## Haruo Inoue

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/6489855/publications.pdf

Version: 2024-02-01

109 papers	4,858 citations	36 h-index	95266 68 g-index
110	110	110	3875 citing authors
all docs	docs citations	times ranked	

#	Article	IF	CITATIONS
1	Development of an Efficient Photocatalytic System for CO <sub>2</sub> Reduction Using Rhenium(I) Complexes Based on Mechanistic Studies. Journal of the American Chemical Society, 2008, 130, 2023-2031.	13.7	571
2	Porphyrin photochemistry in inorganic/organic hybrid materials: Clays, layered semiconductors, nanotubes, and mesoporous materials. Journal of Photochemistry and Photobiology C: Photochemistry Reviews, 2006, 7, 104-126.	11.6	245
3	The Water Oxidation Bottleneck in Artificial Photosynthesis: How Can We Get Through It? An Alternative Route Involving a Twoâ€Electron Process. ChemSusChem, 2011, 4, 173-179.	6.8	184
4	Near-Infrared Plasmon-Assisted Water Oxidation. Journal of Physical Chemistry Letters, 2012, 3, 1248-1252.	<b>4.</b> 6	183
5	Efficient Excited Energy Transfer Reaction in Clay/Porphyrin Complex toward an Artificial Light-Harvesting System. Journal of the American Chemical Society, 2011, 133, 14280-14286.	13.7	180
6	High-Density Adsorption of Cationic Porphyrins on Clay Layer Surfaces without Aggregation:  The Size-Matching Effect. Langmuir, 2002, 18, 2265-2272.	<b>3.</b> 5	175
7	Direct Detection of Key Reaction Intermediates in Photochemical CO <sub>2</sub> Reduction Sensitized by a Rhenium Bipyridine Complex. Journal of the American Chemical Society, 2014, 136, 6021-6030.	13.7	171
8	Highly efficient supramolecular photocatalysts for CO2reduction using visible light. Photochemical and Photobiological Sciences, 2007, 6, 454-461.	2.9	136
9	Development of highly efficient supramolecular CO <sub>2</sub> reduction photocatalysts with high turnover frequency and durability. Faraday Discussions, 2012, 155, 115-127.	3.2	133
10	Size-Matching Effect on Inorganic Nanosheets: Control of Distance, Alignment, and Orientation of Molecular Adsorption as a Bottom-Up Methodology for Nanomaterials. Langmuir, 2013, 29, 2108-2119.	<b>3.</b> 5	133
11	Photochemical Energy Transfer of Cationic Porphyrin Complexes on Clay Surface. Journal of Physical Chemistry B, 2002, 106, 5455-5460.	2.6	117
12	Visible light-induced reduction of carbon dioxide sensitized by a porphyrin–rhenium dyad metal complex on p-type semiconducting NiO as the reduction terminal end of an artificial photosynthetic system. Journal of Catalysis, 2014, 310, 57-66.	6.2	116
13	Highly Efficient and Selective Epoxidation of Alkenes by Photochemical Oxygenation Sensitized by a Ruthenium(II) Porphyrin with Water as Both Electron and Oxygen Donor. Journal of the American Chemical Society, 2003, 125, 5734-5740.	13.7	110
14	Molecular Mechanism of Radiationless Deactivation of Aminoanthraquinones through Intermolecular Hydrogen-Bonding Interaction with Alcohols and Hydroperoxides. Journal of Physical Chemistry A, 1997, 101, 8166-8173.	2.5	94
15	Intercalation of Polyfluorinated Surfactants into Clay Minerals and the Characterization of the Hybrid Compounds. Langmuir, 2002, 18, 891-896.	3.5	91
16	Electron Transfer from the Porphyrin S <sub>2</sub> State in a Zinc Porphyrin-Rhenium Bipyridyl Dyad having Carbon Dioxide Reduction Activity. Journal of Physical Chemistry C, 2009, 113, 11667-11673.	3.1	86
