Ermete Antolini

List of Publications by Year
in descending order

103 papers	12,111 citations	44069 48 h-index	34986 98 g-index
110 all docs	110 docs citations	110 times ranked	11157 citing authors

#	Article	IF	Citations
1	Carbon supports for low-temperature fuel cell catalysts. Applied Catalysis B: Environmental, 2009, 88, 1-24.	20.2	1,027
2	Catalysts for direct ethanol fuel cells. Journal of Power Sources, 2007, 170, 1-12.	7.8	1,008
3	Palladium in fuel cell catalysis. Energy and Environmental Science, 2009, 2, 915.	30.8	975
4	Alkaline direct alcohol fuel cells. Journal of Power Sources, 2010, 195, 3431-3450.	7.8	806
5	Formation of carbon-supported PtM alloys for low temperature fuel cells: a review. Materials Chemistry and Physics, 2003, 78, 563-573.	4.0	584
6	Iridium As Catalyst and Cocatalyst for Oxygen Evolution/Reduction in Acidic Polymer Electrolyte Membrane Electrolyzers and Fuel Cells. ACS Catalysis, 2014, 4, 1426-1440.	11.2	489
7	The stability of Ptâ€“M (M=first row transition metal) alloy catalysts and its effect on the activity in low temperature fuel cells. Journal of Power Sources, 2006, 160, 957-968.	7.8	451
8	The methanol oxidation reaction on platinum alloys with the first row transition metals. Applied Catalysis B: Environmental, 2006, 63, 137-149.	20.2	383
9	Graphene as a new carbon support for low-temperature fuel cell catalysts. Applied Catalysis B: Environmental, 2012, 123-124, 52-68.	20.2	366
10	LiCoO2: formation, structure, lithium and oxygen nonstoichiometry, electrochemical behaviour and transport properties. Solid State Ionics, 2004, 170, 159-171.	2.7	300
11	Title is missing!. Journal of Materials Science, 2003, 38, 2995-3005.	3.7	278
12	Ceramic materials as supports for low-temperature fuel cell catalysts. Solid State Ionics, 2009, 180, 746-763.	2.7	259
13	An overview of platinum-based catalysts as methanol-resistant oxygen reduction materials for direct methanol fuel cells. Journal of Alloys and Compounds, 2008, 461, 253-262.	5.5	245
14	Structure and Activity of Carbon-Supported Ptâˆ'Co Electrocatalysts for Oxygen Reduction. Journal of Physical Chemistry B, 2004, 108, 17767-17774.	2.6	205
15	Effect of temperature on the mechanism of ethanol oxidation on carbon supported Pt, PtRu and Pt3Sn electrocatalysts. Journal of Power Sources, 2006, 157, 98-103.	7.8	205
16	Platinum-based ternary catalysts for low temperature fuel cells. Applied Catalysis B: Environmental, 2007, 74, 337-350.	20.2	174
17	Structural parameters of supported fuel cell catalysts: The effect of particle size, inter-particle distance and metal loading on catalytic activity and fuel cell performance. Applied Catalysis B: Environmental, 2016, 181, 298-313.	20.2	160
18	Carbon supported Ptâ€“Co alloys as methanol-resistant oxygen-reduction electrocatalysts for direct methanol fuel cells. Applied Catalysis B: Environmental, 2005, 57, 283-290.	20.2	158

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19	Review in Applied Electrochemistry. Number 54 Recent Developments in Polymer Electrolyte Fuel Cell Electrodes. Journal of Applied Electrochemistry, 2004, 34, 563-576.	2.9	150
20	Ethanol oxidation on a carbon-supported Pt75Sn25 electrocatalyst prepared by reduction with formic acid: Effect of thermal treatment. Applied Catalysis B: Environmental, 2007, 73, 106-115.	20.2	149
