Osamu Tomita

List of Publications by Year in Descending Order

39 papers	1,294 citations	17 h-index	35 g-index
42 ext. papers	1,614 ext. citations	9.1 avg, IF	4.81 L-index

#	Paper	IF	Citations
39	Manipulation of charge carrier flow in BiNbOCl nanoplate photocatalyst with metal loading.. *Chemical Science*, **2022**, 13, 3118-3128	9.4	4
38	Cobalt hexacyanoferrate as an effective cocatalyst boosting water oxidation on oxynitride TaON photocatalyst under visible light. *Journal of Photochemistry and Photobiology A: Chemistry*, **2022**, 426, 113753	4.7	1
37	Two-Dimensional Metal□Organic Framework Acts as a Hydrogen Evolution Cocatalyst for Overall Photocatalytic Water Splitting. *ACS Catalysis*, **2022**, 12, 3881-3889	13.1	4
36	Layered Perovskite Oxyiodide with Narrow Band Gap and Long Lifetime Carriers for Water Splitting Photocatalysis. *Journal of the American Chemical Society*, **2021**, 143, 8446-8453	16.4	19
35	Visible-Light-Responsive Oxyhalide PbBiOCl Photoelectrode: On-Site Flux Synthesis on a Fluorine-Doped Tin Oxide Electrode. *ACS Applied Materials & Interfaces*, **2021**, 13, 5176-5183	9.5	2
34	A new lead-free Sill□□Aurivillius oxychloride Bi5SrTi3O14Cl with triple-perovskite layers for photocatalytic water splitting under visible light. *Journal of Photochemistry and Photobiology A: Chemistry*, **2021**, 408, 113095	4.7	3
33	Synthesis, band structure and photocatalytic properties of Sill□□Aurivillius oxychlorides BaBi5Ti3O14Cl, Ba2Bi5Ti4O17Cl and Ba3Bi5Ti5O20Cl with triple-, quadruple- and quintuple-perovskite layers. *Journal of Materials Chemistry A*, **2021**, 9, 8332-8340	13	7
32	Earth-abundant iron(III) species serves as a cocatalyst boosting the multielectron reduction of IO3□□redox shuttle in Z-scheme photocatalytic water splitting. *Journal of Materials Chemistry A*, **2021**, 9, 11718-11725	13	3
31	PbBi3O4X3 (X = Cl, Br) with Single/Double Halogen Layers as a Photocatalyst for Visible-Light-Driven Water Splitting: Impact of a Halogen Layer on the Band Structure and Stability. *Chemistry of Materials*, **2021**, 33, 9580-9587	9.6	3
30	Triple-layered Sill□□Aurivillius Perovskite Oxychloride Bi5PbTi3O14Cl as a Visible-light-responsive Photocatalyst for Water Splitting. *Chemistry Letters*, **2020**, 49, 978-981	1.7	6
29	Effective strategy for enhancing Z-scheme water splitting with the IO3□□redox mediator by using a visible light responsive TaON photocatalyst co-loaded with independently optimized two different cocatalysts. *Sustainable Energy and Fuels*, **2019**, 3, 1501-1508	5.8	12
28	Flux Synthesis of Layered Oxyhalide BiNbOCl Photocatalyst for Efficient Z-Scheme Water Splitting Under Visible Light. *ACS Applied Materials & Interfaces*, **2019**, 11, 5642-5650	9.5	58
27	Application of carbon microfiber felts as three-dimensional conductive substrate for efficient photoanodes of tungsten(VI) oxide. *Journal of Photochemistry and Photobiology A: Chemistry*, **2019**, 375, 54-63	4.7	2
26	Mimicking Natural Photosynthesis: Solar to Renewable H Fuel Synthesis by Z-Scheme Water Splitting Systems. *Chemical Reviews*, **2018**, 118, 5201-5241	68.1	497
25	Molybdenum-substituted polyoxometalate as stable shuttle redox mediator for visible light driven Z-scheme water splitting system. *Journal of Photochemistry and Photobiology A: Chemistry*, **2018**, 356, 347-354	4.7	13
24	The first example of an oxide semiconductor photocatalyst consisting of a heptavalent cation: visible-light-induced water oxidation on M3ReO8. *Journal of Materials Chemistry A*, **2018**, 6, 1991-1994	13	2
23	Strong hybridization between Bi-6s and O-2p orbitals in Sill□□Aurivillius perovskite Bi4MO8X (M = Nb, Ta; X = Cl, Br), visible light photocatalysts enabling stable water oxidation. *Journal of Materials Chemistry A*, **2018**, 6, 3100-3107	13	70

