

Panagiotis Tsiakaras

List of Publications by Year in descending order

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217
papers

13,677
citations

17405

63
h-index

26548

107
g-index

222
all docs

222
docs citations

222
times ranked

10863
citing authors

#	ARTICLE	IF	CITATIONS
1	Pt based anode catalysts for direct ethanol fuel cells. Applied Catalysis B: Environmental, 2003, 46, 273-285.	10.8	547
2	Pt-based anode catalysts for direct ethanol fuel cells. Solid State Ionics, 2004, 175, 797-803.	1.3	467
3	Recent progress in direct ethanol proton exchange membrane fuel cells (DE-PEMFCs). Applied Catalysis B: Environmental, 2006, 63, 187-193.	10.8	383
4	N-Doped Porous Molybdenum Carbide Nanobelts as Efficient Catalysts for Hydrogen Evolution Reaction. Applied Catalysis B: Environmental, 2018, 224, 533-540.	10.8	358
5	Low and non-platinum electrocatalysts for PEMFCs: Current status, challenges and prospects. Applied Catalysis B: Environmental, 2012, 127, 371-388.	10.8	333
6	BaCeO ₃ : Materials development, properties and application. Progress in Materials Science, 2014, 60, 72-129.	16.0	301
7	Advanced materials for SOFC application: Strategies for the development of highly conductive and stable solid oxide proton electrolytes. Progress in Materials Science, 2016, 75, 38-79.	16.0	285
8	Bi- and tri-metallic Pt-based anode catalysts for direct ethanol fuel cells. Journal of Power Sources, 2004, 131, 217-223.	4.0	264
9	Direct ethanol fuel cells based on PtSn anodes: the effect of Sn content on the fuel cell performance. Journal of Power Sources, 2005, 140, 50-58.	4.0	262
10	Direct ethanol PEM fuel cells: The case of platinum based anodes. International Journal of Hydrogen Energy, 2005, 30, 995-1001.	3.8	224
11	3D Co-N-doped hollow carbon spheres as excellent bifunctional electrocatalysts for oxygen reduction reaction and oxygen evolution reaction. Applied Catalysis B: Environmental, 2017, 217, 477-484.	10.8	212
12	Performance comparison of low-temperature direct alcohol fuel cells with different anode catalysts. Journal of Power Sources, 2004, 126, 16-22.	4.0	206
13	Investigation of a Ba _{0.5} Sr _{0.5} Co _{0.8} Fe _{0.2} O ₃ based cathode IT-SOFC. Applied Catalysis B: Environmental, 2006, 66, 64-71.	10.8	204
14	PEMFCs and AEMFCs directly fed with ethanol: a current status comparative review. Journal of Applied Electrochemistry, 2013, 43, 119-136.	1.5	191
15	Recent activity in the development of proton-conducting oxides for high-temperature applications. RSC Advances, 2016, 6, 73222-73268.	1.7	188
16	Nitrogen-doped ordered mesoporous carbon: synthesis and active sites for electrocatalysis of oxygen reduction reaction. Applied Catalysis B: Environmental, 2015, 165, 566-571.	10.8	172
17	Electronic modulation of cobalt phosphide nanosheet arrays via copper doping for highly efficient neutral-pH overall water splitting. Applied Catalysis B: Environmental, 2020, 265, 118555.	10.8	172
18	Preparation and characterization of a novel KOH activated graphite felt cathode for the electro-Fenton process. Applied Catalysis B: Environmental, 2015, 165, 360-368.	10.8	170

