

# Ermete Antolini

## List of Publications by Year in descending order

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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	Direct propane fuel cells. <i>Fuel</i> , 2022, 315, 123152.	6.4	11
2	Partial Methane Oxidation in Fuel Cell-Type Reactors for Co-Generation of Energy and Chemicals: A Short Review. <i>Catalysts</i> , 2022, 12, 217.	3.5	14
3	Lignocellulose, Cellulose and Lignin as Renewable Alternative Fuels for Direct Biomass Fuel Cells. <i>ChemSusChem</i> , 2021, 14, 189-207.	6.8	30
4	Ethylene glycol oxidation on carbon supported binary PtM (M=Rh, Pd and Ni) electrocatalysts in alkaline media. <i>Journal of Electroanalytical Chemistry</i> , 2021, 880, 114859.	3.8	11
5	External abiotic glucose fuel cells. <i>Sustainable Energy and Fuels</i> , 2021, 5, 5038-5060.	4.9	15
6	Effect of CeO <sub>2</sub> Presence on the Electronic Structure and the Activity for Ethanol Oxidation of Carbon Supported Pt. <i>Catalysts</i> , 2021, 11, 579.	3.5	4
7	CO tolerance and stability of PtRu and PtRuMo electrocatalysts supported on N-doped graphene nanoplatelets for polymer electrolyte membrane fuel cells. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 5276-5284.	7.1	25
8	CO Tolerance and Stability of Graphene and N-Doped Graphene Supported Pt Anode Electrocatalysts for Polymer Electrolyte Membrane Fuel Cells. <i>Catalysts</i> , 2020, 10, 597.	3.5	5
9	Effect of Atomic Ordering on the Activity for Methanol and Formic Acid Oxidation of Pt-Based Electrocatalysts. <i>Energy Technology</i> , 2019, 7, 1800553.	3.8	7
10	Photoelectrocatalytic fuel cells and photoelectrode microbial fuel cells for wastewater treatment and power generation. <i>Journal of Environmental Chemical Engineering</i> , 2019, 7, 103241.	6.7	44
11	Synthesis, Characterization and CO Tolerance Evaluation in PEMFCs of Pt <sub>2</sub> RuMo Electrocatalysts. <i>Catalysts</i> , 2019, 9, 61.	3.5	18
12	Effect of MgO coverage on the synthesis and thermal treatment of Pt-Sn/C catalysts. <i>Materials Letters</i> , 2019, 244, 6-9.	2.6	0
13	Glycerol Electro-Oxidation in Alkaline Media and Alkaline Direct Glycerol Fuel Cells. <i>Catalysts</i> , 2019, 9, 980.	3.5	55
14	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. <i>Journal of Environmental Chemical Engineering</i> , 2019, 7, 102906.	6.7	24
15	Electro-oxidation of Glycerol on Carbon Supported Pt <sub>75</sub> CoxNi <sub>25-x</sub> (x = 0, 0.9, 12.5, 24.1 and 25) Catalysts in an Alkaline Medium. <i>Electrocatalysis</i> , 2018, 9, 673-681.	3.0	5
16	The oxygen reduction on Pt-Ni and Pt-Ni-M catalysts for low-temperature acidic fuel cells: A review. <i>International Journal of Energy Research</i> , 2018, 42, 3747-3769.	4.5	38
17	Photo-assisted methanol oxidation on Pt-TiO <sub>2</sub> catalysts for direct methanol fuel cells: A short review. <i>Applied Catalysis B: Environmental</i> , 2018, 237, 491-503.	20.2	139
18	Alloy vs. intermetallic compounds: Effect of the ordering on the electrocatalytic activity for oxygen reduction and the stability of low temperature fuel cell catalysts. <i>Applied Catalysis B: Environmental</i> , 2017, 217, 201-213.	20.2	146

