Tomoya Oshikiri

List of Publications by Year
in descending order

51 papers	2,248 citations	257101 24 h-index	214527 47 g-index
59 all docs	59 docs citations	59 times ranked	3372 citing authors

#	Article	IF	Citations
1	Selective Dinitrogen Conversion to Ammonia Using Water and Visible Light through Plasmonâ€Induced Charge Separation. Angewandte Chemie - International Edition, 2016, 55, 3942-3946.	7.2	230
2	Enhanced water splitting under modal strong coupling conditions. Nature Nanotechnology, 2018, 13, 953-958.	15.6	216
3	Plasmonâ€Induced Ammonia Synthesis through Nitrogen Photofixation with Visible Light Irradiation. Angewandte Chemie - International Edition, 2014, 53, 9802-9805.	7.2	211
4	Solid-State Plasmonic Solar Cells. Chemical Reviews, 2018, 118, 2955-2993.	23.0	182
5	Cobalt Oxide (CoO_{<i>x</i>}) as an Efficient Hole-Extracting Layer for High-Performance Inverted Planar Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2016, 8, 33592-33600.	4.0	122
6	Plasmonâ€Assisted Water Splitting Using Two Sides of the Same SrTiO₃ Singleâ€Crystal Substrate: Conversion of Visible Light to Chemical Energy. Angewandte Chemie - International Edition, 2014, 53, 10350-10354.	7.2	119
7	Kinetic Control of Threading of Cyclodextrins onto Axle Molecules. Journal of the American Chemical Society, 2005, 127, 12186-12187.	6.6	100
8	Manipulation of the dephasing time by strong coupling between localized and propagating surface plasmon modes. Nature Communications, 2018, 9, 4858.	5.8	85
9	Selective Dinitrogen Conversion to Ammonia Using Water and Visible Light through Plasmonâ€Induced Charge Separation. Angewandte Chemie, 2016, 128, 4010-4014.	1.6	83
10	Properties of Plasmon-Induced Photoelectric Conversion on a TiO₂/NiO pâ€“n Junction with Au Nanoparticles. Journal of Physical Chemistry Letters, 2016, 7, 1004-1009.	2.1	71
11	Optimization of a compact layer of TiO₂via atomic-layer deposition for high-performance perovskite solar cells. Sustainable Energy and Fuels, 2017, 1, 1533-1540.	2.5	59
12	Face-Selective [2]- and [3]Rotaxanes: Kinetic Control of the Threading Direction of Cyclodextrins. Chemistry - A European Journal, 2007, 13, 7091-7098.	1.7	54
13	Plasmonâ€Induced Water Splitting Using Metallicâ€Nanoparticleâ€Loaded Photocatalysts and Photoelectrodes. ChemPhysChem, 2016, 17, 199-215.	1.0	54
14	Exploring Coupled Plasmonic Nanostructures in the Near Field by Photoemission Electron Microscopy. ACS Nano, 2016, 10, 10373-10381.	7.3	51
15	Versatile plasmonic-effects at the interface of inverted perovskite solar cells. Nanoscale, 2017, 9, 1229-1236.	2.8	50
16	Cocatalyst Effects on Hydrogen Evolution in a Plasmon-Induced Water-Splitting System. Journal of Physical Chemistry C, 2015, 119, 8889-8897.	1.5	38
17	Control of plasmon dephasing time using stacked nanogap gold structures for strong near-field enhancement. Applied Materials Today, 2019, 14, 159-165.	2.3	33
18	Dual Strong Couplings Between TPPS J-Aggregates and Aluminum Plasmonic States. Journal of Physical Chemistry Letters, 2016, 7, 2786-2791.	2.1	32

