Alberto Vertova

List of Publications by Year
in descending order

79 papers	2,054 citations	257450 24 h-index	265206 42 g-index
79 all docs	79 docs citations	79 times ranked	2847 citing authors

#	Article	IF	Citations
1	Dynamic potentialâ€“pH diagrams application to electrocatalysts for wateroxidation. Chemical Science, 2012, 3, 217-229.	7.4	193
2	Observing the oxidation state turnover in heterogeneous iridium-based water oxidation catalysts. Chemical Science, 2014, 5, 3591.	7.4	190
3	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
4	Composite ternary SnO2â€“IrO2â€“Ta2O5 oxide electrocatalysts. Journal of Electroanalytical Chemistry, 2006, 589, 160-166.	3.8	93
5	Electrocatalysis on silver and silver alloys for dichloromethane and trichloromethane dehalogenation. Electrochimica Acta, 2004, 49, 4035-4046.	5.2	92
6	Microcrystalline cellulose powders: structure, surface features and water sorption capability. Cellulose, 1999, 6, 57-69.	4.9	90
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	The Electrocatalytic Performance of Silver in the Reductive Dehalogenation of Bromophenols. Journal of the Electrochemical Society, 2001, 148, D102.	2.9	53
9	Electroreduction of volatile organic halides on activated silver cathodes. Journal of Applied Electrochemistry, 2005, 35, 363-368.	2.9	50
10	Electroreductions on Silverâ€Based Electrocatalysts: The Use of Ag Nanoparticles for CHCl₃ to CH₄ Conversion. Fuel Cells, 2009, 9, 253-263.	2.4	43
11	High-performance of bare and Ti-doped Î±-MnO2 nanoparticles in catalyzing the Oxygen Reduction Reaction. Journal of Power Sources, 2016, 325, 116-128.	7.8	40
12	An Efficient Cu_{<i>x</i>}O Photocathode for Hydrogen Production at Neutral pH: New Insights from Combined Spectroscopy and Electrochemistry. ACS Applied Materials & Interfaces, 2016, 8, 21250-21260.	8.0	39
13	Electrodialytic recovery of light carboxylic acids from industrial aqueous wastes. Journal of Applied Electrochemistry, 2009, 39, 2051-2059.	2.9	38
14	3D-printed photo-spectroelectrochemical devices for<i>in situ</i>and<i>in operando</i>X-ray absorption spectroscopy investigation. Journal of Synchrotron Radiation, 2016, 23, 622-628.	2.4	37
15	Lifetime of Ion-Selective Electrodes Based on Charged Ionophores. Analytical Chemistry, 2000, 72, 1843-1852.	6.5	35
16	Nanocrystalline titanium oxide by solâ€“gel method. The role of the solvent removal step. Physical Chemistry Chemical Physics, 2003, 5, 1689-1694.	2.8	32
17	Impact of self-assembly composition on the alternate interfacial electron transfer for electrostatically immobilized cytochromec. Biopolymers, 2007, 87, 68-73.	2.4	30
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	IrO₂-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	Photoelectrochemical and photocatalytic systems based on titanates for hydrogen peroxide formation. Journal of Electroanalytical Chemistry, 2018, 808, 395-402.	3.8	28
21	pH measurements in non-aqueous and mixed solvents: Predicting pH(PS) of potassium hydrogen phthalate for alcoholwater mixtures (Technical Report). Pure and Applied Chemistry, 1998, 70, 1419-1422.	1.9	27
22	Physico-chemical characterization of IrO2â€“SnO2 sol-gel nanopowders for electrochemical applications. Journal of Applied Electrochemistry, 2009, 39, 2093-2105.	2.9	27
23	Î±- and Î³-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	The role of surface electrification on the growth and structural features of titania nanoparticles. Physical Chemistry Chemical Physics, 2004, 6, 3535.	2.8	24
26	Influence of Strain on the Band Gap of Cu₂O. Chemistry of Materials, 2019, 31, 4787-4792.	6.7	24
27	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
28	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
29	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
30	Copper Oxide-Based Photocatalysts and Photocathodes: Fundamentals and Recent Advances. Molecules, 2021, 26, 7271.	3.8	19
31	Thermodynamics of the cell: {MexHg1âˆ’x | MeCl(m) | AgCl | Ag} (Me = Na,K,Cs) in (ethanol + water) solvent mixtures. Journal of Chemical Thermodynamics, 1995, 27, 245-251.	2.0	18
32	Preparation and electrochemical behaviour of {[Ru(bipy)4Cl2Ag]NO3(CHCl3)Â·6H2O}n obtained from the self-assembly of trans-Ru(bipy)4Cl2 and AgNO3. Electrochimica Acta, 2007, 52, 2603-2611.	5.2	18
33	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
34	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
35	The Influence of Carbonaceous Matrices and Electrocatalytic MnO2 Nanopowders on Lithium-Air Battery Performances. Nanomaterials, 2016, 6, 10.	4.1	18
36	The solvent friction mechanism for outer-sphere electron exchange at bare metal electrodes. The case of Au/Ru(NH3)63+/2+ redox system. Electrochemistry Communications, 2003, 5, 241-245.	4.7	17

