Shin-ichi Sasaki

List of Publications by Year
in descending order

64 papers	1,816 citations	257450 24 h-index	276875 41 g-index
64 all docs	64 docs citations	64 times ranked	1441 citing authors

#	ARTICLE	IF	CITATIONS
1	Effect of the Fabrication Method of Chlorophyllâ€Ti₃C₂T_{<i>x</i>}â€Based Photocatalysts on Noble Metalâ€Free Hydrogen Evolution. Energy Technology, 2022, 10, 2100713.	3.8	5
2	Chlorophyll derivatives/MXene hybrids for photocatalytic hydrogen evolution: Dependence of performance on the central coordinating metals. International Journal of Hydrogen Energy, 2022, 47, 3824-3833.	7.1	14
3	Ti₃C₂T_{<i>x</i>} MXene nanosheets hybridized with bacteriochlorinâ€"carotenoid conjugates for photocatalytic hydrogen evolution. New Journal of Chemistry, 2022, 46, 2166-2177.	2.8	8
4	Chlorophyll derivative intercalation into Nb2C MXene for lithium-ion energy storage. Journal of Materials Science, 2022, 57, 9971-9979.	3.7	10
5	Chlorophyll derivative sensitized monolayer Ti3C2T MXene nanosheets for photocatalytic hydrogen evolution. Journal of Photochemistry and Photobiology A: Chemistry, 2022, 427, 113792.	3.9	10
6	Quasi-Bilayer All-Small-Molecule Solar Cells Based on a Chlorophyll Derivative and Non-Fullerene Materials with Untraditional Energy Alignments. Journal of Physical Chemistry C, 2022, 126, 4807-4814.	3.1	2
7	Enhancement of power conversion efficiency by chlorophyll and carotenoid co-sensitization in the biosolar cells. Journal of Photochemistry and Photobiology A: Chemistry, 2022, 431, 114042.	3.9	0
8	Bacteriochlorin aggregates as dopant-free hole-transporting materials for perovskite solar cells. Organic Electronics, 2022, 108, 106596.	2.6	1
9	Electropolymerized chlorophyll derivative biopolymers for supercapacitors. Chemical Engineering Journal, 2022, 450, 138000.	12.7	6
10	Synthesis of Chl@Ti3C2 composites as an anode material for lithium storage. Frontiers of Chemical Science and Engineering, 2021, 15, 709-716.	4.4	10
11	Chlorophyll Derivative-Sensitized TiO₂ Electron Transport Layer for Record Efficiency of Cs₂AgBiBr₆ Double Perovskite Solar Cells. Journal of the American Chemical Society, 2021, 143, 2207-2211.	13.7	154
12	Chlorophyllâ€Based Organic Heterojunction on Ti₃C₂T_{<i>x</i>} MXene Nanosheets for Efficient Hydrogen Production. Chemistry - A European Journal, 2021, 27, 5277-5282.	3.3	25
13	Hydroquinone redox mediator enhances the photovoltaic performances of chlorophyll-based bio-inspired solar cells. Communications Chemistry, 2021, 4, .	4.5	10
14	Supercapacitor electrodes based on electropolymerized protoporphyrins. Materials Today Energy, 2021, 21, 100830.	4.7	3
15	Semiâ€Synthetic Chlorophyllâ€Carotenoid Dyad for Dyeâ€Sensitized Photocatalytic Hydrogen Evolution. Advanced Materials Interfaces, 2021, 8, 2101303.	3.7	17
16	Aggregate-forming semi-synthetic chlorophyll derivatives / Ti3C2T MXene hybrids for photocatalytic hydrogen evolution. Dyes and Pigments, 2021, 194, 109583.	3.7	21
17	Charge Generation and Transfer Mechanism of Bilayer Organic Photovoltaics with Unconventional Energy Alignment. Journal of Physical Chemistry C, 2021, 125, 25680-25686.	3.1	7
18	Evaluation of covalently linked (bacterio)chlorin-fullerenes as components for organic solar cells. Journal of Porphyrins and Phthalocyanines, 2020, 24, 200-210.	0.8	4

