

Fabio Dionigi

List of Publications by Year in descending order

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35
papers

5,974
citations

257450

24
h-index

395702

33
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37
all docs

37
docs citations

37
times ranked

6329
citing authors

#	ARTICLE	IF	CITATIONS
1	NiFe-Based (Oxy)hydroxide Catalysts for Oxygen Evolution Reaction in Non-Acidic Electrolytes. <i>Advanced Energy Materials</i> , 2016, 6, 1600621.	19.5	765
2	In-situ structure and catalytic mechanism of NiFe and CoFe layered double hydroxides during oxygen evolution. <i>Nature Communications</i> , 2020, 11, 2522.	12.8	594
3	Electrolysis of low-grade and saline surface water. <i>Nature Energy</i> , 2020, 5, 367-377.	39.5	579
4	Direct Electrolytic Splitting of Seawater: Opportunities and Challenges. <i>ACS Energy Letters</i> , 2019, 4, 933-942.	17.4	578
5	Design Criteria, Operating Conditions, and Nickel-Iron Hydroxide Catalyst Materials for Selective Seawater Electrolysis. <i>ChemSusChem</i> , 2016, 9, 962-972.	6.8	467
6	Water electrolysis: from textbook knowledge to the latest scientific strategies and industrial developments. <i>Chemical Society Reviews</i> , 2022, 51, 4583-4762.	38.1	453
7	P-block single-metal-site tin/nitrogen-doped carbon fuel cell cathode catalyst for oxygen reduction reaction. <i>Nature Materials</i> , 2020, 19, 1215-1223.	27.5	278
8	Element-specific anisotropic growth of shaped platinum alloy nanocrystals. <i>Science</i> , 2014, 346, 1502-1506.	12.6	277
9	Alloy Nanocatalysts for the Electrochemical Oxygen Reduction (ORR) and the Direct Electrochemical Carbon Dioxide Reduction Reaction (CO ₂ RR). <i>Advanced Materials</i> , 2019, 31, e1805617.	21.0	255
10	Electrochemical Hydrogen Evolution: Sabatier's Principle and the Volcano Plot. <i>Journal of Chemical Education</i> , 2012, 89, 1595-1599.	2.3	243
11	Direct Electrolytic Splitting of Seawater: Activity, Selectivity, Degradation, and Recovery Studied from the Molecular Catalyst Structure to the Electrolyzer Cell Level. <i>Advanced Energy Materials</i> , 2018, 8, 1800338.	19.5	185
12	Intrinsic Electrocatalytic Activity for Oxygen Evolution of Crystalline 3d-Transition Metal Layered Double Hydroxides. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 14446-14457.	13.8	170
13	Tantalum Nitride Nanorod Arrays: Introducing Ni-Fe Layered Double Hydroxides as a Cocatalyst Strongly Stabilizing Photoanodes in Water Splitting. <i>Chemistry of Materials</i> , 2015, 27, 2360-2366.	6.7	158
14	Elemental Anisotropic Growth and Atomic-Scale Structure of Shape-Controlled Octahedral Pt-Ni-Co Alloy Nanocatalysts. <i>Nano Letters</i> , 2015, 15, 7473-7480.	9.1	156
15	Advancements in cathode catalyst and cathode layer design for proton exchange membrane fuel cells. <i>Nature Communications</i> , 2021, 12, 5984.	12.8	120
16	Current challenges related to the deployment of shape-controlled Pt alloy oxygen reduction reaction nanocatalysts into low Pt-loaded cathode layers of proton exchange membrane fuel cells. <i>Current Opinion in Electrochemistry</i> , 2019, 18, 61-71.	4.8	111
17	A comparison of rotating disc electrode, floating electrode technique and membrane electrode assembly measurements for catalyst testing. <i>Journal of Power Sources</i> , 2018, 392, 274-284.	7.8	94
18	Impact of Carbon Support Functionalization on the Electrochemical Stability of Pt Fuel Cell Catalysts. <i>Chemistry of Materials</i> , 2018, 30, 7287-7295.	6.7	73

#	ARTICLE	IF	CITATIONS
19	Gas phase photocatalytic water splitting with Rh ₂ S ₇ /Cr ₂ O ₃ /GaN:ZnO in μ -reactors. Energy and Environmental Science, 2011, 4, 2937.	30.8	71
20	Evidence of Mars-van-Krevelen Mechanism in the Electrochemical Oxygen Evolution on Ni-Based Catalysts. Angewandte Chemie - International Edition, 2021, 60, 14981-14988.	13.8	67
21	Dealloyed PtNi-Core-Shell Nanocatalysts Enable Significant Lowering of Pt Electrode Content in Direct Methanol Fuel Cells. ACS Catalysis, 2019, 9, 3764-3772.	11.2	66
22	Molecular Understanding of the Impact of Saline Contaminants and Alkaline pH on NiFe Layered Double Hydroxide Oxygen Evolution Catalysts. ACS Catalysis, 2021, 11, 6800-6809.	11.2	50
23	Suppression of the water splitting back reaction on GaN:ZnO photocatalysts loaded with core/shell cocatalysts, investigated using a μ -reactor. Journal of Catalysis, 2012, 292, 26-31.	6.2	45
24	Intrinsic Electrocatalytic Activity for Oxygen Evolution of Crystalline 3d-Transition Metal Layered Double Hydroxides. Angewandte Chemie, 2021, 133, 14567-14578.	2.0	30
25	Plateau-insulator transition in graphene. New Journal of Physics, 2010, 12, 053004.	2.9	22
26	Seed-Mediated Synthesis and Catalytic ORR Reactivity of Facet-Stable, Monodisperse Platinum Nano-Octahedra. ACS Applied Energy Materials, 2021, 4, 9542-9552.	5.1	18
27	Optical detection of quantum Hall effect of composite fermions and evidence of the $\nu=3/8$ state. Physical Review B, 2010, 81, .	3.2	14
28	Anisotropy of Pt nanoparticles on carbon- and oxide-support and their structural response to electrochemical oxidation probed by <i>in situ</i> techniques. Physical Chemistry Chemical Physics, 2020, 22, 22260-22270.	2.8	9
29	Evidence of Mars-van-Krevelen Mechanism in the Electrochemical Oxygen Evolution on Ni-Based Catalysts. Angewandte Chemie, 2021, 133, 15108-15115.	2.0	9
30	A transparent Pyrex μ -reactor for combined in situ optical characterization and photocatalytic reactivity measurements. Review of Scientific Instruments, 2013, 84, 103910.	1.3	7
31	Trion confinement and exciton shrinkage in the 2DEG at high magnetic fields. Solid State Communications, 2012, 152, 1123-1126.	1.9	2
32	Optical probing of the metal-to-insulator transition in a two-dimensional high-mobility electron gas. New Journal of Physics, 2011, 13, 063003.	2.9	1
33	Optical probing of quantum Hall effect of composite fermions and of the liquid-insulator transition. Journal of Physics: Conference Series, 2011, 334, 012022.	0.4	0
34	(Invited) Pt Alloy Octahedral Nanoparticle Catalysts from Screening Studies to Fuel Cell Measurements. ECS Meeting Abstracts, 2021, MA2021-02, 1192-1192.	0.0	0
35	Catalytically-Active Phases and Reaction Mechanism of Ni-Based and Co-Based Layered Double Hydroxides for the Oxygen Evolution Reaction. ECS Meeting Abstracts, 2022, MA2022-01, 1368-1368.	0.0	0