21	Alloy vs. intermetallic compounds: Effect of the ordering on the electrocatalytic activity for oxygen reduction and the stability of low temperature fuel cell catalysts. Applied Catalysis B: Environmental, 2017, 217, 201-213.	20.2	146
22	Platinum-based ternary catalysts for low temperature fuel cells. Applied Catalysis B: Environmental, 2007, 74, 324-336.	20.2	143
23	Photo-assisted methanol oxidation on Pt-TiO2 catalysts for direct methanol fuel cells: A short review. Applied Catalysis B: Environmental, 2018, 237, 491-503.	20.2	139
24	Electrocatalysis of oxygen reduction on a carbon supported platinumâ€“vanadium alloy in polymer electrolyte fuel cells. Electrochimica Acta, 2002, 48, 263-270.	5.2	134
25	Effect of synthesis method and structural characteristics of Ptâ€“Sn fuel cell catalysts on the electro-oxidation of CH3OH and CH3CH2OH in acid medium. Catalysis Today, 2011, 160, 28-38.	4.4	134
26	Physical and morphological characteristics and electrochemical behaviour in PEM fuel cells of PtRuâ€Š/C catalysts. Journal of Solid State Electrochemistry, 2001, 5, 131-140.	2.5	132
27	Ptâ€“Sn/C electrocatalysts for methanol oxidation synthesized by reduction with formic acid. Electrochimica Acta, 2005, 50, 5496-5503.	5.2	130
28	Tungsten-based materials for fuel cell applications. Applied Catalysis B: Environmental, 2010, 96, 245-266.	20.2	130
29	Composite materials for polymer electrolyte membrane microbial fuel cells. Biosensors and Bioelectronics, 2015, 69, 54-70.	10.1	120
30	The renaissance of unsupported nanostructured catalysts for low-temperature fuel cells: from the size to the shape of metal nanostructures. Journal of Materials Science, 2011, 46, 4435-4457.	3.7	116
31	Effect of Ru addition on the structural characteristics and the electrochemical activity for ethanol oxidation of carbon supported Ptâ€“Sn alloy catalysts. Electrochemistry Communications, 2007, 9, 398-404.	4.7	111
32	The stability of molten carbonate fuel cell electrodes: A review of recent improvements. Applied Energy, 2011, 88, 4274-4293.	10.1	110
33	Composite materials: An emerging class of fuel cell catalyst supports. Applied Catalysis B: Environmental, 2010, 100, 413-426.	20.2	106
34	Evaluation of the stability and durability of Pt and Ptâ€“Co/C catalysts for polymer electrolyte membrane fuel cells. Journal of Power Sources, 2008, 182, 83-90.	7.8	105
35	Particle size effect for ethanol electro-oxidation on Pt/C catalysts in half-cell and in a single direct ethanol fuel cell. Journal of Electroanalytical Chemistry, 2011, 654, 108-115.	3.8	104
36	Nitrogen-doped carbons by sustainable N- and C-containing natural resources as nonprecious catalysts and catalyst supports for low temperature fuel cells. Renewable and Sustainable Energy Reviews, 2016, 58, 34-51.	16.4	100

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37	Ethanol Oxidation on Carbon Supported Pt-Sn Electrocatalysts Prepared by Reduction with Formic Acid. Journal of the Electrochemical Society, 2007, 154, B39.	2.9	89
38	The problem of Ru dissolution from Ptâ€“Ru catalysts during fuel cell operation: analysis and solutions. Journal of Solid State Electrochemistry, 2011, 15, 455-472.	2.5	86
39	Synthesis and Thermal Stability of LiCoO2. Journal of Solid State Chemistry, 1995, 117, 1-7.	2.9	81
40	Carbon supported Ptâ€“Co (3:1) alloy as improved cathode electrocatalyst for direct ethanol fuel cells. Journal of Power Sources, 2007, 164, 111-114.	7.8	80
