Armand Bettelheim

List of Publications by Year
in descending order

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77 papers	1,693 citations	331259 21 h-index	301761 39 g-index
77 all docs	77 docs citations	77 times ranked	1298 citing authors

#	Article	IF	Citations
1	A bilayer coating as an oxygen-transfer cascade for the electrochemical ambient conversion of methane to oxygenates. Chemical Communications, 2022, 58, 3154-3157.	2.2	3
2	Room-temperature conversion of the photoelectrochemical oxidation of methane into electricity at nanostructured TiO₂. Sustainable Energy and Fuels, 2021, 5, 127-134.	2.5	10
3	Oligomers Intermediates in Between Two New Distinct Homonuclear Uranium(IV) DOTP Complexes**. Chemistry - A European Journal, 2021, 27, 8264-8267.	1.7	3
4	Charge Capacitance and Hydrogen Storage Capacity of Drop Cast and Electrodeposited Reduced Graphene Oxide Coatings. Journal of the Electrochemical Society, 2021, 168, 090506.	1.3	3
5	Enhancement of Electrocatalytic CO₂ Reduction to Methane by CoTMPyP when Hosted in a 3D Covalent Graphene Framework. ACS Applied Energy Materials, 2021, 4, 10033-10041.	2.5	9
6	Tuning the electrocatalytic 2- and 4-electron reduction of oxygen by electrodeposited hybrid graphene-Co/Mn porphyrin coatings. Electrochimica Acta, 2020, 356, 136792.	2.6	6
7	DFT and Empirical Considerations on Electrocatalytic Water/Carbon Dioxide Reduction by CoTMPyP in Neutral Aqueous Solutions**. ChemPhysChem, 2020, 21, 2644-2650.	1.0	1
8	On the Aqueous Chemistry of the U^{IV}â€“DOTA Complex. Chemistry - A European Journal, 2020, 26, 3390-3403.	1.7	12
9	Different Pathways for CO₂ Electrocatalytic Reduction by Confined CoTMPyP in Electrodeposited Reduced Graphene Oxide. ACS Applied Energy Materials, 2019, 2, 8434-8440.	2.5	16
10	Enhancement of photoelectrochemical organics degradation and power generation by electrodeposited coatings of g-C₃N₄ and graphene on TiO₂ nanotube arrays. Nanoscale Advances, 2019, 1, 4128-4136.	2.2	8
11	Growth Behavior of Copper and Platinum Nanoparticles in an Imidazolium Based Ionic Liquid. Journal of the Electrochemical Society, 2017, 164, H5026-H5030.	1.3	5
12	Structural Characterization of Am(III)- and Pu(III)-DOTA Complexes. Inorganic Chemistry, 2017, 56, 12248-12259.	1.9	22
13	Graphene Oxide Sheets Combine into Conductive Coatings by Direct Oxidative Electropolymerization. Scientific Reports, 2017, 7, 4987.	1.6	9
14	Electropolymerization as a new route to g-C3N4 coatings on TiO2 nanotubes for solar applications. RSC Advances, 2016, 6, 87314-87318.	1.7	10
15	Spectroscopic, electrochemical, and structural aspects of the Ce(IV)/Ce(III) DOTA redox couple chemistry in aqueous solutions. Journal of Coordination Chemistry, 2016, 69, 2895-2907.	0.8	10
16	Electrocatalytic Activity towards Oxygen Reduction of Electropolymerized Cobalt Porphyrin Doped with Ionic-Liquid-Functionalized Graphene. Journal of the Electrochemical Society, 2015, 162, H481-H485.	1.3	6
17	Chemical bias of electrochemical and photoelectrochemical water splitting using a hydrogel separator. Electrochemistry Communications, 2015, 60, 97-99.	2.3	5
18	Structures Self-Assembled from Anionic Graphene and Cationic Manganese Porphyrin: Characterization and Application in Artificial Photosynthesis. European Journal of Inorganic Chemistry, 2014, 2014, 2288-2295.	1.0	21