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19	Investigation of a Ba _{0.5} Sr _{0.5} Co _{0.8} Fe _{0.2} O ₃ based cathode SOFC. Applied Catalysis B: Environmental, 2007, 76, 320-327.	10.8	164
20	Pt/CN-doped electrocatalysts: Superior electrocatalytic activity for methanol oxidation reaction and mechanistic insight into interfacial enhancement. Applied Catalysis B: Environmental, 2017, 203, 541-548.	10.8	153
21	Iron-embedded nitrogen doped carbon frameworks as robust catalyst for oxygen reduction reaction in microbial fuel cells. Applied Catalysis B: Environmental, 2017, 202, 550-556.	10.8	148
22	In-situ electrosynthesis of hydrogen peroxide and wastewater treatment application: A novel strategy for graphite felt activation. Applied Catalysis B: Environmental, 2018, 237, 392-400.	10.8	148
23	Recent advances on oxygen reduction electrocatalysis: Correlating the characteristic properties of metal organic frameworks and the derived nanomaterials. Applied Catalysis B: Environmental, 2020, 268, 118570.	10.8	147
24	Cross-double dumbbell-like Pt-Ni nanostructures with enhanced catalytic performance toward the reactions of oxygen reduction and methanol oxidation. Applied Catalysis B: Environmental, 2019, 246, 277-283.	10.8	145
25	The effect of methanol and ethanol cross-over on the performance of PtRu/C-based anode DAFCs. Applied Catalysis B: Environmental, 2005, 55, 65-72.	10.8	141
26	Bimetallic organic framework-derived hierarchically porous Co-Zn-N-C as efficient catalyst for acidic oxygen reduction reaction. Applied Catalysis B: Environmental, 2019, 244, 120-127.	10.8	140
27	3D interconnected hierarchically porous N-doped carbon with NH ₃ activation for efficient oxygen reduction reaction. Applied Catalysis B: Environmental, 2017, 210, 57-66.	10.8	131
28	A novel sulfur-nitrogen dual doped ordered mesoporous carbon electrocatalyst for efficient oxygen reduction reaction. Applied Catalysis B: Environmental, 2016, 189, 1-11.	10.8	123
29	Synthesis gas production by steam reforming of ethanol. Applied Catalysis A: General, 2001, 220, 123-127.	2.2	122
30	Effect of pore morphology of mesoporous carbons on the electrocatalytic activity of Pt nanoparticles for fuel cell reactions. Applied Catalysis B: Environmental, 2010, 98, 132-137.	10.8	119
31	Ag nanoparticles modified crumpled borophene supported Co ₃ O ₄ catalyst showing superior oxygen evolution reaction (OER) performance. Applied Catalysis B: Environmental, 2021, 298, 120529.	10.8	118
32	Direct methanol fuel cells: The effect of electrode fabrication procedure on MEAs structural properties and cell performance. Journal of Power Sources, 2005, 145, 495-501.	4.0	112
33	One-pot synthesized boron-doped RhFe alloy with enhanced catalytic performance for hydrogen evolution reaction. Applied Catalysis B: Environmental, 2018, 230, 58-64.	10.8	112
34	Electrocatalysts for Glucose Electrooxidation Reaction: A Review. Topics in Catalysis, 2015, 58, 1311-1327.	1.3	110
35	High surface area tungsten carbide microspheres as effective Pt catalyst support for oxygen reduction reaction. Applied Catalysis B: Environmental, 2009, 89, 223-228.	10.8	108
36	Preparation of graphitic mesoporous carbon for the simultaneous detection of hydroquinone and catechol. Applied Catalysis B: Environmental, 2013, 129, 367-374.	10.8	108

