

Adriano Sacco

List of Publications by Year in descending order

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118
papers

4,114
citations

94381

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133188

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119
docs citations

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times ranked

5429
citing authors

#	ARTICLE	IF	CITATIONS
1	Comparison of photocatalytic and transport properties of TiO ₂ and ZnO nanostructures for solar-driven water splitting. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 7775-7786.	1.3	234
2	Electrochemical impedance spectroscopy: Fundamentals and application in dye-sensitized solar cells. <i>Renewable and Sustainable Energy Reviews</i> , 2017, 79, 814-829.	8.2	212
3	Optimization of 1D ZnO@TiO ₂ Core-Shell Nanostructures for Enhanced Photoelectrochemical Water Splitting under Solar Light Illumination. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 12153-12167.	4.0	190
4	Advanced Cu-Sn foam for selectively converting CO ₂ to CO in aqueous solution. <i>Applied Catalysis B: Environmental</i> , 2018, 236, 475-482.	10.8	118
5	Microwave-Assisted Synthesis of Reduced Graphene Oxide/SnO ₂ Nanocomposite for Oxygen Reduction Reaction in Microbial Fuel Cells. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 4633-4643.	4.0	103
6	Multi-functional energy conversion and storage electrodes using flower-like Zinc oxide nanostructures. <i>Energy</i> , 2014, 65, 639-646.	4.5	87
7	A UV-crosslinked polymer electrolyte membrane for quasi-solid dye-sensitized solar cells with excellent efficiency and durability. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 3706.	1.3	82
8	A Chemometric Approach for the Sensitization Procedure of ZnO Flowerlike Microstructures for Dye-Sensitized Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 11288-11295.	4.0	78
9	Characterization of photovoltaic modules for low-power indoor application. <i>Applied Energy</i> , 2013, 102, 1295-1302.	5.1	77
10	Additives and salts for dye-sensitized solar cells electrolytes: what is the best choice?. <i>Journal of Power Sources</i> , 2014, 264, 333-343.	4.0	76
11	High efficiency dye-sensitized solar cells exploiting sponge-like ZnO nanostructures. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 16203.	1.3	75
12	TiO ₂ nanotubes as flexible photoanode for back-illuminated dye-sensitized solar cells with hemi-squaraine organic dye and iodine-free transparent electrolyte. <i>Organic Electronics</i> , 2014, 15, 3715-3722.	1.4	74
13	As-grown vertically aligned amorphous TiO ₂ nanotube arrays as high-rate Li-based micro-battery anodes with improved long-term performance. <i>Electrochimica Acta</i> , 2015, 151, 222-229.	2.6	73
14	New insights in long-term photovoltaic performance characterization of cellulose-based gel electrolytes for stable dye-sensitized solar cells. <i>Electrochimica Acta</i> , 2014, 146, 44-51.	2.6	72
15	Charge transport improvement employing TiO ₂ nanotube arrays as front-side illuminated dye-sensitized solar cell photoanodes. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 2596-2602.	1.3	71
16	First Pseudohalogen Polymer Electrolyte for Dye-Sensitized Solar Cells Promising for <i>In Situ</i> Photopolymerization. <i>Journal of Physical Chemistry C</i> , 2013, 117, 20421-20430.	1.5	71
17	Novel electrode and electrolyte membranes: Towards flexible dye-sensitized solar cell combining vertically aligned TiO ₂ nanotube array and light-cured polymer network. <i>Journal of Membrane Science</i> , 2014, 470, 125-131.	4.1	71
18	Toward Totally Flexible Dye-Sensitized Solar Cells Based on Titanium Grids and Polymeric Electrolyte. <i>IEEE Journal of Photovoltaics</i> , 2016, 6, 498-505.	1.5	70