41	Carbon supported PtCo electrocatalyst prepared by the formic acid method for the oxygen reduction reaction in polymer electrolyte fuel cells. Journal of Power Sources, 2005, 141, 13-18.	7.8	73
42	The use of rare earth-based materials in low-temperature fuel cells. International Journal of Hydrogen Energy, 2011, 36, 15752-15765.	7.1	69
43	Palladium-based electrodes: A way to reduce platinum content in polymer electrolyte membrane fuel cells. Electrochimica Acta, 2011, 56, 2299-2305.	5.2	65
44	LixNi1â^'xO (0<xâ‰0.3) solid solutions: formation, structure and transport properties. Materials Chemistry and Physics, 2003, 82, 937-948.	4.0	63
45	Pt-Ni and Pt-M-Ni (M = Ru, Sn) Anode Catalysts for Low-Temperature Acidic Direct Alcohol Fuel Cells: A Review. Energies, 2017, 10, 42.	3.1	62
46	Stability of Ptâ€“Ni/C (1:1) and Pt/C electrocatalysts as cathode materials for polymer electrolyte fuel cells: Effect of ageing tests. Journal of Power Sources, 2009, 191, 344-350.	7.8	57
47	Glycerol Electro-Oxidation in Alkaline Media and Alkaline Direct Glycerol Fuel Cells. Catalysts, 2019, 9, 980.	3.5	55
48	Oxygen reduction on a Pt70Ni30/C electrocatalyst prepared by the borohydride method in H2SO4/CH3OH solutions. Journal of Power Sources, 2006, 155, 161-166.	7.8	49
49	Influence of operational parameters on the performance of PEMFCs with serpentine flow field channels having different (rectangular and trapezoidal) cross-section shape. International Journal of Hydrogen Energy, 2014, 39, 12052-12060.	7.1	49
50	Ethanol electro-oxidation on partially alloyed Pt-Sn-Rh/C catalysts. Electrochimica Acta, 2014, 147, 483-489.	5.2	47
51	Preparation of carbon supported binary Ptâ€“M alloy catalysts (M=first row transition metals) by low/medium temperature methods. Materials Chemistry and Physics, 2007, 101, 395-403.	4.0	44
52	Photoelectrocatalytic fuel cells and photoelectrode microbial fuel cells for wastewater treatment and power generation. Journal of Environmental Chemical Engineering, 2019, 7, 103241.	6.7	44
53	Electro-oxidation of ethanol on ternary Ptâ€“Snâ€“Ce/C catalysts. Applied Catalysis B: Environmental, 2015, 165, 176-184.	20.2	43
54	Iron-containing platinum-based catalysts as cathode and anode materials for low-temperature acidic fuel cells: a review. RSC Advances, 2016, 6, 3307-3325.	3.6	42

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55	A simple model to assess the contribution of alloyed and non-alloyed platinum and tin to the ethanol oxidation reaction on Ptâ€"Sn/C catalysts: Application to direct ethanol fuel cell performance. Electrochimica Acta, 2010, 55, 6485-6490.	5.2	39
56	Effect of the Structural Characteristics of Binary Ptâ€"Ru and Ternary Ptâ€"Ruâ€"M Fuel Cell Catalysts on the Activity of Ethanol Electrooxidation in Acid Medium. ChemSusChem, 2013, 6, 966-973.	6.8	38
57	The oxygen reduction on Pt-Ni and Pt-Ni-M catalysts for low-temperature acidic fuel cells: A review. International Journal of Energy Research, 2018, 42, 3747-3769.	4.5	38
58	The stability of LiAlO2 powders and electrolyte matrices in molten carbonate fuel cell environment. Ceramics International, 2013, 39, 3463-3478.	4.8	35
59	Title is missing!. Journal of Materials Science, 2002, 37, 133-139.	3.7	34
60	Lignocellulose, Cellulose and Lignin as Renewable Alternative Fuels for Direct Biomass Fuel Cells. ChemSusChem, 2021, 14, 189-207.	6.8	30