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19	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
20	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
21	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
22	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
23	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
24	Composite materials for polymer electrolyte membrane microbial fuel cells. Biosensors and Bioelectronics, 2015, 69, 54-70.	10.1	120
25	Electro-oxidation of ethanol on ternary non-alloyed Pt-Sn-Pr/C catalysts. Journal of Power Sources, 2015, 275, 377-383.	7.8	23
26	Electro-oxidation of ethanol on ternary Pt-Sn-Ce/C catalysts. Applied Catalysis B: Environmental, 2015, 165, 176-184.	20.2	43
27	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
28	Activity, short-term stability (poisoning tolerance) and durability of carbon supported Pt-Pr catalysts for ethanol oxidation. Journal of Power Sources, 2014, 251, 402-410.	7.8	22
29	Iridium Application in Low-Temperature Acidic Fuel Cells: Pt-Free Ir-Based Catalysts or Second/Third Promoting Metal in Pt-Based Catalysts?. ChemElectroChem, 2014, 1, 318-328.	3.4	18
30	Ethanol electro-oxidation on partially alloyed Pt-Sn-Rh/C catalysts. Electrochimica Acta, 2014, 147, 483-489.	5.2	47
31	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
32	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
33	Effect of Structural Characteristics of Binary Palladium-Cobalt Fuel Cell Catalysts on the Activity for Oxygen Reduction. ChemPlusChem, 2014, 79, 765-775.	2.8	15
34	Effect of the degree of alloying of PtRu/C (1:1) catalysts on ethanol oxidation. Ionics, 2013, 19, 1037-1045.	2.4	20
35	The stability of LiAlO <sub>2</sub> powders and electrolyte matrices in molten carbonate fuel cell environment. Ceramics International, 2013, 39, 3463-3478.	4.8	35
36	Anode Catalysts for Alkaline Direct Alcohol Fuel Cells and Characteristics of the Catalyst Layer. Lecture Notes in Energy, 2013, , 89-127.	0.3	1

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37	Effect of the Structural Characteristics of Binary Pt–Ru and Ternary Pt–Ru–M Fuel Cell Catalysts on the Activity of Ethanol Electrooxidation in Acid Medium. <i>ChemSusChem</i> , 2013, 6, 966-973.	6.8	38
38	Structural and electrochemical characterization of carbon supported Pt–Pr catalysts for direct ethanol fuel cells prepared using a modified formic acid method in a CO atmosphere. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 11730.	2.8	24
39	Effect of the relationship between particle size, inter-particle distance, and metal loading of carbon supported fuel cell catalysts on their catalytic activity. <i>Journal of Nanoparticle Research</i> , 2012, 14, 1.	1.9	28
40	Graphene as a new carbon support for low-temperature fuel cell catalysts. <i>Applied Catalysis B: Environmental</i> , 2012, 123-124, 52-68.	20.2	366
41	The stability of molten carbonate fuel cell electrodes: A review of recent improvements. <i>Applied Energy</i> , 2011, 88, 4274-4293.	10.1	110
42	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 SnO <sub>2</sub> and a Pt(1-x)Sn <sub>x</sub> solid solution: Application to DEFC performance. <i>International Journal of Hydrogen Energy</i> , 2011, 36, 11043-11047.	7.1	19
43	The use of rare earth-based materials in low-temperature fuel cells. <i>International Journal of Hydrogen Energy</i> , 2011, 36, 15752-15765.	7.1	69
44	The renaissance of unsupported nanostructured catalysts for low-temperature fuel cells: from the size to the shape of metal nanostructures. <i>Journal of Materials Science</i> , 2011, 46, 4435-4457.	3.7	116
45	The problem of Ru dissolution from Pt–Ru catalysts during fuel cell operation: analysis and solutions. <i>Journal of Solid State Electrochemistry</i> , 2011, 15, 455-472.	2.5	86
46	Effect of synthesis method and structural characteristics of Pt–Sn fuel cell catalysts on the electro-oxidation of CH <sub>3</sub> OH and CH <sub>3</sub> CH <sub>2</sub> OH in acid medium. <i>Catalysis Today</i> , 2011, 160, 28-38.	4.4	134
47	Palladium-based electrodes: A way to reduce platinum content in polymer electrolyte membrane fuel cells. <i>Electrochimica Acta</i> , 2011, 56, 2299-2305.	5.2	65
48	Particle size effect for ethanol electro-oxidation on Pt/C catalysts in half-cell and in a single direct ethanol fuel cell. <i>Journal of Electroanalytical Chemistry</i> , 2011, 654, 108-115.	3.8	104
49	Alkaline direct alcohol fuel cells. <i>Journal of Power Sources</i> , 2010, 195, 3431-3450.	7.8	806
50	A simple model to assess the contribution of alloyed and non-alloyed platinum and tin to the ethanol oxidation reaction on Pt–Sn/C catalysts: Application to direct ethanol fuel cell performance. <i>Electrochimica Acta</i> , 2010, 55, 6485-6490.	5.2	39
51	Tungsten-based materials for fuel cell applications. <i>Applied Catalysis B: Environmental</i> , 2010, 96, 245-266.	20.2	130
52	Composite materials: An emerging class of fuel cell catalyst supports. <i>Applied Catalysis B: Environmental</i> , 2010, 100, 413-426.	20.2	106
53	Ceramic materials as supports for low-temperature fuel cell catalysts. <i>Solid State Ionics</i> , 2009, 180, 746-763.	2.7	259
54	Stability of Pt–Ni/C (1:1) and Pt/C electrocatalysts as cathode materials for polymer electrolyte fuel cells: Effect of ageing tests. <i>Journal of Power Sources</i> , 2009, 191, 344-350.	7.8	57