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37	Highly stable Pt-Co nanodendrite in nanoframe with Pt skin structured catalyst for oxygen reduction electrocatalysis. Applied Catalysis B: Environmental, 2021, 281, 119460.	10.8	105
38	New Electro-Fenton Gas Diffusion Cathode based on Nitrogen-doped Graphene@Carbon Nanotube Composite Materials. Electrochimica Acta, 2016, 194, 228-238.	2.6	102
39	N, S Codoped Carbon Matrix-Encapsulated Co ₉ S ₈ Nanoparticles as a Highly Efficient and Durable Bifunctional Oxygen Redox Electrocatalyst for Rechargeable Zn-Air Batteries. Advanced Energy Materials, 2021, 11, 2101249.	10.2	102
40	Glucose electrooxidation over PdRh/C electrocatalysts in alkaline medium. Applied Catalysis B: Environmental, 2014, 147, 481-489.	10.8	99
41	Investigation of the protonic conduction in Sm doped BaCeO ₃ . Journal of Power Sources, 2008, 181, 207-213.	4.0	97
42	A new Dy-doped BaCeO ₃ -BaZrO ₃ proton-conducting material as a promising electrolyte for reversible solid oxide fuel cells. Journal of Materials Chemistry A, 2016, 4, 15390-15399.	5.2	97
43	2D nitrogen-doped hierarchically porous carbon: Key role of low dimensional structure in favoring electrocatalysis and mass transfer for oxygen reduction reaction. Applied Catalysis B: Environmental, 2017, 209, 447-454.	10.8	94
44	Efficient Pt-free electrocatalyst for oxygen reduction reaction: Highly ordered mesoporous N and S co-doped carbon with saccharin as single-source molecular precursor. Applied Catalysis B: Environmental, 2016, 194, 202-208.	10.8	93
45	Thermodynamic analysis of a solid oxide fuel cell system fuelled by ethanol. Journal of Power Sources, 2001, 102, 210-217.	4.0	89
46	Efficient and poison-tolerant PdAu/C binary electrocatalysts for glucose electrooxidation in alkaline medium. Applied Catalysis B: Environmental, 2014, 150-151, 268-274.	10.8	88
47	The effect of the MEA preparation procedure on both ethanol crossover and DEFC performance. Journal of Power Sources, 2005, 140, 103-110.	4.0	86
48	Oxygen Vacancy and Core-Shell Heterojunction Engineering of Anemone-Like CoP@CoOOH Bifunctional Electrocatalyst for Efficient Overall Water Splitting. Small, 2022, 18, e2106012.	5.2	82
49	Direct alcohol fuel cells: A novel non-platinum and alcohol inert ORR electrocatalyst. Applied Catalysis B: Environmental, 2008, 78, 381-387.	10.8	79
50	Carbon-supported PdSn and Pd ₃ Sn ₂ anodes for glucose electrooxidation in alkaline media. Applied Catalysis B: Environmental, 2014, 158-159, 209-216.	10.8	76
51	Ethanol crossover and direct ethanol PEM fuel cell performance modeling and experimental validation. Chemical Engineering Science, 2006, 61, 7497-7508.	1.9	75
52	Ethanol crossover phenomena and its influence on the performance of DEFC. Journal of Power Sources, 2005, 145, 266-271.	4.0	74
53	Highly effective oxygen reduction reaction electrocatalysis: Nitrogen-doped hierarchically mesoporous carbon derived from interpenetrated nonporous metal-organic frameworks. Applied Catalysis B: Environmental, 2017, 218, 260-266.	10.8	70
54	Bifunctional catalysts for overall water splitting: CoNi oxyhydroxide nanosheets electrodeposited on titanium sheets. Electrochimica Acta, 2019, 301, 449-457.	2.6	70

