Alessandro Minguzzi

List of Publications by Year in descending order

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71 papers 2,206 citations

257450 24 h-index 233421 45 g-index

74 all docs

74 docs citations

74 times ranked 3380 citing authors

#	Article	IF	Citations
1	α-Fe ₂ O ₃ /NiOOH: An Effective Heterostructure for Photoelectrochemical Water Oxidation. ACS Catalysis, 2015, 5, 5292-5300.	11.2	219
2	Dynamic potential–pH diagrams application to electrocatalysts for wateroxidation. Chemical Science, 2012, 3, 217-229.	7.4	193
3	Observing the oxidation state turnover in heterogeneous iridium-based water oxidation catalysts. Chemical Science, 2014, 5, 3591.	7.4	190
4	Easy Accommodation of Different Oxidation States in Iridium Oxide Nanoparticles with Different Hydration Degree as Water Oxidation Electrocatalysts. ACS Catalysis, 2015, 5, 5104-5115.	11.2	105
5	H ₂ Production by Renewables Photoreforming on Pt–Au/TiO ₂ Catalysts Activated by Reduction. ChemSusChem, 2012, 5, 1800-1811.	6.8	102
6	Composite ternary SnO2–IrO2–Ta2O5 oxide electrocatalysts. Journal of Electroanalytical Chemistry, 2006, 589, 160-166.	3.8	93
7	Achieving efficient H2O2 production by a visible-light absorbing, highly stable photosensitized TiO2. Applied Catalysis B: Environmental, 2019, 244, 303-312.	20.2	85
8	Screening of Oxygen Evolution Electrocatalysts by Scanning Electrochemical Microscopy Using a Shielded Tip Approach. Analytical Chemistry, 2008, 80, 4055-4064.	6.5	76
9	Hierarchical Hematite Nanoplatelets for Photoelectrochemical Water Splitting. ACS Applied Materials & Samp; Interfaces, 2014, 6, 11997-12004.	8.0	65
10	Reaction of Various Reductants with Oxide Films on Pt Electrodes As Studied by the Surface Interrogation Mode of Scanning Electrochemical Microscopy (SI-SECM): Possible Validity of a Marcus Relationship. Journal of Physical Chemistry C, 2010, 114, 18645-18655.	3.1	52
11	An Operando X-ray Absorption Spectroscopy Study of a NiCuâ^'TiO ₂ Photocatalyst for H ₂ Evolution. ACS Catalysis, 2020, 10, 8293-8302.	11.2	46
12	Fixed Energy X-ray Absorption Voltammetry. Analytical Chemistry, 2013, 85, 7009-7013.	6.5	45
13	Electroreductions on Silverâ€Based Electrocatalysts: The Use of Ag Nanoparticles for CHCl ₃ to CH ₄ Conversion. Fuel Cells, 2009, 9, 253-263.	2.4	43
14	High-performance of bare and Ti-doped $\hat{l}\pm$ -MnO2 nanoparticles in catalyzing the Oxygen Reduction Reaction. Journal of Power Sources, 2016, 325, 116-128.	7.8	40
15	Dewetting of PtCu Nanoalloys on TiO ₂ Nanocavities Provides a Synergistic Photocatalytic Enhancement for Efficient H ₂ Evolution. ACS Applied Materials & Samp; Interfaces, 2020, 12, 38211-38221.	8.0	40
16	An Efficient Cu _{<i>x</i>} O Photocathode for Hydrogen Production at Neutral pH: New Insights from Combined Spectroscopy and Electrochemistry. ACS Applied Materials & Amp; Interfaces, 2016, 8, 21250-21260.	8.0	39
17	3D-printed photo-spectroelectrochemical devices for <i>in situ</i> absorption spectroscopy investigation. Journal of Synchrotron Radiation, 2016, 23, 622-628.	2.4	37
18	Quantitative Studies on Electrode Material Properties by Means of the Cavity Microelectrode. Analytical Chemistry, 2011, 83, 2819-2823.	6.5	29