17	The Mechanism of the Porphyrin Spectral Shift on Inorganic Nanosheets: The Molecular Flattening Induced by the Strong Host–Guest Interaction due to the "Size-Matching Ruleâ€₃ Journal of Physical Chemistry C, 2012, 116, 7879-7885.	3.1	80
18	High Density Adsorption of Porphyrins onto Clay Layer without Aggregation: Characterization of Smectite-Cationic Porphyrin Complex. Chemistry Letters, 2001, 30, 128-129.	1.3	78

#	Article	IF	CITATIONS
19	The â€~size matching rule' in di-, tri-, and tetra-cationic charged porphyrin/synthetic clay complexes: effect of the inter-charge distance and the number of charged sites. Journal of Physics and Chemistry of Solids, 2004, 65, 403-407.	4.0	72
20	Light-Harvesting Energy Transfer and Subsequent Electron Transfer of Cationic Porphyrin Complexes on Clay Surfaces. Langmuir, 2006, 22, 1406-1408.	3.5	71
21	Photochemical P-450 Oxygenation of Cyclohexene with Water Sensitized by Dihydroxy-Coordinated (Tetraphenylporphyrinato)antimony(V) Hexafluorophosphate. Journal of the American Chemical Society, 1997, 119, 8712-8713.	13.7	68
22	Efficient Photochemical Oxygenation of Cyclohexene with Water as an Oxygen Donor Sensitized by Dimethoxy-Coordinated Tetraphenylporphyrinatoantimony(V). Journal of the American Chemical Society, 1996, 118, 6311-6312.	13.7	64
23	Novel Methodology To Control the Adsorption Structure of Cationic Porphyrins on the Clay Surface Using the "Size-Matching Rule― Langmuir, 2011, 27, 10722-10729.	3.5	63
24	Photoresponsive Multilayer Spiral Nanotubes:Â Intercalation of Polyfluorinated Cationic Azobenzene Surfactant into Potassium Niobate. Journal of the American Chemical Society, 2006, 128, 684-685.	13.7	59
25	Enhanced Aggregation Behavior of Antimony(V) Porphyrins in Polyfluorinated Surfactant/Clay Hybrid Microenvironment. Journal of Physical Chemistry B, 2003, 107, 3789-3797.	2.6	55
26	Artificial photosynthesis via two-electron conversion: Photochemical oxygenation sensitized by ruthenium porphyrins with water as both electron and oxygen atom donor. Pure and Applied Chemistry, 2005, 77, 1019-1033.	1.9	55
27	A Photoactivated Artificial Muscle Model Unit: Reversible, Photoinduced Sliding of Nanosheets. Journal of the American Chemical Society, 2011, 133, 17130-17133.	13.7	55
28	Photochemical epoxidation of alkenes by visible light in a redox system involving tetraphenylporphyrinantimony(V) and water. Journal of the Chemical Society Chemical Communications, $1987$ , $1681$ .	2.0	51
29	Hydrophilicity Control of Visibleâ€Light Hydrogen Evolution and Dynamics of the Chargeâ€Separated State in Dye/TiO <sub>2</sub> /Pt Hybrid Systems. Chemistry - A European Journal, 2012, 18, 15368-15381.	3.3	50
30	Regulation of the Collisional Self-Quenching of Fluorescence in Clay/Porphyrin Complex by Strong Host–Guest Interaction. Journal of Physical Chemistry A, 2012, 116, 12065-12072.	2.5	41
31	One Electronâ€Initiated Twoâ€Electron Oxidation of Water by Aluminum Porphyrins with Earth's Most Abundant Metal. ChemSusChem, 2017, 10, 1909-1915.	6.8	41
32	Dichroic Measurements on Dicationic and Tetracationic Porphyrins on Clay Surfaces with Visible-Light-Attenuated Total Reflectance. Bulletin of the Chemical Society of Japan, 2007, 80, 1350-1356.	3.2	40
33	Controlling the Microadsorption Structure of Porphyrin Dye Assembly on Clay Surfaces Using the "Size-Matching Rule†for Constructing an Efficient Energy Transfer System. ACS Applied Materials & amp; Interfaces, 2012, 4, 811-816.	8.0	38
34	The Orientation Control of Dicationic Porphyrins on Clay Surfaces by Solvent Polarity. Chemistry Letters, 2006, 35, 14-15.	1.3	37