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19	Charge-Transfer Mechanism in Chlorophyll Derivative-based Biosolar Cells with Hole-Transporting P3HT Revealed by Sub-Picosecond Transient Absorption Spectroscopy. Journal of Physical Chemistry C, 2020, 124, 27900-27906.	3.1	1
20	A chlorophyll derivative-based bio-solar energy conversion and storage device. Electrochimica Acta, 2020, 347, 136283.	5.2	17
21	Synthesis of C3/C13â€Substituted Semiâ€Synthetic Bacteriochlorophyllâ€<i>a</i> Derivatives and Their Properties as Functional Dyes. ChemPhotoChem, 2020, 4, 5399-5407.	3.0	3
22	Chlorosomeâ€Like Molecular Aggregation of Chlorophyll Derivative on Ti₃C₂T<i>_x</i> MXene Nanosheets for Efficient Noble Metalâ€Free Photocatalytic Hydrogen Evolution. Advanced Materials Interfaces, 2020, 7, 1902080.	3.7	49
23	Photoactive Znâ€Chlorophyll Hole Transporterâ€Sensitized Leadâ€Free Cs₂AgBiBr₆ Perovskite Solar Cells. Solar Rrl, 2020, 4, 2000166.	5.8	58
24	Semisynthetic Chlorophyll Derivatives Toward Solar Energy Applications. Solar Rrl, 2020, 4, 2000162.	5.8	43
25	Bilayer chlorophyll derivatives as efficient hole-transporting layers for perovskite solar cells. Materials Chemistry Frontiers, 2019, 3, 2357-2362.	5.9	16
26	Organic Solar Cells Based on the Aggregate of Synthetic Chlorophyll Derivative with over 5% Efficiency. Solar Rrl, 2019, 3, 1900203.	5.8	13
27	Charge transfer dynamics in chlorophyll-based biosolar cells. Physical Chemistry Chemical Physics, 2019, 21, 22563-22568.	2.8	6
28	Perovskite solar cells based on chlorophyll hole transporters: Dependence of aggregation and photovoltaic performance on aliphatic chains at C17-propionate residue. Dyes and Pigments, 2019, 162, 763-770.	3.7	18
29	Trilayer Chlorophyll-Based Cascade Biosolar Cells. ACS Energy Letters, 2019, 4, 384-389.	17.4	32
30	Chlorophyll-based organic solar cells with improved power conversion efficiency. Journal of Energy Chemistry, 2019, 38, 88-93.	12.9	17
31	P-type P3HT interfacial layer induced performance improvement in chlorophyll-based solid-state solar cells. Journal of Photochemistry and Photobiology A: Chemistry, 2019, 371, 349-354.	3.9	6
32	Biosupramolecular bacteriochlorin aggregates as hole-transporters for perovskite solar cells. Journal of Photochemistry and Photobiology A: Chemistry, 2018, 353, 639-644.	3.9	18
33	Effects of Cyclic Tetrapyrrole Rings of Aggregate-Forming Chlorophyll Derivatives as Hole-Transporting Materials on Performance of Perovskite Solar Cells. ACS Applied Energy Materials, 2018, 1, 9-16.	5.1	27
34	Enhancement of performance in chlorophyll-based bulk-heterojunction organic-inorganic solar cells upon aggregate management via solvent engineering. Organic Electronics, 2018, 59, 419-426.	2.6	11
35	Bilayer Chlorophyll-Based Biosolar Cells Inspired from the Z-Scheme Process of Oxygenic Photosynthesis. ACS Energy Letters, 2018, 3, 1708-1712.	17.4	46
36	Dyad Sensitizer of Chlorophyll with Indoline Dye for Panchromatic Photocatalytic Hydrogen Evolution. ACS Applied Energy Materials, 2018, 1, 2813-2820.	5.1	51

