

Chiaki TERASHIMA

List of Publications by Year in descending order

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62
papers

3,591
citations

136950

32
h-index

133252

59
g-index

63
all docs

63
docs citations

63
times ranked

5262
citing authors

#	ARTICLE	IF	CITATIONS
1	High-yield Electrochemical Production of Formaldehyde from CO ₂ and Seawater. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 871-874.	13.8	333
2	Superhydrophobic Surfaces Developed by Mimicking Hierarchical Surface Morphology of Lotus Leaf. <i>Molecules</i> , 2014, 19, 4256-4283.	3.8	300
3	Photoelectrochemical biosensors: New insights into promising photoelectrodes and signal amplification strategies. <i>Journal of Photochemistry and Photobiology C: Photochemistry Reviews</i> , 2015, 24, 43-63.	11.6	226
4	Thermodynamic and kinetic analysis of heterogeneous photocatalysis for semiconductor systems. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 8751.	2.8	225
5	A mechanically bendable superhydrophobic steel surface with self-cleaning and corrosion-resistant properties. <i>Journal of Materials Chemistry A</i> , 2015, 3, 14263-14271.	10.3	219
6	Development of sol-gel processed semi-transparent and self-cleaning superhydrophobic coatings. <i>Journal of Materials Chemistry A</i> , 2014, 2, 5548-5553.	10.3	157
7	Direct Electrochemical Oxidation of Disulfides at Anodically Pretreated Boron-Doped Diamond Electrodes. <i>Analytical Chemistry</i> , 2003, 75, 1564-1572.	6.5	113
8	Synergistic Metal-Metal Oxide Nanoparticles Supported Electrocatalytic Graphene for Improved Photoelectrochemical Glucose Oxidation. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 4864-4871.	8.0	100
9	±-Fe ₂ O ₃ /TiO ₂ 3D hierarchical nanostructures for enhanced photoelectrochemical water splitting. <i>Nanoscale</i> , 2017, 9, 134-142.	5.6	97
10	Electrochemical reduction of carbon dioxide at ruthenium dioxide deposited on boron-doped diamond. <i>Journal of Applied Electrochemistry</i> , 2003, 33, 1205-1210.	2.9	96
11	Boron-doped diamond nanograin array for electrochemical sensors. <i>Chemical Communications</i> , 2009, , 3624.	4.1	94
12	Enhanced Solar Photothermal Catalysis over Solution Plasma Activated TiO ₂ . <i>Advanced Science</i> , 2020, 7, 2000204.	11.2	89
13	Exploring Graphene Quantum Dots/TiO ₂ interface in photoelectrochemical reactions: Solar to fuel conversion. <i>Electrochimica Acta</i> , 2016, 187, 249-255.	5.2	79
14	Electrochemical Production of High-Concentration Ozone-Water Using Freestanding Perforated Diamond Electrodes. <i>Journal of the Electrochemical Society</i> , 2007, 154, E71.	2.9	78
15	Electrochemical Behavior of Cobalt Oxide Films Deposited at Conductive Diamond Electrodes. <i>Journal of the Electrochemical Society</i> , 2003, 150, E337.	2.9	70
16	Preparation of low molecular weight chitosan using solution plasma system. <i>Carbohydrate Polymers</i> , 2012, 87, 2745-2749.	10.2	66
17	Self-cleaning and superhydrophobic CuO coating by jet-nebulizer spray pyrolysis technique. <i>CrystEngComm</i> , 2015, 17, 2624-2628.	2.6	66
18	Electrochemical Detection of Catechol Based on As-Grown and Nanograin Array Boron-Doped Diamond Electrodes. <i>Electroanalysis</i> , 2010, 22, 199-203.	2.9	65