35	Key reaction intermediates of the photochemical oxygenation of alkene sensitized by Rull–porphyrin with water by visible light. Photochemical and Photobiological Sciences, 2010, 9, 931-936.	2.9	37
36	Photochemical epoxidation of cyclohexene sensitized by tetraphenylporphyrinatoantimony (V) in the presence of water acting both as an electron and an oxygen donor. Journal of the Chemical Society Perkin Transactions $1,1994,105$ .	0.9	36

#	Article	IF	Citations
37	How is the water molecule activated on metalloporphyrins? Oxygenation of substrates induced through one-photon/two-electron conversion in artificial photosynthesis by visible light. Faraday Discussions, 2012, 155, 145-163.	3.2	36
38	Two-electron oxidation of water to form hydrogen peroxide sensitized by di(hydroxo)porphyrin GelV complex under visible-light irradiation. Journal of Photochemistry and Photobiology A: Chemistry, 2015, 313, 131-136.	3.9	35
39	Alternative route to bypass the bottle-neck of water oxidation: Two-electron oxidation of water catalyzed by earth-abundant metalloporphyrins. Coordination Chemistry Reviews, 2018, 377, 64-72.	18.8	34
40	Microscopic Structure and Microscopic Environment of a Polyfluorinated Surfactant/Clay Hybrid Compound:Â Photochemical Studies of Rose Bengal. Langmuir, 2002, 18, 4232-4239.	3.5	32
41	1.Artificial Photosynthesis Sensitized by Metal Complexes: Utilization of a Ubiquitous Element. Electrochemistry, 2014, 82, 475-485.	1.4	32
42	Hydrogen evolution coupled with the photochemical oxygenation of cyclohexene with water sensitized by tin(iv) porphyrins by visible light. Photochemical and Photobiological Sciences, 2014, 13, 154-156.	2.9	32
43	An artificial muscle model unit based on inorganic nanosheet sliding by photochemical reaction. Nanoscale, 2013, 5, 3182.	5.6	31
44	Photochemical Oxygenation of Cyclohexene through Reductive Quenching of Excited Tetraphenylporphyrinatoantimony(V) by Triphenylphosphine. Journal of Organic Chemistry, 1994, 59, 7373-7378.	3.2	30
45	Photochemical electron transfer though the interface of hybrid films of titania nano-sheets and mono-dispersed spherical mesoporous silica particles. Physical Chemistry Chemical Physics, 2006, 8, 4585.	2.8	29
46	Water Splitting on Aluminum Porphyrins To Form Hydrogen and Hydrogen Peroxide by One Photon of Visible Light. ACS Applied Energy Materials, 2019, 2, 8045-8051.	5.1	29
47	Promotive Effect of Bicarbonate Ion on Twoâ€Electron Water Oxidation to Form H <sub>2</sub> O <sub>2</sub> Catalyzed by Aluminum Porphyrins. ChemSusChem, 2019, 12, 1939-1948.	6.8	29
48	Intercalation of a Surfactant with a Long Polyfluoroalkyl Chain into a Clay Mineral: Unique Orientation of Polyfluoroalkyl Groups in Clay Layers. Langmuir, 2013, 29, 10705-10712.	3.5	25
49	Microstructures of the Porphyrin/Viologen Monolayer on the Clay Surface: Segregation or Integration?. Journal of Physical Chemistry C, 2014, 118, 20504-20510.	3.1	25
50	Synthesis of water-soluble silicon-porphyrin: protolytic behaviour of axially coordinated hydroxy groups. Dalton Transactions, 2015, 44, 20011-20020.	3.3	24
51	Two-electron oxidation of water to form hydrogen peroxide catalysed by silicon-porphyrins. Sustainable Energy and Fuels, 2018, 2, 1966-1973.	4.9	24
52	Energy transfer reaction of cationic porphyrin complexes on the clay surface: effect of sample preparation method. Research on Chemical Intermediates, 2007, 33, 177-189.	2.7	22