61	Effect of the relationship between particle size, inter-particle distance, and metal loading of carbon supported fuel cell catalysts on their catalytic activity. Journal of Nanoparticle Research, 2012, 14, 1.	1.9	28
62	CO tolerance and stability of PtRu and PtRuMo electrocatalysts supported on N-doped graphene nanoplatelets for polymer electrolyte membrane fuel cells. International Journal of Hydrogen Energy, 2020, 45, 5276-5284.	7.1	25
63	Structural and electrochemical characterization of carbon supported Ptâ€"Pr catalysts for direct ethanol fuel cells prepared using a modified formic acid method in a CO atmosphere. Physical Chemistry Chemical Physics, 2013, 15, 11730.	2.8	24
64	Enhanced photocatalytic inactivation of E. coli by natural pyrite in presence of citrate and EDTA as effective chelating agents: Experimental evaluation and kinetic and ANN models. Journal of Environmental Chemical Engineering, 2019, 7, 102906.	6.7	24
65	Electro-oxidation of ethanol on ternary non-alloyed Ptâ€"Snâ€"Pr/C catalysts. Journal of Power Sources, 2015, 275, 377-383.	7.8	23
66	Activity, short-term stability (poisoning tolerance) and durability of carbon supported Ptâ€"Pr catalysts for ethanol oxidation. Journal of Power Sources, 2014, 251, 402-410.	7.8	22
67	Effect of the degree of alloying of PtRu/C (1:1) catalysts on ethanol oxidation. Ionics, 2013, 19, 1037-1045.	2.4	20
68	Lithium loss kinetics from polycrystalline LixNi1â^'xO at high temperatures. Journal of Materials Chemistry, 1998, 8, 2783-2786.	6.7	19
69	An empirical model to evaluate the contribution of alloyed and non-alloyed tin to the ethanol oxidation reaction on Pt-Sn/C catalysts based on the presence of SnO2 and a Pt(1â^'x)Snx solid solution: Application to DEFC performance. International Journal of Hydrogen Energy, 2011, 36, 11043-11047.	7.1	19
70	Iridium Application in Lowâ€Temperature Acidic Fuel Cells: Ptâ€Free Irâ€Based Catalysts or Second/Third Promoting Metal in Ptâ€Based Catalysts?. ChemElectroChem, 2014, 1, 318-328.	3.4	18
71	Synthesis, Characterization and CO Tolerance Evaluation in PEMFCs of Pt2RuMo Electrocatalysts. Catalysts, 2019, 9, 61.	3.5	18
72	Lithium loss from lithium cobalt oxide: hexagonal Li0.5Co0.5O to cubic Li0.065Co0.935O phase transition. Solid State Sciences, 2001, 3, 721-726.	0.7	17

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73	LiCoO2: formation, structure, lithium and oxygen nonstoichiometry, electrochemical behaviour and transport properties. Solid State Ionics, 2004, 170, 159-159.	2.7	16
74	Evaluation of the Optimum Composition of Low-Temperature Fuel Cell Electrocatalysts for Methanol Oxidation by Combinatorial Screening. ACS Combinatorial Science, 2017, 19, 47-54.	3.8	16
75	Effect of Structural Characteristics of Binary Palladiumâ€“Cobalt Fuel Cell Catalysts on the Activity for Oxygen Reduction. ChemPlusChem, 2014, 79, 765-775.	2.8	15
76	External abiotic glucose fuel cells. Sustainable Energy and Fuels, 2021, 5, 5038-5060.	4.9	15
77	Partial Methane Oxidation in Fuel Cell-Type Reactors for Co-Generation of Energy and Chemicals: A Short Review. Catalysts, 2022, 12, 217.	3.5	14
78	Preparation and properties of Liî—¸Coî—¸O compounds. Journal of the European Ceramic Society, 1998, 18, 1405-1411.	5.7	13
79	Formation of ternary lithium oxideâ€“nickel oxideâ€“magnesium oxide solid solution from the Li/Ni/MgO system. Materials Letters, 2001, 51, 385-388.	2.6	11