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55	Ternary Mo ₂ NiB ₂ as a Superior Bifunctional Electrocatalyst for Overall Water Splitting. <i>Small</i> , 2022, 18, e2104303.	5.2	70
56	Non-Faradaic Electrochemical Modification of Catalytic Activity. <i>Journal of Catalysis</i> , 1993, 140, 53-70.	3.1	69
57	Exergy analysis of a solid oxide fuel cell power plant fed by either ethanol or methane. <i>Journal of Power Sources</i> , 2004, 131, 224-230.	4.0	69
58	Bimetallic Ni-Co phosphide nanosheets self-supported on nickel foam as high-performance electrocatalyst for hydrogen evolution reaction. <i>Electrochimica Acta</i> , 2019, 317, 191-198.	2.6	69
59	Novel fluorine-doped cobalt molybdate nanosheets with enriched oxygen-vacancies for improved oxygen evolution reaction activity. <i>Applied Catalysis B: Environmental</i> , 2022, 303, 120871.	10.8	69
60	Insights on thermal and transport features of BaCe _{0.8} Zr _{0.2} O ₃ proton-conducting materials. <i>Journal of Power Sources</i> , 2015, 278, 436-444.	4.0	68
61	The effect of co-dopant addition on the properties of Ln _{0.2} Ce _{0.8} O ₂ (Ln=Gd, Sm, La) solid-state electrolyte. <i>Journal of Power Sources</i> , 2008, 181, 199-206.	4.0	67
62	Sulfur and carbon tolerance of BaCe _{0.8} BaZr _{0.2} O ₃ proton-conducting materials. <i>Journal of Power Sources</i> , 2015, 273, 716-723.	4.0	67
63	A facile route to achieve ultrafine Fe ₂ O ₃ nanorods anchored on graphene oxide for application in lithium-ion battery. <i>Journal of Power Sources</i> , 2019, 416, 118-124.	4.0	67
64	Active sites and mechanism on nitrogen-doped carbon catalyst for hydrogen evolution reaction. <i>Journal of Catalysis</i> , 2017, 348, 151-159.	3.1	64
65	Design and Synthesis of Highly Performing Bifunctional Ni-NiO-MoNi Hybrid Catalysts for Enhanced Urea Oxidation and Hydrogen Evolution Reactions. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 7174-7181.	3.2	63
66	Facile synthesis of bimetallic Pt-Pd symmetry-broken concave nanocubes and their enhanced activity toward oxygen reduction reaction. <i>Applied Catalysis B: Environmental</i> , 2019, 251, 49-56.	10.8	62
67	Worm-like S-doped RhNi alloys as highly efficient electrocatalysts for hydrogen evolution reaction. <i>Applied Catalysis B: Environmental</i> , 2019, 255, 117737.	10.8	61
68	Hydrogenolysis of glycerol to propylene glycol by in situ produced hydrogen from aqueous phase reforming of glycerol over SiO ₂ -Al ₂ O ₃ supported nickel catalyst. <i>Fuel Processing Technology</i> , 2016, 142, 135-146.	3.7	60
69	A novel NiFe@NC-functionalized N-doped carbon microtubule network derived from biomass as a highly efficient 3D free-standing cathode for Li-CO ₂ batteries. <i>Applied Catalysis B: Environmental</i> , 2019, 244, 559-567.	10.8	60
70	A facile soft-template synthesis of ordered mesoporous carbon/tungsten carbide composites with high surface area for methanol electrooxidation. <i>Journal of Power Sources</i> , 2012, 200, 8-13.	4.0	59
71	Iron oxide@graphitic carbon core-shell nanoparticles embedded in ordered mesoporous N-doped carbon matrix as an efficient cathode catalyst for PEMFC. <i>Applied Catalysis B: Environmental</i> , 2020, 264, 118468.	10.8	59
72	Ordered mesoporous tungsten carbide/carbon composites promoted Pt catalyst with high activity and stability for methanol electrooxidation. <i>Applied Catalysis B: Environmental</i> , 2014, 147, 518-525.	10.8	58

