
66	Donor-Ï€-Acceptor Type Porphyrin-Fullerene Dyad with Acetylene Bridge for p-Type Dye-sensitized Solar Cell. Chemistry Letters, 2022, 51, 260-263.	0.7	1
67	ABC-ABC-Type Directly meso -meso Linked Porphyrin Dimers. Chemistry - A European Journal, 2019, 25, 389-389.	1.7	0
68	Modulation of Aromaticity and Properties of Porphyrins By Peripheral Heterole-Fused Structures. ECS Meeting Abstracts, 2021, MA2021-01, 741-741.	0.0	0
69	Control of Physicochemical Properties for Thiophene-Fused Naphthodiphospholes By Precise Fusion of Heterole Rings. ECS Meeting Abstracts, 2021, MA2021-01, 735-735.	0.0	0
70	Thiophene-Fused Expanded Porphyrins with Ï€-System Switching. ECS Meeting Abstracts, 2019, , .	0.0	0