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19	Chainlike Mesoporous SnO ₂ as a Well-Performing Catalyst for Electrochemical CO ₂ Reduction. ACS Applied Energy Materials, 2019, 2, 3081-3091.	2.5	70
20	Electrodes/Electrolyte Interfaces in the Presence of a Surface-Modified Photopolymer Electrolyte: Application in Dye-Sensitized Solar Cells. ChemPhysChem, 2015, 16, 960-969.	1.0	69
21	Dispelling clichés at the nanoscale: the true effect of polymer electrolytes on the performance of dye-sensitized solar cells. Nanoscale, 2015, 7, 12010-12017.	2.8	68
22	Polymer electrolytes for dye-sensitized solar cells prepared by photopolymerization of PEG-based oligomers. International Journal of Hydrogen Energy, 2014, 39, 3036-3045.	3.8	67
23	Nanobranched ZnO Structure: p-Type Doping Induces Piezoelectric Voltage Generation and Ferroelectric-Photovoltaic Effect. Advanced Materials, 2015, 27, 4218-4223.	11.1	65
24	Photo-catalytic activity of BiVO ₄ thin-film electrodes for solar-driven water splitting. Applied Catalysis A: General, 2015, 504, 266-271.	2.2	58
25	Boron/Nitrogen-Codoped Carbon Nano-Onion Electrocatalysts for the Oxygen Reduction Reaction. ACS Applied Nano Materials, 2018, 1, 5763-5773.	2.4	57
26	Investigation of Transport and Recombination Properties in Graphene/Titanium Dioxide Nanocomposite for Dye-Sensitized Solar Cell Photoanodes. Electrochimica Acta, 2014, 131, 154-159.	2.6	56
27	Electrochemical and impedance characterization of Microbial Fuel Cells based on 2D and 3D anodic electrodes working with seawater microorganisms under continuous operation. Bioresource Technology, 2015, 195, 139-146.	4.8	56
28	Effects of pH variations on anodic marine consortia in a dual chamber microbial fuel cell. International Journal of Hydrogen Energy, 2017, 42, 1820-1829.	3.8	51
29	Coupled Copper-Zinc Catalysts for Electrochemical Reduction of Carbon Dioxide. ChemSusChem, 2020, 13, 4128-4139.	3.6	51
30	Electrochemical impedance spectroscopy as a tool to investigate the electroreduction of carbon dioxide: A short review. Journal of CO ₂ Utilization, 2018, 27, 22-31.	3.3	49
31	Microfluidic sealing and housing system for innovative dye-sensitized solar cell architecture. Microelectronic Engineering, 2011, 88, 2308-2310.	1.1	47
32	Biochar/Zinc Oxide Composites as Effective Catalysts for Electrochemical CO ₂ Reduction. ACS Sustainable Chemistry and Engineering, 2021, 9, 5445-5453.	3.2	46
33	An easy approach for the fabrication of TiO ₂ nanotube-based transparent photoanodes for Dye-sensitized Solar Cells. Solar Energy, 2013, 95, 90-98.	2.9	45
34	Vertically aligned TiO ₂ nanotube array for high rate Li-based micro-battery anodes with improved durability. Electrochimica Acta, 2013, 102, 233-239.	2.6	45
35	Nanostructured Mn _x O _y for oxygen reduction reaction (ORR) catalysts. Applied Surface Science, 2016, 388, 631-639.	3.1	42
36	Syngas production by electrocatalytic reduction of CO ₂ using Ag-decorated TiO ₂ nanotubes. International Journal of Hydrogen Energy, 2020, 45, 26458-26471.	3.8	42

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37	Sn-Decorated Cu for Selective Electrochemical CO ₂ to CO Conversion: Precision Architecture beyond Composition Design. ACS Applied Energy Materials, 2019, 2, 867-872.	2.5	41
38	Thick mesoporous TiO ₂ films through a sol-gel method involving a non-ionic surfactant: Characterization and enhanced performance for water photo-electrolysis. International Journal of Hydrogen Energy, 2014, 39, 21512-21522.	3.8	37
39	Surface energy tailoring of glass by contact printed PDMS. Applied Surface Science, 2012, 258, 9427-9431.	3.1	36
40	N-doped carbon nanofibers as catalyst layer at cathode in single chamber Microbial Fuel Cells. International Journal of Hydrogen Energy, 2019, 44, 4442-4449.	3.8	36
41	New Transparent Laser-Drilled Fluorine-doped Tin Oxide covered Quartz Electrodes for Photo-Electrochemical Water Splitting. Electrochimica Acta, 2014, 131, 184-194.	2.6	35
42	The active modulation of drug release by an ionic field effect transistor for an ultra-low power implantable nanofluidic system. Nanoscale, 2016, 8, 18718-18725.	2.8	35
43	AgCu Bimetallic Electrocatalysts for the Reduction of Biomass-Derived Compounds. ACS Applied Materials & Interfaces, 2021, 13, 23675-23688.	4.0	35
44	Coral-shaped ZnO nanostructures for dye-sensitized solar cell photoanodes. Progress in Photovoltaics: Research and Applications, 2014, 22, 189-197.	4.4	34
45	Combined experimental and theoretical investigation of the hemi-squaraine/TiO ₂ interface for dye sensitized solar cells. Physical Chemistry Chemical Physics, 2013, 15, 7198.	1.3	31
46	Electrochemical analysis of microbial fuel cells based on enriched biofilm communities from freshwater sediment. Electrochimica Acta, 2017, 237, 133-143.	2.6	31
47	An easy method for the room-temperature growth of spongelike nanostructured Zn films as initial step for the fabrication of nanostructured ZnO. Thin Solid Films, 2012, 524, 107-112.	0.8	30
48	Comparison of Hemi-Squaraine Sensitized TiO ₂ and ZnO Photoanodes for DSSC Applications. Journal of Physical Chemistry C, 2013, 117, 22778-22783.	1.5	30
49	Multifunctional NIR-reflective and self-cleaning UV-cured coating for solar cell applications based on cycloaliphatic epoxy resin. Progress in Organic Coatings, 2014, 77, 458-462.	1.9	30
50	Enhancement of electron lifetime in dye-sensitized solar cells using anodically grown TiO ₂ nanotube/nanoparticle composite photoanodes. Microelectronic Engineering, 2013, 111, 137-142.	1.1	29
51	Dynamical analysis of microbial fuel cells based on planar and 3D-packed anodes. Chemical Engineering Journal, 2016, 288, 38-49.	6.6	29
52	Fluid Dynamic Modeling for Microbial Fuel Cell Based Biosensor Optimization. Fuel Cells, 2017, 17, 627-634.	1.5	29
53	Novel Insights into Sb-Cu Catalysts for Electrochemical Reduction of CO ₂ . Applied Catalysis B: Environmental, 2022, 306, 121089.	10.8	25
54	Toward quasi-solid state Dye-sensitized Solar Cells: Effect of γ -Al ₂ O ₃ nanoparticle dispersion into liquid electrolyte. Solar Energy, 2015, 111, 125-134.	2.9	24