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19	Spectral and Electrochemical Properties of Lanthanide Thiocyanate Complexes Ionic as Liquid Components. European Journal of Inorganic Chemistry, 2013, 2013, 3477-3482.	1.0	9
20	Carbon Aerogels with Ionic Liquid Stabilized Pt and PtRu Nanoparticles as Electrocatalytic Fuel Cell Electrodes. ECS Electrochemistry Letters, 2013, 2, F55-F59.	1.9	5
21	Ion-Conductive and Transparent Resorcinol-Formaldehyde Hydrogels for Electrochemical and Solar Applications. Electrochemical and Solid-State Letters, 2012, 15, F1.	2.2	9
22	Macrocellular iron foams: characterization and facile conversion into water splitting photoanodes. RSC Advances, 2012, 2, 9376.	1.7	4
23	Evidence for the Formation of Cobalt Porphyrinâ^'Quinone Complexes Stabilized at Carbon-Based Surfaces Toward the Design of Efficient Non-Noble-Metal Oxygen Reduction Catalysts. Journal of Physical Chemistry Letters, 2010, 1, 398-401.	2.1	40
24	Mediation at High Potentials for the Reduction of Oxygen to Water by Cobalt Porphyrinâ€"Quinone Systems in Porous Aerogel Carbon Electrodes. Journal of the Electrochemical Society, 2010, 157, B27.	1.3	30
25	Electrocatalytic oxygen reduction by Co(III) porphyrins incorporated in aerogel carbon electrodes. Journal of Electroanalytical Chemistry, 2008, 621, 91-96.	1.9	39
26	Interaction of Fe(III) Tetrakis(4-N-methylpyridinium)porphyrin with Sodium Dodecyl Sulfate at Submicellar Concentrations. Langmuir, 2008, 24, 11514-11517.	1.6	11
27	FUEL CELLS AND IONICALLY CONDUCTIVE MEMBRANES: AN OVERVIEW. Reviews in Chemical Engineering, 2007, 23, .	2.3	3
28	Tautomerism in N-confused porphyrins as the basis of a novel fiber-optic humidity sensor. Journal of Porphyrins and Phthalocyanines, 2006, 10, 63-66.	0.4	12
29	Electrocrystallization of calcium carbonate on carbon-based electrodes. Journal of Electroanalytical Chemistry, 2005, 575, 195-202.	1.9	31
30	Removal of Phenol and Derivatives from Aqueous Solutions by Electropolymerization in Aerogel Carbon Electrodes. Electrochemical and Solid-State Letters, 2005, 8, E42.	2.2	7
31	Preparation of a Novel Pd Hydride Electrode Based on Polymer Embedded Nanosized Pd Incorporated in Porous Carbon Substrate. Electrochemical and Solid-State Letters, 2004, 7, A484.	2.2	5
32	Electropolymerized porphyrin films as methanol barriers in direct methanol fuel cells. Journal of Electroanalytical Chemistry, 2004, 571, 265-272.	1.9	18
33	Use of electropolymerized films of macrocyclic compounds in direct methanol fuel cell components. Journal of Power Sources, 2004, 130, 158-162.	4.0	18
34	Spectroscopic and electrochemical characterization of solutions and films of a new redox couple: Co(II)/Co(III) N-confused porphyrin. Inorganic Chemistry Communication, 2004, 7, 1238-1241.	1.8	19
35	Effect of Organic Additives on Electrochemical Surface Precipitation and Polymorphism of CaCO3. Chemical Engineering and Technology, 2003, 26, 341-346.	0.9	9
36	Surface Processes Characterization for the Corrosion of Copper in Borate Solutions. Journal of the Electrochemical Society, 2002, 149, B314.	1.3	16