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19	Relative Rotational Motion between Î±-Cyclodextrin Derivatives and a Stiff Axle Molecule. Journal of Organic Chemistry, 2008, 73, 2496-2502.	1.7	31
20	Improvement of Plasmon-Enhanced Photocurrent Generation by Interference of TiO₂ Thin Film. Journal of Physical Chemistry C, 2013, 117, 24733-24739.	1.5	29
21	Water splitting using a three-dimensional plasmonic photoanode with titanium dioxide nano-tunnels. Green Chemistry, 2017, 19, 2398-2405.	4.6	28
22	Face selective translation of a cyclodextrin ring along an axle. Chemical Communications, 2009, , 5515.	2.2	27
23	Site-Selective Deposition of a Cobalt Cocatalyst onto a Plasmonic Au/TiO₂ Photoanode for Improved Water Oxidation. ACS Applied Energy Materials, 2020, 3, 5142-5146.	2.5	26
24	Rotaxanes with unidirectional cyclodextrin array. Journal of Physics Condensed Matter, 2006, 18, S1809-S1816.	0.7	24
25	Near-field spectral properties of coupled plasmonic nanoparticle arrays. Optics Express, 2017, 25, 6883.	1.7	23
26	Ammonia photosynthesis <i>via</i> an association pathway using a plasmonic photoanode and a zirconium cathode. Green Chemistry, 2019, 21, 4443-4448.	4.6	20
27	Water Oxidation under Modal Ultrastrong Coupling Conditions Using Gold/Silver Alloy Nanoparticles and Fabryâ€“PÃ©rot Nanocavities. Angewandte Chemie - International Edition, 2021, 60, 18438-18442.	7.2	20
28	Toward a translational molecular ratchet: face-selective translation coincident with deuteration in a pseudo-rotaxane. Scientific Reports, 2018, 8, 8950.	1.6	15
29	Interfacial Structure-Modulated Plasmon-Induced Water Oxidation on Strontium Titanate. ACS Applied Energy Materials, 2020, 3, 5675-5683.	2.5	15
30	Extrinsic Chirality by Interference between Two Plasmonic Modes on an Achiral Rectangular Nanostructure. ACS Nano, 2021, 15, 16802-16810.	7.3	13
31	Exploring the Near-Field of Strongly Coupled Waveguide-Plasmon Modes by Plasmon-Induced Photocurrent Generation Using a Gold Nanograting-Loaded Titanium Dioxide Photoelectrode. Journal of Physical Chemistry C, 2017, 121, 21627-21633.	1.5	10
32	Plasmon-Assisted Polarity Switching of a Photoelectric Conversion Device by UV and Visible Light Irradiation. Journal of Physical Chemistry C, 2018, 122, 14064-14071.	1.5	10
33	Efficient Hotâ€Electron Transfer under Modal Strong Coupling Conditions with Sacrificial Electron Donors. ChemNanoMat, 2019, 5, 1008-1014.	1.5	9
34	Revealing the Chiroptical Response of Plasmonic Nanostructures at the Nanofemto Scale. Nano Letters, 2021, 21, 4780-4786.	4.5	9
35	Boosting Hydrogen Evolution at Visible Light Wavelengths by Using a Photocathode with Modal Strong Coupling between Plasmons and a Fabryâ€PÃ©rot Nanocavity. Chemistry - A European Journal, 2022, 28, .	1.7	9
36	Plasmon-enhanced Water Splitting Utilizing the Heterojunction Synergistic Effect between SrTiO3 and Rutile-TiO2. Chemistry Letters, 2015, 44, 618-620.	0.7	8

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37	Near-Perfect Absorption of Light by Coherent Plasmonâ€“Exciton States. Nano Letters, 2021, 21, 3864-3870.	4.5	8
38	Plasmon-induced artificial photosynthesis. Interface Focus, 2015, 5, 20140082.	1.5	7
39	Surface plasmon optical antennae in the infrared region with high resonant efficiency and frequency selectivity. Optics Express, 2016, 24, 17728.	1.7	7
40	Plasmon-induced electron injection into the large negative potential conduction band of Ga₂O₃for coupling with water oxidation. Nanoscale, 2020, 12, 22674-22679.	2.8	7
41	Plasmon-induced photoelectrochemical biosensor for in situ real-time measurement of biotin-streptavidin binding kinetics under visible light irradiation. Analytica Chimica Acta, 2017, 957, 70-75.	2.6	6
42	Near-field engineering for boosting the photoelectrochemical activity to a modal strong coupling structure. Chemical Communications, 2021, 57, 524-527.	2.2	6
43	Highly Sensitive and Spatially Homogeneous Surface-Enhanced Raman Scattering Substrate under Plasmonâ€“Nanocavity Coupling. Journal of Physical Chemistry C, 2021, 125, 19880-19886.	1.5	6
44	Enhancement of Selective Fixation of Dinitrogen to Ammonia under Modal Strong Coupling Conditions. European Journal of Inorganic Chemistry, 2020, 2020, 1396-1401.	1.0	5
45	Water Oxidation under Modal Ultrastrong Coupling Conditions Using Gold/Silver Alloy Nanoparticles and Fabryâ€“PÃ©rot Nanocavities. Angewandte Chemie, 2021, 133, 18586-18590.	1.6	5
46	A pseudo-rotaxane of Î±-cyclodextrin and a two-station axis molecule consisting of pyridinium and decamethylene moieties, and its deuteration in deuterium oxide. Tetrahedron, 2017, 73, 4988-4993.	1.0	3
47	Hot-carrier Separation Induced by the Electric Field of a p-n Junction between Titanium Dioxide and Nickel Oxide. Chemistry Letters, 2021, 50, 374-377.	0.7	3
48	Plasmon-enhanced light energy conversion using gold nanostructured oxide semiconductor photoelectrodes. Pure and Applied Chemistry, 2015, 87, 547-555.	0.9	2
49	Arbitrary control of the diffusion potential between a plasmonic metal and a semiconductor by an angstrom-thick interface dipole layer. Journal of Chemical Physics, 2020, 152, 034705.	1.2	2
50	Primary structure control of ArF resist polymer by regulating feed rate of monomers and initiator. Proceedings of SPIE, 2011, , .	0.8	1
51	Enhancement of Selective Fixation of Dinitrogen to Ammonia under Modal Strong Coupling Conditions. European Journal of Inorganic Chemistry, 2020, 2020, 1346-1346.	1.0	0