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19	Pt-free solar driven photoelectrochemical hydrogen fuel generation using 1T MoS ₂ co-catalyst assembled CdS QDs/TiO ₂ photoelectrode. <i>Chemical Communications</i> , 2015, 51, 522-525.	4.1	60
20	Facile synthesis of nanostructured monoclinic bismuth vanadate by a co-precipitation method: Structural, optical and photocatalytic properties. <i>Materials Science in Semiconductor Processing</i> , 2015, 30, 343-351.	4.0	58
21	Charge Separation in TiO ₂ /BDD Heterojunction Thin Film for Enhanced Photoelectrochemical Performance. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 1583-1588.	8.0	55
22	Simultaneous glucose sensing and biohydrogen evolution from direct photoelectrocatalytic glucose oxidation on robust Cu ₂ O/TiO ₂ electrodes. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 21237-21242.	2.8	54
23	Visible Light-Assisted Photocatalysis Using Spherical-Shaped BiVO ₄ Photocatalyst. <i>Catalysts</i> , 2021, 11, 460.	3.5	51
24	Advanced Two-Dimensional Heterojunction Photocatalysts of Stoichiometric and Non-Stoichiometric Bismuth Oxyhalides with Graphitic Carbon Nitride for Sustainable Energy and Environmental Applications. <i>Catalysts</i> , 2021, 11, 426.	3.5	48
25	Fabrication of Vertically Aligned Diamond Whiskers from Highly Boron-Doped Diamond by Oxygen Plasma Etching. <i>ACS Applied Materials & Interfaces</i> , 2011, 3, 177-182.	8.0	47
26	Application of Freestanding Perforated Diamond Electrodes for Efficient Ozone-Water Production. <i>Electrochemical and Solid-State Letters</i> , 2006, 9, D17.	2.2	44
27	Boron-doped diamond semiconductor electrodes: Efficient photoelectrochemical CO ₂ reduction through surface modification. <i>Scientific Reports</i> , 2016, 6, 38010.	3.3	43
28	Facile synthesis of transparent superhydrophobic titania coating by using soot as a nanoimprint template. <i>RSC Advances</i> , 2013, 3, 22825.	3.6	40
29	Cobalt-Doped Manganese Dioxide Hierarchical Nanostructures for Enhancing Pseudocapacitive Properties. <i>ACS Omega</i> , 2021, 6, 5717-5729.	3.5	40
30	WO ₃ /W:BiVO ₄ /BiVO ₄ graded photoabsorber electrode for enhanced photoelectrocatalytic solar light driven water oxidation. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 4648-4655.	2.8	38
31	Enhanced UV-Vis photocatalytic performance of the CuInS ₂ /TiO ₂ /SnO ₂ hetero-structure for air decontamination. <i>Journal of Catalysis</i> , 2017, 350, 174-181.	6.2	35
32	Selective Inactivation of Bacteriophage in the Presence of Bacteria by Use of Ground Rh-Doped SrTiO ₃ Photocatalyst and Visible Light. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 31393-31400.	8.0	35
33	Enhanced Photoelectrocatalytic Water Splitting at Hierarchical Gd ³⁺ :TiO ₂ Nanostructures through Amplifying Light Reception and Surface States Passivation. <i>Journal of the Electrochemical Society</i> , 2015, 162, H108-H114.	2.9	33
34	Three-dimensional Gd-doped TiO ₂ fibrous photoelectrodes for efficient visible light-driven photocatalytic performance. <i>RSC Advances</i> , 2014, 4, 11750-11757.	3.6	31
35	Ionic-Liquid-Assisted Selective and Controlled Electrochemical CO ₂ Reduction at Cu-Modified Boron-Doped Diamond Electrode. <i>ChemElectroChem</i> , 2016, 3, 1044-1047.	3.4	31
36	Enhanced electrogenerated chemiluminescence of a ruthenium tris(2,2'-bipyridyl)/tripropylamine system on a boron-doped diamond nanograin array. <i>Chemical Communications</i> , 2010, 46, 5793.	4.1	30