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37	Solid-State Electrochemical Probing of Atmospheric and Galvanic Corrosion. Journal of the Electrochemical Society, 2002, 149, B328.	1.3	1
38	Electroprecipitation of Ag(II)/Ag(III) tetraphenylsulfonate porphyrin and electrocatalytic behavior of the films. Electrochemistry Communications, 2002, 4, 862-865.	2.3	11
39	Spectroscopic and electrochemical characterization of the interaction of nitrogen monoxide and cobalt tetrasulfonated phthalocyanine in aqueous solutions and surfactant films. Inorganica Chimica Acta, 2000, 305, 53-60.	1.2	21
40	Effect of Sodium Dodecylsulfate on the Corrosion Behavior of Copper in Borate Aqueous Solutions. Electrochemical and Solid-State Letters, 1999, 3, 183.	2.2	1
41	Ligation and Mediated Oxidation of Nitrogen Monoxide by Nickel(II) Tetrasulfonated Phthalocyanine. Journal of the Electrochemical Society, 1997, 144, L228-L230.	1.3	16
42	Reflection-FTIR spectroelectrochemistry using ionically conductive polymer films: electrochemical preparation and spectroscopic characterization of some metal hydrides. Journal of Electroanalytical Chemistry, 1996, 405, 251-254.	1.9	3
43	Electrochemical response to H2, O2, CO2 and NH3 of a solid-state cell based on a cation- or anion-exchange membrane serving as a solid polymer electrolyte. Analytica Chimica Acta, 1995, 310, 139-144.	2.6	31
44	Spectroscopic and electrochemical response to nitrogen monoxide of a cationic iron porphyrin immobilized in nafion-coated electrodes or membranes. Journal of the Chemical Society Chemical Communications, 1994, , 619.	2.0	30
45	Cobalt phthalocyanine as a mediator for the electrooxidation of glucose oxidase at glucose electrodes. Analytica Chimica Acta, 1993, 281, 327-333.	2.6	26
46	Plasma-nitrided Î±-Î² Ti alloy: layer characterization and mechanical properties modification. Surface and Coatings Technology, 1993, 57, 19-29.	2.2	34
47	Electrocatalytic properties of chemically polymerized films of cobalt, iron and manganese tetrakis(o-aminophenyl)porphyrins. Journal of Electroanalytical Chemistry, 1993, 359, 209-221.	1.9	39
48	Use of Nafion as a Solid Polymer Electrolyte for the Electroreduction of Tungsten (VI) Fluoride. Journal of the Electrochemical Society, 1992, 139, 132-136.	1.3	6
49	Conductivity response of porous electrodes supported on perfluorosulfonic acid membranes to acidic gas mixtures. Analytical Chemistry, 1991, 63, 2724-2727.	3.2	10
50	Mediated electron transfer for the electrooxidation of glucose oxidase by manganese tetrakis(o-aminophenyl) porphyrin. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1991, 307, 293-298.	0.3	10
51	Aging Effects of Epoxy Resin on Joining of Aluminum Plates. Journal of Adhesion, 1991, 36, 109-124.	1.8	10
52	Dioxygen reduction and hydrogen peroxide dismutation using electropolymerized bilayers of cobalt + manganese tetrakis(o-aminophenyl)porphyrins. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1990, 281, 147-161.	0.3	16
53	A New Electrolytic Solution for the Direct Electrodeposition of Copper on Aluminum and Other Chemically Reactive Substrates. Journal of the Electrochemical Society, 1990, 137, 3151-3153.	1.3	10
54	Dioxygen fixation by a cobalt(II)â€“ammoniacal complex and its electroreduction in a nafion coated solid-state three-electrode cell. Journal of the Chemical Society Chemical Communications, 1990, , 521-522.	2.0	2