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19	IrO ₂ -Based Disperse-Phase Electrocatalysts: A Complementary Study by Means of the Cavity-Microelectrode and Ex-Situ X-ray Absorption Spectroscopy. Journal of Physical Chemistry A, 2012, 116, 6497-6504.	2.5	29
20	Rapid screening of silver nanoparticles for the catalytic degradation of chlorinated pollutants in water. Applied Catalysis B: Environmental, 2015, 163, 554-563.	20.2	29
21	Photoelectrochemical and photocatalytic systems based on titanates for hydrogen peroxide formation. Journal of Electroanalytical Chemistry, 2018, 808, 395-402.	3.8	28
22	Physico-chemical characterization of IrO2–SnO2 sol-gel nanopowders for electrochemical applications. Journal of Applied Electrochemistry, 2009, 39, 2093-2105.	2.9	27
23	\hat{l}_{\pm} - and \hat{l}^3 -FeOOH: Stability, Reversibility, and Nature of the Active Phase under Hydrogen Evolution. ACS Applied Energy Materials, 2018, 1, 1716-1725.	5.1	26
24	Silver nanoparticles for hydrodehalogenation reduction: Evidence of a synergistic effect between catalyst and support. Electrochemistry Communications, 2012, 22, 25-28.	4.7	25
25	Influence of Strain on the Band Gap of Cu ₂ 0. Chemistry of Materials, 2019, 31, 4787-4792.	6.7	24
26	Chlorine Dioxide Degradation Issues on Metal and Plastic Water Pipes Tested in Parallel in a Semi-Closed System. International Journal of Environmental Research and Public Health, 2019, 16, 4582.	2.6	24
27	Cavity microelectrodes for the voltammetric investigation of electrocatalysts: the electroreduction of volatile organic halides on micro-sized silver powders. Journal of Applied Electrochemistry, 2008, 38, 965-971.	2.9	21
28	Structure and Stability of a Copper(II) Lactate Complex in Alkaline Solution: a Case Study by Energy-Dispersive X-ray Absorption Spectroscopy. Inorganic Chemistry, 2017, 56, 6982-6989.	4.0	19
29	Understanding Solid–Gas Reaction Mechanisms by Operando Soft X-Ray Absorption Spectroscopy at Ambient Pressure. Journal of Physical Chemistry C, 2020, 124, 14202-14212.	3.1	19
30	Copper Oxide-Based Photocatalysts and Photocathodes: Fundamentals and Recent Advances. Molecules, 2021, 26, 7271.	3.8	19
31	Designing materials by means of the cavity-microelectrode: the introduction of the quantitative rapid screening toward a highly efficient catalyst for water oxidation. Journal of Materials Chemistry, 2012, 22, 8896.	6.7	18
32	Gas-phase volatile organic chloride electroreduction: A versatile experimental setup for electrolytic dechlorination and voltammetric analysis. Electrochemistry Communications, 2014, 44, 63-65.	4.7	18
33	The Influence of Carbonaceous Matrices and Electrocatalytic MnO2 Nanopowders on Lithium-Air Battery Performances. Nanomaterials, 2016, 6, 10.	4.1	18
34	Operando and Time-Resolved X-Ray Absorption Spectroscopy for the Study of Photoelectrode Architectures. Electrochimica Acta, 2016, 207, 16-21.	5.2	17
35	Time-Resolved X-ray Absorption Spectroscopy in (Photo)Electrochemistry. Surfaces, 2018, 1, 138-150.	2.3	17
36	Rapid Characterization of Oxygen-Evolving Electrocatalyst Spot Arrays by the Substrate Generation/Tip Collection Mode of Scanning Electrochemical Microscopy with Decreased O ₂ Diffusion Layer Overlap. Journal of Physical Chemistry C, 2015, 119, 2941-2947.	3.1	16

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37	NO _x degradation in a continuous large-scale reactor using full-size industrial photocatalytic tiles. Catalysis Science and Technology, 2016, 6, 2261-2267.	4.1	16
38	Observation of charge transfer cascades in α-Fe ₂ O ₃ /lrO _x photoanodes by operando X-ray absorption spectroscopy. Physical Chemistry Chemical Physics, 2017, 19, 5715-5720.	2.8	16
39	Silver electrodeposition from water–acetonitrile mixed solvents and mixed electrolytes in the presence of tetrabutylammonium perchlorate. Part l—electrochemical nucleation on glassy carbon electrode. Journal of Solid State Electrochemistry, 2009, 13, 1577-1584.	2.5	15
40	Reverse type I core - CuI /shell - CuO: A versatile heterostructure for photoelectrochemical applications. Electrochimica Acta, 2018, 266, 441-451.	5.2	15
41	Operando X-ray absorption spectroscopy of WO3 photoanodes. Electrochimica Acta, 2019, 320, 134561.	5.2	14
42	Bulk, Surface and Morphological Features of Nanostructured Tin Oxide by a Controlled Alkoxide-Gel Path. Journal of Nanoparticle Research, 2006, 8, 653-660.	1.9	13
43	Electrochemically assisted deposition on TiO2scaffold for Tissue Engineering: an apatite bio-inspired crystallization pathway. Journal of Materials Chemistry, 2011, 21, 400-407.	6.7	13
44	In Situ Dispersive EXAFS in Electrocatalysis: The Investigation of the Local Structure of IrO _{<i>x</i>} in Chronoamperometric Conditions as a Case Study. Journal of Spectroscopy, 2014, 2014, 1-7.	1.3	13
45	IrO2–SnO2 mixtures as electrocatalysts for the oxygen reduction reaction in alkaline media. Journal of Applied Electrochemistry, 2013, 43, 171-179.	2.9	12
46	Evidence of Facilitated Electron Transfer on Hydrogenated Selfâ€Doped TiO ₂ Nanocrystals. ChemElectroChem, 2014, 1, 1415-1421.	3.4	12
47	Low-temperature sol–gel nanocrystalline tin oxide. Electrochimica Acta, 2005, 50, 4419-4425.	5.2	11
48	Benzyl Chloride Electroreduction on Ag Cathodes in CH3CN in the Presence of Small Amounts of Water: Evidences of Quantitative Effects on Reaction Rates and Mechanism. Electrocatalysis, 2013, 4, 353-357.	3.0	11
49	Fixed Energy X-ray Absorption Voltammetry and Extended X-ray Absorption fine Structure of Ag nanoparticle electrodes. Journal of Electroanalytical Chemistry, 2016, 766, 71-77.	3.8	11
50	In situ characterizations of photoelectrochemical cells for solar fuels and chemicals. MRS Energy & Sustainability, 2020, 7, 1.	3.0	11
51	New electrocatalytic materials based on mixed metal oxides: electrochemical quartz crystal microbalance characterization. Journal of Applied Electrochemistry, 2008, 38, 973-978.	2.9	10
52	Direct Observation of Photoinduced Higher Oxidation States at a Semiconductor/Electrocatalyst Junction. ACS Catalysis, 2020, 10, 10476-10487.	11.2	10
53	TiO2 nanocrystal particles and electrodes. The combined role of pH and metal substrate. Journal of Electroanalytical Chemistry, 2008, 621, 185-197.	3.8	9
54	Au-based/electrochemically etched cavity-microelectrodes as optimal tool for quantitative analyses on finely dispersed electrode materials: Pt/C, IrO2-SnO2 and Ag catalysts. Electrochimica Acta, 2013, 114, 637-642.	5.2	9