80	Ethylene glycol oxidation on carbon supported binary PtM (MÂ=ÂRh, Pd an Ni) electrocatalysts in alkaline media. Journal of Electroanalytical Chemistry, 2021, 880, 114859.	3.8	11
81	Direct propane fuel cells. Fuel, 2022, 315, 123152.	6.4	11
82	Physical properties of anionic poly(Îµ-caprolactam) synthesized in the presence of calcium chloride. Polymer, 1989, 30, 1099-1104.	3.8	9
83	Effect of lithium carbonate on the densification of LixNi1â^'xO solid solutions at temperatures up to 900Â°C. Materials Letters, 1991, 12, 117-122.	2.6	9
84	Structural change of LixNi1 â^' x during synthesis. Materials Letters, 1997, 30, 59-63.	2.6	8
85	A new way of obtaining LixNi1â^'xO cathodes for molten-carbonate fuel cells. Journal of Power Sources, 1992, 40, 265-270.	7.8	7
86	Effect of Atomic Ordering on the Activity for Methanol and Formic Acid Oxidation of Ptâ€Based Electrocatalysts. Energy Technology, 2019, 7, 1800553.	3.8	7
87	Formation of LixNi1â^'xO solid solution from mixtures. Materials Letters, 1993, 16, 286-290.	2.6	6
88	Sintering of LixNi1â^'xO solid solutions at 750 Â°C. Materials Chemistry and Physics, 1998, 52, 152-156.	4.0	5
89	Li2O evaporation from LixCo1â^'xO solid solutions at 1200Â°C. Ceramics International, 2001, 27, 675-679.	4.8	5
90	Electro-oxidation of Glycerol on Carbon Supported Pt75CoxNi25-x (x = 0, 0.9, 12.5, 24.1 and 25) Catalysts in an Alkaline Medium. Electrocatalysis, 2018, 9, 673-681.	3.0	5

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91	CO Tolerance and Stability of Graphene and N-Doped Graphene Supported Pt Anode Electrocatalysts for Polymer Electrolyte Membrane Fuel Cells. Catalysts, 2020, 10, 597.	3.5	5
92	Thermal treatment of Co/Li2CO3 mixtures at 1200 Â°C. Materials Letters, 1995, 24, 89-95.	2.6	4
93	Effect of CeO2 Presence on the Electronic Structure and the Activity for Ethanol Oxidation of Carbon Supported Pt. Catalysts, 2021, 11, 579.	3.5	4
94	Effect of the method of obtaining Li2CO3î—¸LiyNi1â^'yO mixtures on the densification of the resulting LixNi1â^'xO solid solutions. Ceramics International, 1992, 18, 399-402.	4.8	2
95	On Li2O evaporation from LixNi1â^'xO solid solution. Ceramics International, 1999, 25, 677-679.	4.8	2
96	Effect of CoO presence on the structure of LixCo1 â^' xO obtained by LiCoO2 decomposition. Materials Letters, 1997, 31, 335-337.	2.6	1
97	Ethanol Oxidation on Pt-Sn Electrocatalysts Supported on Carbon Prepared by Reduction with Formic Acid. ECS Transactions, 2006, 3, 1307-1316.	0.5	1
98	Anode Catalysts for Alkaline Direct Alcohol Fuel Cells and Characteristics of the Catalyst Layer. Lecture Notes in Energy, 2013, , 89-127.	0.3	1
99	A review study of the preparation of porous lithium-doped nickel oxide. Journal of the European Ceramic Society, 1993, 12, 139-145.	5.7	0
100	Preparation and characterization of superconducting YBa2Cu3O7-x thick films from powder of non-homogeneous particle size. Applied Superconductivity, 1993, 1, 1773-1784.	0.5	0
101	LixNi1-xO (0 < x â‰ 0.3) Solid Solutions: Formation, Structure and Transport Properties. ChemInform, 2004, 35, no.	0.0	0
102	Frontispiece: Effect of Structural Characteristics of Binary Palladium-Cobalt Fuel Cell Catalysts on the Activity for Oxygen Reduction. ChemPlusChem, 2014, 79, n/a-n/a.	2.8	0
103	Effect of MgO coverage on the synthesis and thermal treatment of Pt-Sn/C catalysts. Materials Letters, 2019, 244, 6-9.	2.6	0