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37	Near-infrared absorption carboxylated chlorophyll-a derivatives for biocompatible dye-sensitized hydrogen evolution. International Journal of Hydrogen Energy, 2017, 42, 15731-15738.	7.1	33
38	Near-infrared absorption bacteriochlorophyll derivatives as biomaterial electron donor for organic solar cells. Journal of Photochemistry and Photobiology A: Chemistry, 2017, 347, 49-54.	3.9	18
39	Chlorophyllâ€Based Organicâ€"Inorganic Heterojunction Solar Cells. Chemistry - A European Journal, 2017, 23, 10886-10892.	3.3	17
40	Dopantâ€Free Zinc Chlorophyll Aggregates as an Efficient Biocompatible Hole Transporter for Perovskite Solar Cells. ChemSusChem, 2016, 9, 2862-2869.	6.8	58
41	Rotational isomerization of 3-substituents in synthetic chlorophyll derivatives. Tetrahedron, 2016, 72, 6626-6633.	1.9	11
42	Natural-photosynthesis-inspired photovoltaic cells using carotenoid aggregates as electron donors and chlorophyll derivatives as electron acceptors. RSC Advances, 2015, 5, 45755-45759.	3.6	31
43	Synthesis of carboxylated chlorophylls and their application as functional materials. Journal of Porphyrins and Phthalocyanines, 2015, 19, 517-526.	0.8	25
44	Zinc chlorophyll aggregates as hole transporters for biocompatible, natural-photosynthesis-inspired solar cells. Journal of Power Sources, 2015, 297, 519-524.	7.8	34
45	Esterification of Indoline-Based Small-Molecule Donors for Efficient Co-evaporated Organic Photovoltaics. Journal of Physical Chemistry C, 2014, 118, 14785-14794.	3.1	15
46	Dicyano-functionalized chlorophyll derivatives with ambipolar characteristic for organic photovoltaics. Organic Electronics, 2013, 14, 1972-1979.	2.6	21
47	Molecular engineering on a chlorophyll derivative, chlorin e6, forÂsignificantly improved power conversion efficiency in dye-sensitized solar cells. Journal of Power Sources, 2013, 242, 860-864.	7.8	35
48	Development of Solar Cells Based on Synthetic Near-Infrared Absorbing Purpurins 2: Use of Fullerene and Its Derivative As Electron Acceptors for Favorable Charge Separation. Journal of Physical Chemistry C, 2012, 116, 21244-21254.	3.1	18
49	Development of Solar Cells Based on Synthetic Near-Infrared Absorbing Purpurins: Observation of Multiple Electron Injection Pathways at Cyclic Tetrapyrroleâ€"Semiconductor Interface. Journal of Physical Chemistry C, 2011, 115, 24394-24402.	3.1	41
50	Chlorophyll-<i>a</i>Derivatives with Various Hydrocarbon Ester Groups for Efficient Dye-Sensitized Solar Cells: Static and Ultrafast Evaluations on Electron Injection and Charge Collection Processes. Langmuir, 2010, 26, 6320-6327.	3.5	118
51	Cooperative C3â€•and C13â€Substituent Effects on Synthetic Chlorophyll Derivatives. European Journal of Organic Chemistry, 2010, 2010, 5287-5291.	2.4	30
52	Chlorophyll- and Bacteriochlorophyll-Derived Colorimetric Chemosensors for Amine Detection. Bulletin of the Chemical Society of Japan, 2009, 82, 267-271.	3.2	13
53	Efficient Dye-Sensitized Solar Cell Based on <i>oxo</i>-Bacteriochlorin Sensitizers with Broadband Absorption Capability. Journal of Physical Chemistry C, 2009, 113, 7954-7961.	3.1	95
54	Extension of Ï€-conjugation length along the Qy axis of a chlorophyll a derivative for efficient dye-sensitized solar cells. Chemical Communications, 2009, , 1523.	4.1	72

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55	Dependence of Photocurrent and Conversion Efficiency of Titania-Based Solar Cell on the Q<i>_y</i> Absorption and One Electron-Oxidation Potential of Pheophorbide Sensitizer. Journal of Physical Chemistry C, 2008, 112, 4418-4426.	3.1	40
56	A Facile Synthetic Method for Conversion of Chlorophyll-a to Bacteriochlorophyll-c. Journal of Organic Chemistry, 2007, 72, 4566-4569.	3.2	29
57	Synthesis and Anion-Selective Complexation of Homobenzylic Tripodal Thiourea Derivatives. European Journal of Organic Chemistry, 2007, 2007, 607-615.	2.4	42
58	Synthesis and Optical Properties of Bacteriochlorophyll-aDerivatives Having Various C3 Substituents on the Bacteriochlorin Ï€-System. Journal of Organic Chemistry, 2006, 71, 2648-2654.	3.2	66
59	Gallium(III) complexes of methyl pyropheophorbide-a as synthetic models for investigation of diastereomerically controlled axial ligation towards chlorophylls. Bioorganic and Medicinal Chemistry Letters, 2006, 16, 1168-1171.	2.2	10
60	Effects of plant carotenoid spacers on the performance of a dye-sensitized solar cell using a chlorophyll derivative: Enhancement of photocurrent determined by one electron-oxidation potential of each carotenoid. Chemical Physics Letters, 2006, 423, 470-475.	2.6	86
61	Synthesis of cyclic chlorophyll oligomers. Tetrahedron Letters, 2006, 47, 4965-4968.	1.4	16
62	Dye-sensitized solar cells using a chlorophyll a derivative as the sensitizer and carotenoids having different conjugation lengths as redox spacers. Chemical Physics Letters, 2005, 408, 409-414.	2.6	86
63	Generation of carotenoid radical cation in the vicinity of a chlorophyll derivative bound to titanium oxide, upon excitation of the chlorophyll derivative to the Qy state, as identified by time-resolved absorption spectroscopy. Chemical Physics Letters, 2005, 416, 229-233.	2.6	13
64	Determination of glycosylated albumin using surface plasmon resonance sensor. Bunseki Kagaku, 2003, 52, 311-317.	0.2	4