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55	Modeling of gas bubble-induced mass transport in the electrochemical reduction of carbon dioxide on nanostructured electrodes. <i>Journal of Catalysis</i> , 2019, 372, 39-48.	3.1	24
56	One-Pot Microwave-Assisted Synthesis of Reduced Graphene Oxide/Iron Oxide Nanocomposite Catalyst for the Oxygen Reduction Reaction. <i>ChemistrySelect</i> , 2016, 1, 3640-3646.	0.7	22
57	In situ continuous current production from marine floating microbial fuel cells. <i>Applied Energy</i> , 2018, 230, 78-85.	5.1	22
58	Microwave-Assisted Synthesis of Copper-Based Electrocatalysts for Converting Carbon Dioxide to Tunable Syngas. <i>ChemElectroChem</i> , 2020, 7, 229-238.	1.7	22
59	An Integrated Device for the Solar-Driven Electrochemical Conversion of CO ₂ to CO. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 7563-7568.	3.2	22
60	Facilely synthesized nitrogen-doped reduced graphene oxide functionalized with copper ions as electrocatalyst for oxygen reduction. <i>Npj 2D Materials and Applications</i> , 2021, 5, .	3.9	22
61	A new method for studying activity and reaction kinetics of photocatalytic water oxidation systems using a bubbling reactor. <i>Chemical Engineering Journal</i> , 2014, 238, 17-26.	6.6	21
62	MnxOy- based cathodes for oxygen reduction reaction catalysis in microbial fuel cells. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 4432-4441.	3.8	21
63	Electrospun Nanofibers: from Food to Energy by Engineered Electrodes in Microbial Fuel Cells. <i>Nanomaterials</i> , 2020, 10, 523.	1.9	21
64	Impedance spectroscopy analysis of the tunnelling conduction mechanism in piezoresistive composites. <i>Journal Physics D: Applied Physics</i> , 2014, 47, 345306.	1.3	20
65	Sponge-like ZnO nanostructures by low temperature water vapor-oxidation method as dye-sensitized solar cell photoanodes. <i>Journal of Alloys and Compounds</i> , 2014, 615, S487-S490.	2.8	20
66	Nonwoven mats of N-doped carbon nanofibers as high-performing anodes in microbial fuel cells. <i>Materials Today Energy</i> , 2020, 16, 100385.	2.5	20
67	Microfluidic housing system: a useful tool for the analysis of dye-sensitized solar cell components. <i>Applied Physics A: Materials Science and Processing</i> , 2012, 109, 377-383.	1.1	19
68	Proving the existence of Mn porphyrin-like complexes hosted in reduced graphene oxide with outstanding performance as oxygen reduction reaction catalysts. <i>2D Materials</i> , 2019, 6, 045001.	2.0	19
69	Multifunctional flexible membranes based on reduced graphene oxide/tin dioxide nanocomposite and cellulose fibers. <i>Electrochimica Acta</i> , 2019, 306, 420-426.	2.6	19
70	Environmental electroactive consortia as reusable biosensing element for freshwater toxicity monitoring. <i>New Biotechnology</i> , 2020, 55, 36-45.	2.4	19
71	Facile synthesis of cubic cuprous oxide for electrochemical reduction of carbon dioxide. <i>Journal of Materials Science</i> , 2021, 56, 1255-1271.	1.7	19
72	Photodetection and piezoelectric response from hard and flexible sponge-like ZnO-based structures. <i>Nano Energy</i> , 2013, 2, 1294-1302.	8.2	18