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55	Carbon supports for low-temperature fuel cell catalysts. Applied Catalysis B: Environmental, 2009, 88, 1-24.	20.2	1,027
56	Palladium in fuel cell catalysis. Energy and Environmental Science, 2009, 2, 915.	30.8	975
57	Evaluation of the stability and durability of Pt and Pt-Co/C catalysts for polymer electrolyte membrane fuel cells. Journal of Power Sources, 2008, 182, 83-90.	7.8	105
58	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
59	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
60	Effect of Ru addition on the structural characteristics and the electrochemical activity for ethanol oxidation of carbon supported Pt-Sn alloy catalysts. Electrochemistry Communications, 2007, 9, 398-404.	4.7	111
61	Ethanol oxidation on a carbon-supported Pt <sub>75</sub> Sn <sub>25</sub> electrocatalyst prepared by reduction with formic acid: Effect of thermal treatment. Applied Catalysis B: Environmental, 2007, 73, 106-115.	20.2	149
62	Platinum-based ternary catalysts for low temperature fuel cells. Applied Catalysis B: Environmental, 2007, 74, 337-350.	20.2	174
63	Platinum-based ternary catalysts for low temperature fuel cells. Applied Catalysis B: Environmental, 2007, 74, 324-336.	20.2	143
64	Preparation of carbon supported binary Pt-M alloy catalysts (M=first row transition metals) by low/medium temperature methods. Materials Chemistry and Physics, 2007, 101, 395-403.	4.0	44
65	Carbon supported Pt-Co (3:1) alloy as improved cathode electrocatalyst for direct ethanol fuel cells. Journal of Power Sources, 2007, 164, 111-114.	7.8	80
66	Catalysts for direct ethanol fuel cells. Journal of Power Sources, 2007, 170, 1-12.	7.8	1,008
67	Oxygen reduction on a Pt <sub>70</sub> Ni <sub>30</sub> /C electrocatalyst prepared by the borohydride method in H <sub>2</sub> SO <sub>4</sub> /CH <sub>3</sub> OH solutions. Journal of Power Sources, 2006, 155, 161-166.	7.8	49
68	Effect of temperature on the mechanism of ethanol oxidation on carbon supported Pt, PtRu and Pt <sub>3</sub> Sn electrocatalysts. Journal of Power Sources, 2006, 157, 98-103.	7.8	205
69	The stability of Pt-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
70	The methanol oxidation reaction on platinum alloys with the first row transition metals. Applied Catalysis B: Environmental, 2006, 63, 137-149.	20.2	383
71	Ethanol Oxidation on Pt-Sn Electrocatalysts Supported on Carbon Prepared by Reduction with Formic Acid. ECS Transactions, 2006, 3, 1307-1316.	0.5	1
72	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

