Shunsuke Sato

List of Publications by Year
in descending order

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49 papers	3,645 citations	172457 29 h-index	182427 51 g-index
56 all docs	56 docs citations	56 times ranked	3867 citing authors

#	Article	IF	Citations
1	A Highly Durable, Self-Photosensitized Mononuclear Ruthenium Catalyst for CO2 Reduction. Synlett, 2022, 33, 1137-1141.	1.8	8
2	Hot-carrier photocatalysts for artificial photosynthesis. Journal of Chemical Physics, 2022, 156, 164705.	3.0	1
3	Solar-Driven CO₂ Reduction Using a Semiconductor/Molecule Hybrid Photosystem: From Photocatalysts to a Monolithic Artificial Leaf. Accounts of Chemical Research, 2022, 55, 933-943.	15.6	47
4	Photocatalytic CO₂ Reduction Using an Ironâ€“Bipyridyl Complex Supported by Two Phosphines for Improving Catalyst Durability. Organometallics, 2022, 41, 1865-1871.	2.3	7
5	Study of Excited States and Electron Transfer of Semiconductorâ€Metalâ€Complex Hybrid Photocatalysts for CO 2 Reduction by Using Picosecond Timeâ€Resolved Spectroscopies. Chemistry - A European Journal, 2021, 27, 1127-1137.	3.3	4
6	Carbon Nanohorn Support for Solar driven CO₂ Reduction to CO Catalyzed by Mnâ€complex in an All Earthâ€abundant System. ChemNanoMat, 2021, 7, 596-599.	2.8	3
7	Electrochemical CO₂ Reduction to HCOOH Catalyzed by Ag_n(NO₃)_n₊₁ Clusters Prepared by Laser Ablation at the Air-Liquid Interface. Chemistry Letters, 2021, 50, 1941-1944.	1.3	0
8	Particulate photocatalytic reactors with spectrum-splitting function for artificial photosynthesis. Physical Chemistry Chemical Physics, 2021, 23, 15659-15674.	2.8	2
9	Low-Overpotential Electrochemical Water Oxidation Catalyzed by CuO Derived from 2 nm-Sized Cu₂(NO₃)(OH)₃ Nanoparticles Generated by Laser Ablation at the Airâ€“Liquid Interface. ACS Applied Energy Materials, 2020, 3, 8383-8392.	5.1	12
10	Photocatalytic CO₂ Reduction Using a Robust Multifunctional Iridium Complex toward the Selective Formation of Formic Acid. Journal of the American Chemical Society, 2020, 142, 10261-10266.	13.7	90
11	Formation of C2 organic molecules from CO₂ and H₂O by femtosecond laser induced chemical reactions in water. Japanese Journal of Applied Physics, 2020, 59, 057001.	1.5	4
12	Aqueous electrocatalytic CO₂ reduction using metal complexes dispersed in polymer ion gels. Chemical Communications, 2020, 56, 4440-4443.	4.1	21
13	Solar-driven CO₂ to CO reduction utilizing H₂O as an electron donor by earth-abundant Mnâ€“bipyridine complex and Ni-modified Fe-oxyhydroxide catalysts activated in a single-compartment reactor. Chemical Communications, 2019, 55, 237-240.	4.1	33
14	Molecular Catalysts Immobilized on Semiconductor Photosensitizers for Proton Reduction toward Visibleâ€Lightâ€Driven Overall Water Splitting. ChemSusChem, 2019, 12, 1807-1824.	6.8	25
15	Self-Assembled Single-Crystalline GaN Having a Bimodal Meso/Macropore Structure To Enhance Photoabsorption and Photocatalytic Reactions. ACS Applied Materials & Interfaces, 2019, 11, 4233-4241.	8.0	11
16	Low-Energy Electrocatalytic CO₂ Reduction in Water over Mn-Complex Catalyst Electrode Aided by a Nanocarbon Support and K⁺ Cations. ACS Catalysis, 2018, 8, 4452-4458.	11.2	79
17	Band bending and dipole effect at interface of metal-nanoparticles and TiO₂ directly observed by angular-resolved hard X-ray photoemission spectroscopy. Physical Chemistry Chemical Physics, 2018, 20, 11342-11346.	2.8	12
18	Effects of Ta₂O₅ Surface Modification by NH₃ on the Electronic Structure of a Ru-Complex/Nâ€“Ta₂O₅ Hybrid Photocatalyst for Selective CO₂ Reduction. Journal of Physical Chemistry C, 2018, 122, 1921-1929.	3.1	12