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73	Enhancement of photoconversion efficiency in dye-sensitized solar cells exploiting pulsed laser deposited niobium pentoxide blocking layers. <i>Thin Solid Films</i> , 2015, 574, 38-42.	0.8	18
74	Anodically-grown TiO ₂ nanotubes: Effect of the crystallization on the catalytic activity toward the oxygen reduction reaction. <i>Applied Surface Science</i> , 2017, 412, 447-454.	3.1	18
75	Electric Characterization and Modeling of Microfluidic-Based Dye-Sensitized Solar Cell. <i>International Journal of Photoenergy</i> , 2012, 2012, 1-11.	1.4	14
76	Biohybrid Cathode in Single Chamber Microbial Fuel Cell. <i>Nanomaterials</i> , 2019, 9, 36.	1.9	14
77	Insights into the Electrochemical Reduction of 5-Hydroxymethylfurfural at High Current Densities. <i>ChemSusChem</i> , 2022, 15, .	3.6	14
78	Dye-sensitized solar cell for a solar concentrator system. <i>Solar Energy</i> , 2016, 125, 307-313.	2.9	13
79	Thermal evolution of Mn _x O _y nanofibres as catalysts for the oxygen reduction reaction. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 28781-28787.	1.3	13
80	Beneficial effect of Fe addition on the catalytic activity of electrodeposited MnO _x films in the water oxidation reaction. <i>Electrochimica Acta</i> , 2018, 284, 294-302.	2.6	13
81	A Study of the Effect of Electrode Composition on the Electrochemical Reduction of CO ₂ . <i>Catalysis Today</i> , 2021, , .	2.2	13
82	Polymer-metal complexes as emerging catalysts for electrochemical reduction of carbon dioxide. <i>Journal of Applied Electrochemistry</i> , 2021, 51, 1301-1311.	1.5	12
83	Tandem devices for simultaneous CO ₂ reduction at the cathode and added-value products formation at the anode. <i>Journal of CO₂ Utilization</i> , 2021, 52, 101697.	3.3	12
84	Anodic microbial community analysis of microbial fuel cells based on enriched inoculum from freshwater sediment. <i>Bioprocess and Biosystems Engineering</i> , 2019, 42, 697-709.	1.7	11
85	N-doping modification by plasma treatment in polyacrylonitrile derived carbon-based nanofibers for Oxygen Reduction Reaction. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 13845-13854.	3.8	11
86	Fabrication of microstructures on glass by imprinting in conventional furnace for lab-on-chip application. <i>Microelectronic Engineering</i> , 2012, 95, 90-101.	1.1	10
87	CuZnAl-Oxide Nanopyramidal Mesoporous Materials for the Electrocatalytic CO ₂ Reduction to Syngas: Tuning of H ₂ /CO Ratio. <i>Nanomaterials</i> , 2021, 11, 3052.	1.9	10
88	Consistent static and small-signal physics-based modeling of dye-sensitized solar cells under different illumination conditions. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 14634.	1.3	9
89	Novel spongelike nanostructured ZnO films: Properties and applications. <i>Journal of Alloys and Compounds</i> , 2014, 586, S331-S335.	2.8	9
90	Resistive switching and impedance properties of soft nanocomposites based on Ag nanoparticles. <i>Applied Surface Science</i> , 2017, 424, 352-358.	3.1	9