22	Improved water oxidation under visible light on oxyhalide Bi4MO8X (M = Nb, Ta; X = Cl, Br) photocatalysts prepared using excess halogen precursors. *Sustainable Energy and Fuels*, **2018**, 2, 1474-1480	5.8	23
21	Improved visible-light activity of nitrogen-doped layered niobate photocatalysts by NH3-nitridation with KCl flux. *Applied Catalysis B: Environmental*, **2018**, 232, 49-54	21.8	17
20	Lead Bismuth Oxyhalides PbBiO2X (X = Cl, Br) as Visible-Light-Responsive Photocatalysts for Water Oxidation: Role of Lone-Pair Electrons in Valence Band Engineering. *Chemistry of Materials*, **2018**, 30, 5862-5869	9.6	62
19	Improved Activity of Hydrothermally-prepared WO3 Photocatalysts by Sodium Salt Additives. *Chemistry Letters*, **2018**, 47, 985-988	1.7	4
18	Enhanced H2 Evolution on ZnIn2S4 Photocatalyst under Visible Light by Surface Modification with Metal Cyanoferrates. *Chemistry Letters*, **2018**, 47, 941-944	1.7	9
17	Sill□Aurivillius-related Oxychloride Bi6NbWO14Cl as a Stable O2-evolving Photocatalyst in Z-scheme Water Splitting under Visible Light. *Chemistry Letters*, **2017**, 46, 583-586	1.7	21
16	Enhanced oxygen evolution on visible light responsive TaON photocatalysts co-loaded with highly active Ru species for IO3□reduction and Co species for water oxidation. *Sustainable Energy and Fuels*, **2017**, 1, 748-754	5.8	13
15	Tungstic acids H2WO4 and H4WO5 as stable photocatalysts for water oxidation under visible light. *Journal of Materials Chemistry A*, **2017**, 5, 10280-10288	13	23
14	Surface-modified metal sulfides as stable H2-evolving photocatalysts in Z-scheme water splitting with a [Fe(CN)6]3⁄4□redox mediator under visible-light irradiation. *Sustainable Energy and Fuels*, **2017**, 1, 1065-1073	5.8	29
13	Highly Dispersed RuO2 Hydrates Prepared via Simple Adsorption as Efficient Cocatalysts for Visible-Light-Driven Z-Scheme Water Splitting with an IO3⁄I□Redox Mediator. *ACS Catalysis*, **2017**, 7, 4336-4343	13.1	33
12	Fabrication of CuInS2 photocathodes on carbon microfiber felt by arc plasma deposition for efficient water splitting under visible light. *Sustainable Energy and Fuels*, **2017**, 1, 699-709	5.8	6
11	Improved Photocatalytic Water Oxidation with Fe3+/Fe2+ Redox on Rectangular-shaped WO3 Particles with Specifically Exposed Crystal Faces via Hydrothermal Synthesis. *Chemistry Letters*, **2017**, 46, 221-224	1.7	15
10	Design of nitrogen-doped layered tantalates for non-sacrificial and selective hydrogen evolution from water under visible light. *Journal of Materials Chemistry A*, **2016**, 4, 14444-14452	13	21
9	Manganese-Substituted Polyoxometalate as an Effective Shuttle Redox Mediator in Z-Scheme Water Splitting under Visible Light. *ChemSusChem*, **2016**, 9, 2201-8	8.3	43
8	Partial Oxidation of Alcohols on Visible-Light-Responsive WO3 Photocatalysts Loaded with Palladium Oxide Cocatalyst. *ACS Catalysis*, **2016**, 6, 1134-1144	13.1	107
7	Porous TaON Photoanodes Loaded with Cobalt-Based Cocatalysts for Efficient and Stable Water Oxidation Under Visible Light. *Topics in Catalysis*, **2016**, 59, 740-749	2.3	12
6	Two-step photocatalytic water splitting into H2 and O2 using layered metal oxide KCa2Nb3O10 and its derivatives as O2-evolving photocatalysts with IO3⁄I□or Fe3+/Fe2+ redox mediator. *Catalysis Science and Technology*, **2015**, 5, 2640-2648	5.5	41
5	Fabrication of cation-doped BaTaO2N photoanodes for efficient photoelectrochemical water splitting under visible light irradiation. *APL Materials*, **2015**, 3, 104418	5.7	30

4	Solvothermal Synthesis of Ca2Nb2O7 Fine Particles and Their High Activity for Photocatalytic Water Splitting into H2 and O2 under UV Light Irradiation. *Chemistry Letters*, **2015**, 44, 1001-1003	1.7	11
3	Z-scheme Water Splitting into H2 and O2 Using Tungstic Acid as an Oxygen-evolving Photocatalyst under Visible Light Irradiation. *Chemistry Letters*, **2015**, 44, 1134-1136	1.7	10
2	Highly selective phenol production from benzene on a platinum-loaded tungsten oxide photocatalyst with water and molecular oxygen: selective oxidation of water by holes for generating hydroxyl radical as the predominant source of the hydroxyl group. *Catalysis Science and Technology*, **2014**, 4, 3850-3860	5.5	57
1	Controlling the Carrier Density in Niobium Oxynitride BaNbO2N via Cation Doping for Efficient Photoelectrochemical Water Splitting under Visible Light. *Sustainable Energy and Fuels*,	5.8	1