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19	Solar-Driven Photocatalytic CO₂ Reduction in Water Utilizing a Ruthenium Complex Catalyst on p-Type Fe₂O₃ with a Multiheterojunction. ACS Catalysis, 2018, 8, 1405-1416.	11.2	110
20	Light-Driven Carbon Dioxide Reduction Devices. Green Chemistry and Sustainable Technology, 2018, , 259-280.	0.7	2
21	[Ir(tpy)(bpy)Cl] as a Photocatalyst for CO₂ Reduction under Visibleâ€Light Irradiation. ChemPhotoChem, 2018, 2, 207-212.	3.0	32
22	Electrocatalytic CO₂ reduction near the theoretical potential in water using Ru complex supported on carbon nanotubes. Nanotechnology, 2018, 29, 034001.	2.6	19
23	Enhancement of CO2 reduction activity under visible light irradiation over Zn-based metal sulfides by combination with Ru-complex catalysts. Applied Catalysis B: Environmental, 2018, 224, 572-578.	20.2	55
24	Electrochemical Water Oxidation Catalysed by CoOâ€Co₂O₃â€Co(OH)₂ Multiphaseâ€Nanoparticles Prepared by Femtosecond Laser Ablation in Water. ChemistrySelect, 2018, 3, 4979-4984.	1.5	14
25	Highly crystalline Î²-FeOOH(Cl) nanorod catalysts doped with transition metals for efficient water oxidation. Sustainable Energy and Fuels, 2017, 1, 636-643.	4.9	40
26	Carbon microfiber layer as noble metal-catalyst support for selective CO2 photoconversion in phosphate solution: Toward artificial photosynthesis in a single-compartment reactor. Journal of Photochemistry and Photobiology A: Chemistry, 2016, 327, 1-5.	3.9	8
27	Aminoalkylsilane-modified Silver Cathodes for Electrochemical CO₂ Reduction. Chemistry Letters, 2016, 45, 1362-1364.	1.3	3
28	Striking Differences in Properties of Geometric Isomers of [Ir(tpy)(ppy)H]⁺: Experimental and Computational Studies of their Hydricities, Interaction with CO₂, and Photochemistry. Angewandte Chemie - International Edition, 2015, 54, 14128-14132.	13.8	51
29	A monolithic device for CO₂ photoreduction to generate liquid organic substances in a single-compartment reactor. Energy and Environmental Science, 2015, 8, 1998-2002.	30.8	157
30	Z-scheme water splitting under visible light irradiation over powdered metal-complex/semiconductor hybrid photocatalysts mediated by reduced graphene oxide. Journal of Materials Chemistry A, 2015, 3, 13283-13290.	10.3	65
31	Toward Solar-Driven Photocatalytic CO₂ Reduction Using Water as an Electron Donor. Inorganic Chemistry, 2015, 54, 5105-5113.	4.0	115
32	Photochemical reactions of fac-rhenium(I) tricarbonyl complexes and their application for synthesis. Coordination Chemistry Reviews, 2015, 282-283, 50-59.	18.8	61
33	Photoelectrochemical CO2 Reduction. , 2014, , 1535-1538.		2
34	A Highly Efficient Mononuclear Iridium Complex Photocatalyst for CO₂ Reduction under Visible Light. Angewandte Chemie - International Edition, 2013, 52, 988-992.	13.8	277
35	Solar CO2 reduction using H2O by a semiconductor/metal-complex hybrid photocatalyst: enhanced efficiency and demonstration of a wireless system using SrTiO3 photoanodes. Energy and Environmental Science, 2013, 6, 1274.	30.8	251
36	Photochemistry of facâ€[Re(bpy)(CO)₃Cl]. Chemistry - A European Journal, 2012, 18, 15722-15734.	3.3	74

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37	Photoinduced Electron Transfer from Nitrogen-Doped Tantalum Oxide to Adsorbed Ruthenium Complex. Journal of Physical Chemistry C, 2011, 115, 18348-18353.	3.1	58
38	Selective CO2 conversion to formate in water using a CZTS photocathode modified with a ruthenium complex polymer. Chemical Communications, 2011, 47, 12664.	4.1	127
39	Direct assembly synthesis of metal complexâ€“semiconductor hybrid photocatalysts anchored by phosphonate for highly efficient CO2 reduction. Chemical Communications, 2011, 47, 8673.	4.1	108
40	Selective CO₂ Conversion to Formate Conjugated with H₂O Oxidation Utilizing Semiconductor/Complex Hybrid Photocatalysts. Journal of the American Chemical Society, 2011, 133, 15240-15243.	13.7	458
41	Visibleâ€Lightâ€Induced Selective CO₂ Reduction Utilizing a Ruthenium Complex Electrocatalyst Linked to a pâ€Type Nitrogenâ€Doped Ta₂O₅ Semiconductor. Angewandte Chemie - International Edition, 2010, 49, 5101-5105.	13.8	325
42	Photoelectrochemical reduction of CO2 in water under visible-light irradiation by a p-type InP photocathode modified with an electropolymerized ruthenium complex. Chemical Communications, 2010, 46, 6944.	4.1	180
43	Architecture of supramolecular metal complexes for photocatalytic CO2 reduction. Journal of Photochemistry and Photobiology A: Chemistry, 2009, 207, 109-114.	3.9	136
44	Synthesis and properties of a novel tripodal bipyridyl ligand tb-carbinol and its Ru(II)â€“Re(I) trimetallic complexes: investigation of multimetallic artificial systems for photocatalytic CO₂reduction. Dalton Transactions, 2009, , 983-993.	3.3	65
45	A Novel Tripodal Ligand, Tris[(4â€²-methyl-2,2â€²-bipyridyl-4-yl)methyl]carbinol and Its Trinuclear RuII/ReIMixed-Metal Complexes: Synthesis, Emission Properties, and Photocatalytic CO2Reduction. Inorganic Chemistry, 2008, 47, 10801-10803.	4.0	71
46	Photochemical Synthesis of mer-[Re(bpy)(CO)₃Cl]. Inorganic Chemistry, 2007, 46, 9051-9053.	4.0	55
47	Highly efficient supramolecular photocatalysts for CO2reduction using visible light. Photochemical and Photobiological Sciences, 2007, 6, 454-461.	2.9	136
48	Photochemical Ligand Substitution Reactions of fac-[Re(bpy)(CO)3Cl] and Derivatives. Inorganic Chemistry, 2007, 46, 3531-3540.	4.0	67
49	Image degradation and stroboscopic images caused by rotary motion of the object in Xâ€ray computed tomography. Systems and Computers in Japan, 1993, 24, 76-83.	0.2	1