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73	Novel Mn-/Co-N_x Moieties Captured in N-Doped Carbon Nanotubes for Enhanced Oxygen Reduction Activity and Stability in Acidic and Alkaline Media. ACS Applied Materials & Interfaces, 2021, 13, 23191-23200.	4.0	57
74	BaCe _{0.5} Zr _{0.3} Y _{0.2} â€“xYb _x O ₃ â€“Î proton-conducting electrolytes for intermediate-temperature solid oxide fuel cells. Electrochimica Acta, 2017, 251, 554-561.	2.6	56
75	Interface charges redistribution enhanced monolithic etched copper foam-based Cu ₂ O layer/TiO ₂ nanodots heterojunction with high hydrogen evolution electrocatalytic activity. Applied Catalysis B: Environmental, 2019, 243, 365-372.	10.8	56
76	Novel composite solid state electrolytes on the base of BaCeO ₃ and CeO ₂ for intermediate temperature electrochemical devices. Journal of Power Sources, 2013, 221, 217-227.	4.0	55
77	Electrocatalytic production of ammonia: Biomimetic electrodeâ€“electrolyte design for efficient electrocatalytic nitrogen fixation under ambient conditions. Applied Catalysis B: Environmental, 2020, 271, 118919.	10.8	55
78	Direct ethanol fuel cell anode simulation model. Journal of Power Sources, 2006, 157, 657-665.	4.0	54
79	A detailed analysis of thermal and chemical compatibility of cathode materials suitable for BaCe _{0.8} Y _{0.2} O ₃ â€“Î and BaZr _{0.8} Y _{0.2} O ₃ â€“Î proton electrolytes for solid oxide fuel cell application. International Journal of Hydrogen Energy, 2017, 42, 1715-1723.	3.8	53
80	Methane activation on a La _{0.6} Sr _{0.4} Co _{0.8} Fe _{0.2} O ₃ perovskite. Applied Catalysis A: General, 1998, 169, 249-261.	2.2	52
81	Aqueous phase reforming (APR) of glycerol over platinum supported on Al ₂ O ₃ catalyst. Renewable Energy, 2016, 85, 1116-1126.	4.3	52
82	Design and applications of potentiometric sensors based on proton-conducting ceramic materials. A brief review. Sensors and Actuators B: Chemical, 2017, 244, 1004-1015.	4.0	51
83	Anionâ€“Cation Double Doped Co₃O₄ Microtube Architecture to Promote High-Valence Co Species Formation for Enhanced Oxygen Evolution Reaction. ACS Sustainable Chemistry and Engineering, 2019, 7, 11901-11910.	3.2	50
84	KOH-activated multi-walled carbon nanotubes as platinum supports for oxygen reduction reaction. Journal of Power Sources, 2010, 195, 7409-7414.	4.0	49
85	Non-Precious Electrocatalysts for Oxygen Reduction Reaction in Alkaline Media: Latest Achievements on Novel Carbon Materials. Catalysis, 2016, 6, 159.	1.6	49
86	Electrochemical reduction of carbon dioxide at nanostructured SnO ₂ /carbon aerogels: The effect of tin oxide content on the catalytic activity and formate selectivity. Applied Catalysis A: General, 2017, 345, 159-166.	2.2	49
87	Single noble metal atoms doped 2D materials for catalysis. Applied Catalysis B: Environmental, 2021, 297, 120389.	10.8	49
88	Excavated and dendritic Pt-Co nanocubes as efficient ethylene glycol and glycerol oxidation electrocatalysts. Applied Catalysis B: Environmental, 2019, 258, 117951.	10.8	48
89	Hierarchically skeletal multi-layered Pt-Ni nanocrystals for highly efficient oxygen reduction and methanol oxidation reactions. Chinese Journal of Catalysis, 2021, 42, 648-657.	6.9	48
90	Influence of sintering additives of transition metals on the properties of gadolinium-doped barium cerate. Solid State Ionics, 2008, 179, 887-890.	1.3	47