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37	Citrate-Capped Hybrid Au-TiO ₂ Nanomaterial for Facile and Enhanced Electrochemical Hydrazine Oxidation. ACS Omega, 2017, 2, 1215-1221.	3.5	29
38	Significance of Hydroxyl Radical in Photoinduced Oxygen Evolution in Water on Monoclinic Bismuth Vanadate. Journal of Physical Chemistry C, 2017, 121, 25624-25631.	3.1	29
39	Enhanced photocatalytic performance at a Au/Ni-TiO ₂ hollow nanowire array by a combination of light scattering and reduced recombination. Physical Chemistry Chemical Physics, 2014, 16, 17748-17755.	2.8	26
40	Hierarchically nanostructured boron-doped diamond electrode surface. Diamond and Related Materials, 2017, 72, 13-19.	3.9	22
41	In Situ Photoconductivity Kinetic Study of Nano-TiO ₂ during the Photocatalytic Oxidation of Formic Acid: Effects of New Recombination and Current Doubling. Journal of Physical Chemistry C, 2015, 119, 21711-21722.	3.1	19
42	Photocatalytic Degradation of Gaseous Acetaldehyde over Rh-doped SrTiO ₃ under Visible Light Irradiation. Chemistry Letters, 2016, 45, 42-44.	1.3	18
43	Single-step electrospun TiO ₂ -Au hybrid electrodes for high selectivity photoelectrocatalytic glutathione bioanalysis. Journal of Materials Chemistry B, 2016, 4, 220-228.	5.8	18
44	Cosensitization Properties of Glutathione-Protected Au ₂₅ Cluster on Ruthenium Dye-Sensitized TiO ₂ Photoelectrode. International Journal of Photoenergy, 2013, 2013, 1-7.	2.5	16
45	Modulating the interaction between gold and TiO ₂ nanowires for enhanced solar driven photoelectrocatalytic hydrogen generation. Physical Chemistry Chemical Physics, 2015, 17, 19371-19378.	2.8	16
46	Positive shift in the potential of photo-electrochemical CO ₂ reduction to CO on Ag-loaded boron-doped diamond electrode by an electrochemical pre-treatment. Journal of Applied Electrochemistry, 2018, 48, 61-73.	2.9	15
47	Synergistic oxidation of NADH on bimetallic CoPt nanoparticles decorated carbon nitride nanotubes. Sensors and Actuators B: Chemical, 2015, 208, 204-211.	7.8	14
48	Sporicidal performance induced by photocatalytic production of organic peroxide under visible light irradiation. Scientific Reports, 2016, 6, 33715.	3.3	13
49	Amperometric Detection of Oxidized and Reduced Glutathione at Anodically Pretreated Diamond Electrodes. Chemistry Letters, 2003, 32, 136-137.	1.3	12
50	Electrochemical Reduction of Ozone Dissolved in Perchloric Acid Solutions at Boron-doped Diamond Electrodes. Chemistry Letters, 2006, 35, 1018-1019.	1.3	12
51	Low Temperature Deposition of TiO ₂ Thin Films through Atmospheric Pressure Plasma Jet Processing. Catalysts, 2021, 11, 91.	3.5	12
52	ZnO/ZnS-Polyvinyl Alcohol Hydrogel for Photocatalytic H ₂ -Generation. Catalysts, 2022, 12, 272.	3.5	12
53	Single Crystal ZrO ₂ Nanosheets Formed by Thermal Transformation for Solid Oxide Fuel Cells and Oxygen Sensors. ACS Applied Nano Materials, 2019, 2, 6866-6873.	5.0	10
54	Fabrication of Efficient Visible-light-responsive TiO ₂ -WO ₃ Hollow Particle Photocatalyst by Electrospray Method. Chemistry Letters, 2017, 46, 122-124.	1.3	9

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55	Systematic studies of TiO ₂ -based photocatalysts anti-algal effects on <i>Chlorella vulgaris</i> . <i>Journal of Applied Electrochemistry</i> , 2017, 47, 197-203.	2.9	7
56	One-Pot Synthesis of Anatase, Rutile-Decorated Hydrogen Titanate Nanorods by Yttrium Doping for Solar H ₂ Production. <i>ACS Omega</i> , 2020, 5, 23081-23089.	3.5	7
57	Direct Dimethyl Carbonates Synthesis over CeO ₂ and Evaluation of Catalyst Morphology Role in Catalytic Performance. <i>Catalysts</i> , 2021, 11, 223.	3.5	7
58	Rod-Shaped $\hat{1}^2$ -FeOOH Synthesis for Hydrogen Production under Light Irradiation. <i>ACS Omega</i> , 2021, 6, 30562-30568.	3.5	7
59	Rapid growth of diamond and its morphology by in-liquid plasma CVD. <i>Diamond and Related Materials</i> , 2016, 63, 12-16.	3.9	6
60	Moth-eye-structured Antireflective Poly(methyl methacrylate) Film with Visible-light-responsive Self-cleaning Ability. <i>Chemistry Letters</i> , 2014, 43, 1511-1513.	1.3	5
61	In Situ Infrared Analysis for the Process of Water Photo-oxidation on Monoclinic Bismuth Vanadate. <i>Journal of Physical Chemistry C</i> , 2021, 125, 18579-18587.	3.1	3
62	Liquid exfoliation of five-coordinate layered titanate K ₂ Ti ₂ O ₅ single crystals in water. <i>CrystEngComm</i> , 2022, 24, 5112-5119.	2.6	1