53	Preparation and photochemical behavior of polyfluorinated cationic azobenzene-titanoniobate intercalation compounds. Journal of Materials Chemistry, 2008, 18, 4641.	6.7	22
54	Twoâ€Electron Oxidation of Water Through Oneâ€Photon Excitation of Aluminium Porphyrins: Molecular Mechanism and Detection of Key Intermediates. ChemPhotoChem, 2018, 2, 240-248.	3.0	21

#	Article	IF	Citations
55	Surface Polyfluorinated Micelles. Journal of Physical Chemistry B, 1999, 103, 9562-9568.	2.6	20
56	Synthesis of Highly Monodispersed Mesoporous Tin Oxide Spheres. Chemistry of Materials, 2009, 21, 5252-5257.	6.7	20
57	Kinetic Analysis by Laser Flash Photolysis of Porphyrin Molecules' Orientation Change at the Surface of Silicate Nanosheet. Journal of Physical Chemistry C, 2016, 120, 7428-7434.	3.1	20
58	Protolytic behavior of axially coordinated hydroxy groups of Tin(IV) porphyrins as promising molecular catalysts for water oxidation. Journal of Photochemistry and Photobiology A: Chemistry, 2018, 358, 402-410.	3.9	20
59	Preparation and Characterization of a Transparent Thin Film of the Layered Perovskite, K2La2Ti3O10, Intercalated with an Ionic Porphyrin. Chemistry Letters, 2005, 34, 632-633.	1.3	19
60	Visible light induced oxygenation of alkenes with water sensitized by silicon-porphyrins with the second most earth-abundant element. Journal of Photochemistry and Photobiology A: Chemistry, 2015, 313, 176-183.	3.9	19
61	Protolytic behavior of water-soluble zinc(II) porphyrin and the electrocatalytic two-electron water oxidation to form hydrogen peroxide. Journal of Photochemistry and Photobiology A: Chemistry, 2020, 400, 112619.	3.9	19
62	Photochemical epoxidation of alkene by visible light in a redox system involving metalloporphyrins and water. Journal of Photochemistry and Photobiology A: Chemistry, 1992, 65, 221-227.	3.9	18
63	Effects of porphyrin structure on the complex formation behavior with clay. Microporous and Mesoporous Materials, 2011, 141, 38-42.	4.4	18
64	Photo-induced morphological winding and unwinding motion of nanoscrolls composed of niobate nanosheets with a polyfluoroalkyl azobenzene derivative. Nanoscale, 2016, 8, 12289-12293.	5.6	17
65	Photochemical oxygenation of cyclohexene with water sensitized by aluminium(III) porphyrins with visible light. Journal of Photochemistry and Photobiology A: Chemistry, 2015, 313, 137-142.	3.9	16
66	Two-electron oxidation of water to form hydrogen peroxide initiated by one-electron oxidation of Tin (IV)-porphyrins. Journal of Photochemistry and Photobiology A: Chemistry, 2020, 401, 112732.	3.9	16
67	Surface polyfluorinated cationic vesicles. Physical Chemistry Chemical Physics, 1999, 1, 3135-3140.	2.8	15
68	Decomposition of poly(4-hydroxystyrene sulfone) in alkaline aqueous solutions. Journal of Polymer Science Part A, 2000, 38, 2760-2766.	2.3	15
69	Enhanced Aggregation of Tin(IV)Porphyrins in a Polyfluorinated Surfactant-Clay Hybrid Environment. Molecular Crystals and Liquid Crystals, 2000, 341, 333-338.	0.3	15
70	Photochemical hydrogen evolution on metal ion surface-grafted TiO2-particles prepared by sol/gel method without calcination. Journal of Photochemistry and Photobiology A: Chemistry, 2018, 358, 386-394.	3.9	15
71	How one-photon can induce water splitting into hydrogen peroxide and hydrogen by aluminum porphyrins. Rationale of the thermodynamics. Sustainable Energy and Fuels, 2020, 4, 1945-1953.	4.9	15