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91	Dimethyl phthalate degradation at novel and efficient electro-Fenton cathode. Applied Catalysis B: Environmental, 2014, 156-157, 1-7.	10.8	47
92	Novel Bifunctional V ₂ O ₃ Nanosheets Coupled with N-Doped-Carbon Encapsulated Ni Heterostructure for Enhanced Electrocatalytic Oxidation of Urea-Rich Wastewater. ACS Applied Materials & Interfaces, 2020, 12, 38061-38069.	4.0	47
93	Oxidative Coupling of CH ₄ on Ag Catalyst-Electrodes Deposited on ZrO ₂ (8 mol% Y ₂ O ₃). Journal of Catalysis, 1993, 144, 333-347.	3.1	46
94	Thermal expansion of materials in the barium cerate-zirconate system. Physics of the Solid State, 2015, 57, 285-289.	0.2	46
95	Ceria promoted Pd/C catalysts for glucose electrooxidation in alkaline media. Applied Catalysis B: Environmental, 2015, 176-177, 233-239.	10.8	46
96	Glucose electrooxidation in alkaline medium: Performance enhancement of PdAu/C synthesized by NH ₃ modified pulse microwave assisted polyol method. Applied Catalysis B: Environmental, 2015, 162, 275-281.	10.8	45
97	Acceptor doping effects on microstructure, thermal and electrical properties of proton-conducting BaCe _{0.5} Zr _{0.3} Ln _{0.2} O _{3-δ} (Ln = Yb, Gd, Sm, Nd, La or Y) ceramics for solid oxide fuel cell applications. Electrochimica Acta, 2016, 192, 80-88.	2.6	45
98	Grain and grain boundary transport in BaCe _{0.5} Zr _{0.3} Ln _{0.2} O _{3-δ} (Ln = Y or lanthanide) electrolytes attractive for protonic ceramic fuel cells application. Journal of Power Sources, 2017, 366, 161-168.	4.0	45
99	Novel and highly efficient cathodes for Li-O ₂ batteries: 3D self-standing NiFe@NC-functionalized N-doped carbon nanonet derived from Prussian blue analogues/biomass composites. Applied Catalysis B: Environmental, 2019, 245, 721-732.	10.8	45
100	A tape calendaring method as an effective way for the preparation of proton ceramic fuel cells with enhanced performance. Electrochimica Acta, 2016, 210, 681-688.	2.6	43
101	Electrochemical Approach for Analyzing Electrolyte Transport Properties and Their Effect on Protonic Ceramic Fuel Cell Performance. ACS Applied Materials & Interfaces, 2017, 9, 26874-26884.	4.0	42
102	P-doped CNTs encapsulated nickel hybrids with flower-like structure as efficient catalysts for hydrogen evolution reaction. Electrochimica Acta, 2019, 298, 142-149.	2.6	41
103	Molybdenum-modified and vertex-reinforced quaternary hexapod nano-skeletons as efficient electrocatalysts for methanol oxidation and oxygen reduction reaction. Applied Catalysis B: Environmental, 2019, 258, 117974.	10.8	40
104	Emerging materials for the electrochemical detection of COVID-19. Journal of Electroanalytical Chemistry, 2021, 893, 115289.	1.9	40
105	Direct methanol fuel cells : Methanol crossover and its influence on single DMFC performance. Ionics, 2004, 10, 458-462.	1.2	39
106	Efficient and Stable Carbon-coated Nickel Foam Cathodes for the Electro-Fenton Process. Electrochimica Acta, 2015, 176, 811-818.	2.6	39
107	Single-atom catalysis for zinc-air/O ₂ batteries, water electrolyzers and fuel cells applications. Energy Storage Materials, 2022, 45, 504-540.	9.5	39
108	Influence of Cu on the properties of gadolinium-doped barium cerate. Journal of Power Sources, 2008, 181, 292-296.	4.0	38