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91	Correlation between impedance spectroscopy and bubble-induced mass transport in the electrochemical reduction of carbon dioxide. <i>Journal of Energy Chemistry</i> , 2022, 67, 500-507.	7.1	9
92	Well performing Fe-SnO ₂ for CO ₂ reduction to HCOOH. <i>Catalysis Communications</i> , 2022, 163, 106412.	1.6	9
93	Monitoring the dye impregnation time of nanostructured photoanodes for dye sensitized solar cells. <i>Journal of Physics: Conference Series</i> , 2013, 439, 012012.	0.3	8
94	Defining the role of nanonetting in the electrical behaviour of composite nanofiber/nets. <i>RSC Advances</i> , 2017, 7, 38812-38818.	1.7	8
95	Green-synthesized Nitrogen-Doped Carbon-Based Aerogels as Environmentally Friendly Catalysts for Oxygen Reduction in Microbial Fuel Cells. <i>Energy Technology</i> , 2018, 6, 1052-1059.	1.8	8
96	A long-term analysis of Pt counter electrodes for Dye-sensitized Solar Cells exploiting a microfluidic housing system. <i>Materials Chemistry and Physics</i> , 2015, 161, 74-83.	2.0	7
97	Electrospinning-on Electrode Assembly for Air-Cathodes in Microbial Fuel Cells. <i>Advanced Materials Interfaces</i> , 2018, 5, 1801107.	1.9	7
98	Zn- and Ti-Doped SnO ₂ for Enhanced Electroreduction of Carbon Dioxide. <i>Materials</i> , 2021, 14, 2354.	1.3	7
99	Living Bacteria Directly Embedded into Electrospun Nanofibers: Design of New Anode for Bio-Electrochemical Systems. <i>Nanomaterials</i> , 2021, 11, 3088.	1.9	7
100	Fabrication of large-area microfluidics structures on glass by imprinting and diode-pumped solid state laser writing techniques. <i>Microsystem Technologies</i> , 2011, 17, 1611-1619.	1.2	6
101	Modeling of the dye loading time influence on the electrical impedance of a dye-sensitized solar cell. <i>Journal of Applied Physics</i> , 2013, 114, 094901.	1.1	6
102	TiO ₂ Nanotube Array as Efficient Transparent Photoanode in Dye-Sensitized Solar Cell with High Electron Lifetime. <i>Acta Physica Polonica A</i> , 2013, 123, 376-379.	0.2	6
103	Integration of Portable Sedimentary Microbial Fuel Cells in Autonomous Underwater Vehicles. <i>Energies</i> , 2021, 14, 4551.	1.6	5
104	An Electrochemical Platform for the Carbon Dioxide Capture and Conversion to Syngas. <i>Energies</i> , 2021, 14, 7869.	1.6	5
105	Fast TiO ₂ Sensitization Using the Semisquaric Acid as Anchoring Group. <i>International Journal of Photoenergy</i> , 2013, 2013, 1-8.	1.4	4
106	Enhanced Power Extraction with Sediment Microbial Fuel Cells by Anode Alternation. <i>Fuels</i> , 2021, 2, 168-178.	1.3	4
107	A green and easy-to-assemble electrochemical biosensor based on thylakoid membranes for photosynthetic herbicides detection. <i>Biosensors and Bioelectronics</i> , 2022, 198, 113838.	5.3	4
108	Microwave-Assisted Synthesis of Nitrogen and Sulphur Doped Graphene Decorated with Antimony Oxide: An Effective Catalyst for Oxygen Reduction Reaction. <i>Materials</i> , 2022, 15, 10.	1.3	4

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109	Electrochemical Reduction of CO ₂ With Good Efficiency on a Nanostructured Cu-Al Catalyst. <i>Frontiers in Chemistry</i> , 0, 10, .	1.8	4
110	Fabrication of microstructures on nickel alloy by DPSS laser ablation technique for lab-on-chip applications. , 2010, , .		2
111	Efficient CO ₂ Electroreduction on Tin Modified Cuprous Oxide Synthesized via a One-Pot Microwave-Assisted Route. <i>Catalysts</i> , 2021, 11, 907.	1.6	2
112	Real-time temperature measurement during a laser annealing process featuring a microthermocouple array: Exploiting nano and micro-metrology. <i>Microelectronic Engineering</i> , 2011, 88, 2484-2488.	1.1	1
113	Fabrication of microstructures on different materials by diode-pumped solid state laser writing for microfluidics applications. <i>Microsystem Technologies</i> , 2013, 19, 1185-1194.	1.2	1
114	Sponge-like Porous ZnO Photoanodes for Highly Efficient dye-sensitized Solar Cells. <i>Acta Physica Polonica A</i> , 2013, 123, 386-389.	0.2	1
115	Characterization of Chemically Modified TiO ₂ Synthesized via Sustainable Superoxidation of Ti. <i>Journal of Physical Chemistry C</i> , 2022, 126, 6223-6230.	1.5	1
116	Anodically Grown TiO ₂ Nanotube Membranes: Synthesis, Characterization, and Application in Dye-Sensitized Solar Cells. , 2015, , 1-23.		0
117	Self-Organized Nano- and Microstructure of Electrochemical Materials by Design of Fabrication Approaches. , 2016, , 1033-1056.		0
118	Anodically Grown TiO ₂ Nanotube Membranes: Synthesis, Characterization, and Application in Dye-Sensitized Solar Cells. , 2016, , 1299-1325.		0