72	Efficient Oxygenation of Alkene through Reductive Quenching of Excited Sb(V)tetraphenylporphyrin by Triphenylphosphine. Chemistry Letters, 1993, 22, 687-690.	1.3	14

#	Article	IF	Citations
73	Visible light induced oxygenation of cyclohexene with activation of water sensitized by dihydroxy coordinated tetraphenyloprphyrinatotin(IV). Research on Chemical Intermediates, 2000, 26, 171-183.	2.7	14
74	Non-aggregated adsorption of cationic metalloporphyrin dyes onto nano-clay sheets films. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2006, 284-285, 284-289.	4.7	13
75	Microscopic structures of adsorbed cationic porphyrins on clay surfaces: molecular alignment in artificial light-harvesting systems. Research on Chemical Intermediates, 2007, 33, 191-200.	2.7	13
76	Remarkable enhancement of the photoreactivity of a polyfluoroalkyl azobenzene derivative in an organic–inorganic nano-layered microenvironment. Physical Chemistry Chemical Physics, 2014, 16, 23663-23670.	2.8	13
77	Photochemical Electron Transfer from Hydroxide Ion to the Excited Triplet State of Tetraphenylporphyrinatoantimony(V) upon Visible Light Irradiation in Aqueous Acetonitrile. Chemistry Letters, 1993, 22, 793-796.	1.3	11
78	Effects of Axial Ligands on the Formation of a Layered Structure in Mono- and Di-Cationic Charged Tetraphenylporphyrinatoantimony(V)/Synthetic Clay Composites. Bulletin of the Chemical Society of Japan, 2005, 78, 2251-2258.	3.2	11
79	One-Pot Facile Synthesis of Water-Soluble Cationic Aluminum(III) Porphyrins in a Unique Heterogeneous System at Ambient Temperature. Bulletin of the Chemical Society of Japan, 2016, 89, 334-336.	3.2	11
80	Mechanism of the photoreduction of carbon dioxide catalyzed by the benchmarking rhenium dimethylbipyridine complexes; operando measurements by XAFS and FT-IR. Journal of Catalysis, 2022, 405, 508-519.	6.2	11
81	Adsorption of gaseous molecule within polyfluorinated surfactant/saponite hybrid compound. Journal of Physics and Chemistry of Solids, 2005, 66, 1228-1233.	4.0	9
82	Dense Deposition of Gold Nanoclusters Utilizing a Porphyrin/Inorganic Layered Material Complex as the Template. Langmuir, 2015, 31, 9142-9147.	3.5	9
83	How does the tin(IV)-insertion to porphyrins proceed in water at ambient temperature?: Re-investigation by time dependent 1H NMR and detection of intermediates. Inorganica Chimica Acta, 2018, 482, 914-924.	2.4	9
84	Optically Transparent Colloidal Dispersion of Titania Nanoparticles Storable for Longer than One Year Prepared by Sol/Gel Progressive Hydrolysis/Condensation. ACS Applied Materials & Samp; Interfaces, 2020, 12, 44743-44753.	8.0	9
85	Magnetic Alignment of Rhodamine B Intercalated in Synthetic Mica. Macromolecular Symposia, 2006, 242, 120-125.	0.7	8
86	Effect of Li ions doping into p-type semiconductor NiO as a hole injection/transfer medium in the CO2 reduction sensitized/catalyzed by Zn-porphyrin/Re-complex upon visible light irradiation. Research on Chemical Intermediates, 2021, 47, 269-285.	2.7	8
87	Synthesis of double-wall nanoscrolls intercalated with polyfluorinated cationic surfactant into layered niobate and their magnetic alignment. Physical Chemistry Chemical Physics, 2016, 18, 12108-12114.	2.8	7
88	Microscopic environment and molecular orientation of guest molecules within polyfluorinated surfactant and clay hybrids: Photochemical studies of stilbazolium derivatives. Journal of Photochemistry and Photobiology A: Chemistry, 2018, 363, 61-67.	3.9	7
