Shunsuke Sato

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/1522768/publications.pdf

Version: 2024-02-01

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	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
2	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
3	A Highly Efficient Mononuclear Iridium Complex Photocatalyst for CO₂ Reduction under Visible Light. Angewandte Chemie - International Edition, 2013, 52, 988-992.	13.8	277
4	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
5	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
6	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
7	Highly efficient supramolecular photocatalysts for CO2reduction using visible light. Photochemical and Photobiological Sciences, 2007, 6, 454-461.	2.9	136
8	Architecture of supramolecular metal complexes for photocatalytic CO2 reduction. Journal of Photochemistry and Photobiology A: Chemistry, 2009, 207, 109-114.	3.9	136
9	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
10	Toward Solar-Driven Photocatalytic CO₂ Reduction Using Water as an Electron Donor. Inorganic Chemistry, 2015, 54, 5105-5113.	4.0	115
11	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
12	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
13	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
14	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
15	Photochemistry of facâ€[Re(bpy)(CO)₃Cl]. Chemistry - A European Journal, 2012, 18, 15722-15734.	3.3	74
16	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
17	Photochemical Ligand Substitution Reactions of fac-[Re(bpy)(CO)3Cl] and Derivatives. Inorganic Chemistry, 2007, 46, 3531-3540.	4.0	67
18	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

#	Article	IF	Citations
19	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
20	Photochemical reactions of fac-rhenium(I) tricarbonyl complexes and their application for synthesis. Coordination Chemistry Reviews, 2015, 282-283, 50-59.	18.8	61
21	Photoinduced Electron Transfer from Nitrogen-Doped Tantalum Oxide to Adsorbed Ruthenium Complex. Journal of Physical Chemistry C, 2011, 115, 18348-18353.	3.1	58
22	Photochemical Synthesis of mer-[Re(bpy)(CO)₃Cl]. Inorganic Chemistry, 2007, 46, 9051-9053.	4.0	55
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	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
25	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
26	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
27	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
28	[Ir(tpy)(bpy)Cl] as a Photocatalyst for CO₂ Reduction under Visibleâ€Light Irradiation. ChemPhotoChem, 2018, 2, 207-212.	3.0	32
29	Molecular Catalysts Immobilized on Semiconductor Photosensitizers for Proton Reduction toward Visibleâ€Lightâ€Driven Overall Water Splitting. ChemSusChem, 2019, 12, 1807-1824.	6.8	25
30	Aqueous electrocatalytic CO₂ reduction using metal complexes dispersed in polymer ion gels. Chemical Communications, 2020, 56, 4440-4443.	4.1	21
31	Electrocatalytic CO₂ reduction near the theoretical potential in water using Ru complex supported on carbon nanotubes. Nanotechnology, 2018, 29, 034001.	2.6	19
32	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
33	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
34	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
35	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
36	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

#	Article	IF	Citations
37	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
38	A Highly Durable, Self-Photosensitized Mononuclear Ruthenium Catalyst for CO2 Reduction. Synlett, 2022, 33, 1137-1141.	1.8	8
39	Photocatalytic CO₂ Reduction Using an Ironâ€“Bipyridyl Complex Supported by Two Phosphines for Improving Catalyst Durability. Organometallics, 2022, 41, 1865-1871.	2.3	7
40	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
41	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
42	Aminoalkylsilane-modified Silver Cathodes for Electrochemical CO₂ Reduction. Chemistry Letters, 2016, 45, 1362-1364.	1.3	3
43	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
44	Light-Driven Carbon Dioxide Reduction Devices. Green Chemistry and Sustainable Technology, 2018, , 259-280.	0.7	2
45	Particulate photocatalytic reactors with spectrum-splitting function for artificial photosynthesis. Physical Chemistry Chemical Physics, 2021, 23, 15659-15674.	2.8	2
46	Photoelectrochemical CO2 Reduction. , 2014, , 1535-1538.		2
47	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
48	Hot-carrier photocatalysts for artificial photosynthesis. Journal of Chemical Physics, 2022, 156, 164705.	3.0	1
49	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