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37	Operando and Time-Resolved X-Ray Absorption Spectroscopy for the Study of Photoelectrode Architectures. Electrochimica Acta, 2016, 207, 16-21.	5.2	17
38	Time-Resolved X-ray Absorption Spectroscopy in (Photo)Electrochemistry. Surfaces, 2018, 1, 138-150.	2.3	17
39	Rapid Characterization of Oxygen-Evolving Electrocatalyst Spot Arrays by the Substrate Generation/Tip Collection Mode of Scanning Electrochemical Microscopy with Decreased O₂ Diffusion Layer Overlap. Journal of Physical Chemistry C, 2015, 119, 2941-2947.	3.1	16
40	Observation of charge transfer cascades in Î±-Fe₂O₃/IrO_xphotoanodes by operando X-ray absorption spectroscopy. Physical Chemistry Chemical Physics, 2017, 19, 5715-5720.	2.8	16
41	Transference Numbers of Alkali Chlorides and Characterization of Salt Bridges for Use in Methanol + Water Mixed Solvents. Journal of Chemical & Engineering Data, 1999, 44, 1002-1008.	1.9	15
42	Silver electrodeposition from waterâ€“acetonitrile mixed solvents and mixed electrolytes in the presence of tetrabutylammonium perchlorate. Part Iâ€”electrochemical nucleation on glassy carbon electrode. Journal of Solid State Electrochemistry, 2009, 13, 1577-1584.	2.5	15
43	Reverse type I core - CuI /shell - CuO: A versatile heterostructure for photoelectrochemical applications. Electrochimica Acta, 2018, 266, 441-451.	5.2	15
44	Operando X-ray absorption spectroscopy of WO3 photoanodes. Electrochimica Acta, 2019, 320, 134561.	5.2	14
45	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
46	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
47	IrO2â€“SnO2 mixtures as electrocatalysts for the oxygen reduction reaction in alkaline media. Journal of Applied Electrochemistry, 2013, 43, 171-179.	2.9	12
48	A new, long-lived Ca-selective electrode. Sensors and Actuators B: Chemical, 1995, 23, 27-33.	7.8	11
49	Low-temperature solâ€“gel nanocrystalline tin oxide. Electrochimica Acta, 2005, 50, 4419-4425.	5.2	11
50	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
51	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
52	The Use of Hexaamineruthenium(III) Redox Marker for the Characterization of SAM-Au Amperometric Sensors. Electroanalysis, 2003, 15, 1297-1301.	2.9	10
53	New electrocatalytic materials based on mixed metal oxides: electrochemical quartz crystal microbalance characterization. Journal of Applied Electrochemistry, 2008, 38, 973-978.	2.9	10
54	Direct Observation of Photoinduced Higher Oxidation States at a Semiconductor/Electrocatalyst Junction. ACS Catalysis, 2020, 10, 10476-10487.	11.2	10