89	Facile Synthesis of Water-Soluble Cationic Tin(IV) Porphyrins and Water-Insoluble Tin(IV) Porphyrins in Water at Ambient Temperature. Bulletin of the Chemical Society of Japan, 2016, 89, 902-904.	3.2	6
90	Which types of clay minerals fix cesium ions effectively? the "cavity-charge matching effect― Physical Chemistry Chemical Physics, 2019, 21, 9352-9356.	2.8	6

#	Article	IF	Citations
91	Fabrication of dialkyldimethylammonium/vanadium oxide gel hybrid Langmuir-Blodgett membranes. Research on Chemical Intermediates, 2007, 33, 101-110.	2.7	5
92	Investigation of adsorption behavior and energy transfer of cationic porphyrins on clay surface at low loading levels by picosecond time-resolved fluorescence measurement. Research on Chemical Intermediates, 2013, 39, 269-278.	2.7	5
93	Active species transfer-type artificial light harvesting system in the nanosheet – Dye complexes: Utilization of longer wavelength region of sunlight. Tetrahedron Letters, 2018, 59, 528-531.	1.4	5
94	Acid-base equilibria of axial ligand and peripheral pyridyl group with stepwise formation of nine species of aluminum (III) tera(4-pyridyl) porphyrin. Inorganica Chimica Acta, 2021, 526, 120529.	2.4	5
95	Adsorption and stacking behaviour of zwitterionic porphyrin on the clay surface. Clay Minerals, 2012, 47, 243-250.	0.6	4
96	Trapping of excess energy in a nano-layered microenvironment to promote chemical reactions. Physical Chemistry Chemical Physics, 2017, 19, 4734-4740.	2.8	4
97	Synthesis of a photo-responsive single-walled nanoscroll and its photo-reactivity in a nano-layered microenvironment. Physical Chemistry Chemical Physics, 2019, 21, 21738-21745.	2.8	4
98	Reversed Micelles Formed by Polyfluorinated Surfactant II; the Properties of Core Water Phase in Reversed Micelle. Bulletin of the Chemical Society of Japan, 2019, 92, 1200-1204.	3.2	4
99	Microstructure and the Mobility of Fluorinated Carbon Chain of Reversed Micelles Formed by Cationic Polyfluorinated Surfactant. Bulletin of the Chemical Society of Japan, 2014, 87, 1273-1277.	3.2	3
100	Silylated poly(4-hydroxystyrene)s as negative electron beam resists. Journal of Applied Polymer Science, 1998, 70, 1151-1157.	2.6	2
101	Effects of axial ligands on the intercalation of tetraphenylporphyrinatoantimony(V) into smectite clay layers. Research on Chemical Intermediates, 2007, 33, 169-175.	2.7	1
102	Photoamination of 1â€hydroxyanthraquinone in a waterâ€acetonitrile mixed solvent. Journal of Physical Organic Chemistry, 2009, 22, 313-320.	1.9	1
103	Heat trapping in a nano-layered microenvironment: estimation of temperature by thermal sensing molecules. Physical Chemistry Chemical Physics, 2020, 22, 7201-7209.	2.8	1
104	Desulfonylation of poly(4-hydroxystyrene sulfone) by vapor phase silylation. Journal of Polymer Science Part A, 1999, 37, 1549-1554.	2.3	0
105	Energy Dissipation Processes of singletâ€excited 1â€Hydroxyfluorenone and its Hydrogenâ€bonded Complex with Nâ€methylimidazole <sup>¶</sup> . Photochemistry and Photobiology, 2004, 80, 119-126.	2.5	0
106	One Electronâ€Initiated Twoâ€Electron Oxidation of Water by Aluminum Porphyrins with Earth's Most Abundant Metal. ChemSusChem, 2017, 10, 1860-1860.	6.8	0
107	Capturing the Light Fantastic. ChemPhotoChem, 2018, 2, 110-111.	3.0	0
108	(Keynote) One-Electron Initiated Two-Electron Oxidation of Water Catalyzed By Aluminum Porphyrins, Incorporating Earth. ECS Meeting Abstracts, 2016, , .	0.0	0

#	Article	IF	CITATIONS
109	Future Prospect of Artificial Photosynthesis. Hyomen Kagaku, 2017, 38, 260-267.	0.0	0