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55	Application of Nafion as a Polymer Solid Electrolyte for Voltammetry in the Absence of a Contacting Electrolyte Solution. Journal of the Electrochemical Society, 1989, 136, 3863-3867.	1.3	26
56	Electrochemistry of various substituted aminophenyl iron porphyrins. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1989, 266, 93-108.	0.3	28
57	Electrochemistry of various substituted aminophenyl iron porphyrins. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1989, 266, 109-123.	0.3	22
58	Redox and electrocatalytic properties towards dioxygen reduction of ruthenium tetra(ortho-aminophenyl)porphyrin complexes with various axial ligands. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1988, 246, 139-154.	0.3	18
59	A New Polymer Agâ€‰/â€‰AgCl Reference Electrode for Electrochemistry with No Contacting Electrolyte Solution. Journal of the Electrochemical Society, 1988, 135, 1041-1042.	1.3	6
60	Application of a polymer solid electrolyte for the vapor-phase electrocatalysis of dioxygen reduction by some cobalt porphyrins. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1987, 238, 259-276.	0.3	25
61	Electrocatalysis of dioxygen reduction in aqueous acid and base by multimolecular layer films of electropolymerized cobalt tetra(o-aminophenyl)porphyrin. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1987, 217, 271-286.	0.3	91
62	Electrochemical polymerization of amino-, pyrrole-, and hydroxy-substituted tetraphenylporphyrins. Inorganic Chemistry, 1987, 26, 1009-1017.	1.9	387
63	Electrochemistry of the manganese(III)â€“manganese(IV) 5,10,15,20-tetrakis(p-trimethylammoniophenyl)porphyrinate couple. Journal of the Chemical Society Dalton Transactions, 1986, , 2297-2301.	1.1	9
64	Electrochemical Behavior of Water in Immobilized Salt Electrolytes: II . Cyclic Voltammetry. Journal of the Electrochemical Society, 1985, 132, 1588-1591.	1.3	3
65	Electrodeposition of Ruthenium from a LiClâ€‰â€â€‰KCl Melt. Journal of the Electrochemical Society, 1985, 132, 1775-1776.	1.3	2
66	Redox properties of copper tetra(4-N,Nâ€²,Nâ€³-trimethylanilinium)porphyrin. Electrochemical and spectral studies. Journal of the Chemical Society Faraday Transactions I, 1985, 81, 1577.	1.0	1
67	Electrocatalytic reduction of dioxygen by cobalt tetra(4-N Nâ€²Nâ€³-trimethylanilinium)porphyrin. Journal of the Chemical Society Faraday Transactions I, 1984, 80, 1139.	1.0	23
68	Electrochemical Behavior of Water in Immobilized Salt Electrolytes: I . Electrical Conductivity and Thermal Measurements. Journal of the Electrochemical Society, 1984, 131, 2531-2535.	1.3	4
69	Electrochemical and spectroscopic properties of manganese tetra(4-NNâ€²Nâ€³-trimethylanilinium)porphyrin. Journal of the Chemical Society Faraday Transactions I, 1983, 79, 1555.	1.0	21
70	Catalysis of Oxygen Cathodic Reduction by Adsorbed Iron(111)â€Tetra (N,N,Nâ€Trimethylanilinium) Porphyrin on Glassy Carbon Electrodes. Journal of the Electrochemical Society, 1982, 129, 2247-2250.	1.3	38
71	Electroanalysis of oxygen reduction. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1980, 110, 93-102.	0.3	97
72	Electrocatalysis of oxygen reduction. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1979, 99, 391-397.	0.3	81

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73	Rotating-ring-disk analysis of iron tetra(N-methylpyridyl)porphyrin in electrocatalysis of oxygen. Analytical Chemistry, 1979, 51, 2257-2260.	3.2	78
74	Catalysis of Oxygen Cathodic Reduction in Cobalt Ammoniacal Solutions. Journal of the Electrochemical Society, 1977, 124, 531-532.	1.3	3
75	Homogeneous catalysis of cathodic reduction of oxygen in copperâ€“cystamine aqueous solutions. Journal of the Chemical Society Faraday Transactions I, 1977, 73, 582.	1.0	8
76	Electroreduction of cobalt-amino peroxo complexes. Part 1.â€”The reduction of oxygen in the Co(II)+ ammonia system. Journal of the Chemical Society Faraday Transactions I, 1977, 73, 143.	1.0	1
77	Electroreduction of cobalt-amino peroxo complexes. Part 2.â€”The reduction of oxygen in the Co(II)-ethylenediamine and Co(II)-triethylenetetramine systems. Journal of the Chemical Society Faraday Transactions I, 1977, 73, 150.	1.0	0