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55	Operando X-ray Absorption Spectroscopy (XAS) Observation of Photoinduced Oxidation in FeNi (Oxy)hydroxide Overlayers on Hematite (l±-Fe ₂ O ₃) Photoanodes for Solar Water Splitting. Langmuir, 2020, 36, 11564-11572.	3.5	9
56	New Surface Properties in Porcelain Gres Tiles with a Look to Human and Environmental Safety. Advances in Materials Science and Engineering, 2012, 2012, 1-8.	1.8	8
57	The dynamics of pseudocapacitive phenomena studied by Energy Dispersive X-Ray Absorption Spectroscopy on hydrous iridium oxide electrodes in alkaline media. Electrochimica Acta, 2016, 212, 247-253.	5.2	8
58	Dynamics of oxide growth on Pt nanoparticles electrodes in the presence of competing halides by operando energy dispersive X-Ray absorption spectroscopy. Electrochimica Acta, 2018, 270, 378-386.	5.2	8
59	Hydrodehalogenation of Polychloromethanes on Silverâ€Based Gas Diffusion Electrodes. ChemElectroChem, 2021, 8, 1892-1898.	3.4	8
60	Smart interfaces in Li-ion batteries: Near-future key challenges. Electrochimica Acta, 2022, 415, 140258.	5.2	8
61	Electroreduction., 2018,, 3-28.		7
62	ORR in Non-Aqueous Solvent for Li-Air Batteries: The Influence of Doped MnO2-Nanoelectrocatalyst. Nanomaterials, 2020, 10, 1735.	4.1	6
63	The cavity-microelectrode as a tip for scanning electrochemical microscopy. Electrochemistry Communications, 2015, 59, 100-103.	4.7	5
64	Electrodeposited Cu thin layers as low cost and effective underlayers for Cu2O photocathodes in photoelectrochemical water electrolysis. Journal of Solid State Electrochemistry, 2020, 24, 339-355.	2.5	5
65	How to improve the lifetime of an electrocatalyst. Nature Catalysis, 2020, 3, 687-689.	34.4	5
66	Role of Synthetic Parameters on the Structural and Optical Properties of N,Sn-Copromoted Nanostructured TiO2: A Combined Ti K-Edge and Sn L2,3-Edges X-ray Absorption Investigation. Nanomaterials, 2020, 10, 1224.	4.1	4
67	AEMFC Exploiting a Pd/CeO2-Based Anode Compared to Classic PEMFC via LCA Analysis. Hydrogen, 2021, 2, 246-261.	3.4	4
68	Molecular cluster route for the facile synthesis of a stable and active Pt nanoparticle catalyst. New Journal of Chemistry, 2021, 45, 11292-11303.	2.8	4
69	Determining the Efficiency of Photoelectrode Materials by Coupling Cavityâ€Microelectrode Tips and Scanning Electrochemical Microscopy. ChemElectroChem, 2020, 7, 2440-2447.	3.4	2
70	Strain or Electronic Effects? – The influence of alkali metals on the bandgap of Cu2O. Chemical Physics Letters, 2020, 755, 137799.	2.6	1
71	Organic Pollutants for Wastewater Treatment, Reductive Dechlorination. , 2014, , 1398-1402.		0