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73	Pt-Sn/C electrocatalysts for methanol oxidation synthesized by reduction with formic acid. <i>Electrochimica Acta</i> , 2005, 50, 5496-5503.	5.2	130
74	Carbon supported Pt-Co alloys as methanol-resistant oxygen-reduction electrocatalysts for direct methanol fuel cells. <i>Applied Catalysis B: Environmental</i> , 2005, 57, 283-290.	20.2	158
75	Review in <i>Applied Electrochemistry. Number 54 Recent Developments in Polymer Electrolyte Fuel Cell Electrodes. Journal of Applied Electrochemistry</i> , 2004, 34, 563-576.	2.9	150
76	$\text{Li}_x\text{Ni}_{1-x}\text{O}$ ( $0 < x \leq 0.3$ ) Solid Solutions: Formation, Structure and Transport Properties. <i>ChemInform</i> , 2004, 35, no.	0.0	0
77	$\text{LiCoO}_2$ : formation, structure, lithium and oxygen nonstoichiometry, electrochemical behaviour and transport properties. <i>Solid State Ionics</i> , 2004, 170, 159-171.	2.7	300
78	$\text{LiCoO}_2$ : formation, structure, lithium and oxygen nonstoichiometry, electrochemical behaviour and transport properties. <i>Solid State Ionics</i> , 2004, 170, 159-159.	2.7	16
79	Structure and Activity of Carbon-Supported Pt-Co Electrocatalysts for Oxygen Reduction. <i>Journal of Physical Chemistry B</i> , 2004, 108, 17767-17774.	2.6	205
80	Title is missing!. <i>Journal of Materials Science</i> , 2003, 38, 2995-3005.	3.7	278
81	$\text{Li}_x\text{Ni}_{1-x}\text{O}$ ( $0 < x \leq 0.3$ ) solid solutions: formation, structure and transport properties. <i>Materials Chemistry and Physics</i> , 2003, 82, 937-948.	4.0	63
82	Formation of carbon-supported PtM alloys for low temperature fuel cells: a review. <i>Materials Chemistry and Physics</i> , 2003, 78, 563-573.	4.0	584
83	Electrocatalysis of oxygen reduction on a carbon supported platinum-vanadium alloy in polymer electrolyte fuel cells. <i>Electrochimica Acta</i> , 2002, 48, 263-270.	5.2	134
84	Title is missing!. <i>Journal of Materials Science</i> , 2002, 37, 133-139.	3.7	34
85	Lithium loss from lithium cobalt oxide: hexagonal $\text{Li}_{0.5}\text{Co}_{0.5}\text{O}$ to cubic $\text{Li}_{0.065}\text{Co}_{0.935}\text{O}$ phase transition. <i>Solid State Sciences</i> , 2001, 3, 721-726.	0.7	17
86	Formation of ternary lithium oxide-nickel oxide-magnesium oxide solid solution from the Li/Ni/MgO system. <i>Materials Letters</i> , 2001, 51, 385-388.	2.6	11
87	Physical and morphological characteristics and electrochemical behaviour in PEM fuel cells of PtRu/C catalysts. <i>Journal of Solid State Electrochemistry</i> , 2001, 5, 131-140.	2.5	132
88	$\text{Li}_2\text{O}$ evaporation from $\text{Li}_x\text{Co}_{1-x}\text{O}$ solid solutions at $1200^\circ\text{C}$ . <i>Ceramics International</i> , 2001, 27, 675-679.	4.8	5
89	On $\text{Li}_2\text{O}$ evaporation from $\text{Li}_x\text{Ni}_{1-x}\text{O}$ solid solution. <i>Ceramics International</i> , 1999, 25, 677-679.	4.8	2
90	Sintering of $\text{Li}_x\text{Ni}_{1-x}\text{O}$ solid solutions at $750^\circ\text{C}$ . <i>Materials Chemistry and Physics</i> , 1998, 52, 152-156.	4.0	5

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91	Preparation and properties of $\text{Li}_{1-x}\text{Co}_x\text{O}$ compounds. Journal of the European Ceramic Society, 1998, 18, 1405-1411.	5.7	13
92	Lithium loss kinetics from polycrystalline $\text{Li}_x\text{Ni}_{1-x}\text{O}$ at high temperatures. Journal of Materials Chemistry, 1998, 8, 2783-2786.	6.7	19
93	Structural change of $\text{Li}_x\text{Ni}_{1-x}$ during synthesis. Materials Letters, 1997, 30, 59-63.	2.6	8
94	Effect of CoO presence on the structure of $\text{Li}_x\text{Co}_{1-x}\text{O}$ obtained by $\text{LiCoO}_2$ decomposition. Materials Letters, 1997, 31, 335-337.	2.6	1
95	Synthesis and Thermal Stability of $\text{LiCoO}_2$ . Journal of Solid State Chemistry, 1995, 117, 1-7.	2.9	81
96	Thermal treatment of Co/ $\text{Li}_2\text{CO}_3$ mixtures at 1200 °C. Materials Letters, 1995, 24, 89-95.	2.6	4
97	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
98	Preparation and characterization of superconducting $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ thick films from powder of non-homogeneous particle size. Applied Superconductivity, 1993, 1, 1773-1784.	0.5	0
99	Formation of $\text{Li}_x\text{Ni}_{1-x}\text{O}$ solid solution from mixtures. Materials Letters, 1993, 16, 286-290.	2.6	6
100	A new way of obtaining $\text{Li}_x\text{Ni}_{1-x}\text{O}$ cathodes for molten-carbonate fuel cells. Journal of Power Sources, 1992, 40, 265-270.	7.8	7
101	Effect of the method of obtaining $\text{Li}_2\text{CO}_3$ - $\text{Li}_y\text{Ni}_{1-y}\text{O}$ mixtures on the densification of the resulting $\text{Li}_x\text{Ni}_{1-x}\text{O}$ solid solutions. Ceramics International, 1992, 18, 399-402.	4.8	2
102	Effect of lithium carbonate on the densification of $\text{Li}_x\text{Ni}_{1-x}\text{O}$ solid solutions at temperatures up to 900 °C. Materials Letters, 1991, 12, 117-122.	2.6	9
103	Physical properties of anionic poly( $\mu$ -caprolactam) synthesized in the presence of calcium chloride. Polymer, 1989, 30, 1099-1104.	3.8	9