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55	Batch effects, water content and aqueous/organic solvent reactivity of microcrystalline cellulose samples. International Journal of Biological Macromolecules, 1999, 26, 269-277.	7.5	9
56	Ion-channel Sensors Based on ETH 1001 Ionophore Embedded in Charged-alkanethiol Self-assembled Monolayers on Gold Electrode Surfaces. Analytical Sciences, 2006, 22, 1581-1584.	1.6	9
57	TiO2 nanocrystal particles and electrodes. The combined role of pH and metal substrate. Journal of Electroanalytical Chemistry, 2008, 621, 185-197.	3.8	9
58	Electroreduction of Halogenated Organic Compounds. , 2010, , 279-306.		9
59	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
60	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
61	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
62	Ad hoc tailored electrocatalytic MnO2 nanorods for the oxygen reduction in aqueous and organic media. Journal of Electroanalytical Chemistry, 2018, 808, 439-445.	3.8	8
63	Hydrodehalogenation of Polychloromethanes on Silverâ€Based Gas Diffusion Electrodes. ChemElectroChem, 2021, 8, 1892-1898.	3.4	8
64	Smart interfaces in Li-ion batteries: Near-future key challenges. Electrochimica Acta, 2022, 415, 140258.	5.2	8
65	Electroreduction. , 2018, , 3-28.		7
66	Charge-Transfer Patterns for [Ru(NH3)6]3+/2+ at SAM Modified Gold Electrodes: Impact of the Permeability of a Redox Probe. The Open Physical Chemistry Journal, 2008, 2, 17-21.	0.4	7
67	ORR in Non-Aqueous Solvent for Li-Air Batteries: The Influence of Doped MnO2-Nanoelectrocatalyst. Nanomaterials, 2020, 10, 1735.	4.1	6
68	Monitoring hydrogen absorption in Pd electrodes by means of electric and electrochemical signals. Journal of Applied Electrochemistry, 2002, 32, 661-670.	2.9	5
69	Electron transfer across the interface gold/self-assembled organic monolayer. Comparison of single- and two-component systems. Russian Journal of Electrochemistry, 2012, 48, 351-363.	0.9	5
70	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
71	Thermodynamics of the amalgam cell: {Me_{<i>x</i>}Hg_{1â€<i>x</i>} |MeCl(<i>m</i>)| AgCl| Ag} (with Me = K, Rb) in (methanol+water) solvent mixtures. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1997, 101, 842-846.	0.9	4
72	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

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73	AEMFC Exploiting a Pd/CeO2-Based Anode Compared to Classic PEMFC via LCA Analysis. Hydrogen, 2021, 2, 246-261.	3.4	4
74	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
75	Probing the Electron Transfer Process of Cytochrome C Embedded in Mixed Thiol SAM on Electrodeposited Gold. Journal of the Electrochemical Society, 2012, 159, F81-F86.	2.9	3
76	Determining the Efficiency of Photoelectrode Materials by Coupling Cavityâ€Microelectrode Tips and Scanning Electrochemical Microscopy. ChemElectroChem, 2020, 7, 2440-2447.	3.4	2
77	Studying electron transfer reaction at the Au/n-decanethiol/aqueous solution of NaNO3 interface by electrochemical impedance spectroscopy. Russian Journal of Electrochemistry, 2013, 49, 26-37.	0.9	1
78	Strain or Electronic Effects? â€“ The influence of alkali metals on the bandgap of Cu2O. Chemical Physics Letters, 2020, 755, 137799.	2.6	1
79	Organic Pollutants for Wastewater Treatment, Reductive Dechlorination. , 2014, , 1398-1402.		0