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109	Electrocatalytic activity of Vulcan-XC-72 supported Pd, Rh and Pd Rh toward HOR and ORR. Applied Catalysis B: Environmental, 2015, 174-175, 203-211.	10.8	38
110	Shell-thickness-dependent Pd@PtNi core-shell nanosheets for efficient oxygen reduction reaction. Chemical Engineering Journal, 2022, 427, 131565.	6.6	38
111	How Far Are Direct Alcohol Fuel Cells From Our Energy Future?. Journal of Fuel Cell Science and Technology, 2007, 4, 203-209.	0.8	37
112	Understanding the electrocatalytic activity of Pt _x Sn _y in direct ethanol fuel cells. Journal of Power Sources, 2011, 196, 4980-4986.	4.0	37
113	Carbon Monoxide Tolerant Pt-Based Electrocatalysts for H ₂ -PEMFC Applications: Current Progress and Challenges. Catalysts, 2021, 11, 1127.	1.6	37
114	Direct ethanol fuel cells: The effect of the cell discharge current on the products distribution. Applied Catalysis B: Environmental, 2010, 100, 157-164.	10.8	36
115	The effect of microwave operation parameters on the electrochemical performance of Pt/C catalysts. Applied Catalysis B: Environmental, 2011, 103, 287-293.	10.8	36
116	Crude bio-glycerol aqueous phase reforming and hydrogenolysis over commercial SiO ₂ Al ₂ O ₃ nickel catalyst. Renewable Energy, 2016, 97, 373-379.	4.3	36
117	Improved ceramic and electrical properties of CaZrO ₃ -based proton-conducting materials prepared by a new convenient combustion synthesis method. Ceramics International, 2017, 43, 7184-7192.	2.3	36
118	Designing a protonic ceramic fuel cell with novel electrochemically active oxygen electrodes based on doped Nd _{0.5} Ba _{0.5} FeO _{3-δ} . Dalton Transactions, 2018, 47, 8149-8157.	1.6	35
119	Cu and Gd co-doped BaCeO ₃ proton conductors: Experimental vs SEM image algorithmic-segmentation results. Electrochimica Acta, 2014, 125, 371-379.	2.6	34
120	The importance of the fuel choice on the efficiency of a solid oxide fuel cell system. Journal of Power Sources, 2003, 123, 200-205.	4.0	33
121	Characterization of proton-conducting electrolyte based on La _{0.9} Sr _{0.1} YO ₃ and its application in a hydrogen amperometric sensor. Sensors and Actuators B: Chemical, 2016, 225, 446-452.	4.0	33
122	Efficient overall water splitting over Mn doped Ni ₂ P microflowers grown on nickel foam. Catalysis Today, 2020, 355, 815-821.	2.2	33
123	A three-dimensional CFD model of direct ethanol fuel cells: Anode flow bed analysis. Solid State Ionics, 2006, 177, 2133-2138.	1.3	32
124	A thermodynamic analysis of hydrogen production via aqueous phase reforming of glycerol. Fuel Processing Technology, 2015, 134, 107-115.	3.7	32
125	Ethanol decomposition over Pd-based catalyst in the presence of steam. Reaction Kinetics and Catalysis Letters, 2002, 76, 343-351.	0.6	31
126	Ethanol/water mixture permeation through a Nafion® based membrane electrode assembly. Journal of Power Sources, 2007, 171, 1-7.	4.0	31

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127	Combined amperometric and potentiometric hydrogen sensors based on BaCe _{0.7} Zr _{0.1} Y _{0.2} O _{3-δ} proton-conducting ceramic. <i>Sensors and Actuators B: Chemical</i> , 2016, 231, 175-182.	4.0	31
128	Oxygen reduction and hydrogen oxidation reaction on novel carbon supported Pd x Ir y electrocatalysts. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 11766-11777.	3.8	31
129	Conductivity of Gd-doped BaCeO ₃ protonic conductor in 2-2 atmospheres. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 21547-21552.	3.8	29
130	A SOFC based on a co-ionic electrolyte. <i>Journal of Power Sources</i> , 2004, 131, 231-236.	4.0	28
131	Structural, thermomechanical and electrical properties of new (1-x)Ce _{0.8} Nd _{0.2} O _{2-δ} xBaCe _{0.8} Nd _{0.2} O _{3-δ} composites. <i>Journal of Power Sources</i> , 2014, 267, 269-279.	4.0	28
132	Exergy analysis of an ethanol fuelled proton exchange membrane (PEM) fuel cell system for automobile applications. <i>Journal of Power Sources</i> , 2005, 145, 502-514.	4.0	27
133	Enhancement of oxygen reduction reaction performance: The characteristic role of Fe N coordinations. <i>Electrochimica Acta</i> , 2018, 260, 264-273.	2.6	27
134	Transport properties of highly dense proton-conducting BaCe _{0.8-x} Zr _x Dy _{0.2} O _{3-δ} materials in low- and high-temperature ranges. <i>Electrochimica Acta</i> , 2018, 284, 551-559.	2.6	27
135	Copper oxide derived nanostructured self-supporting Cu electrodes for electrochemical reduction of carbon dioxide. <i>Electrochimica Acta</i> , 2019, 328, 135083.	2.6	26
136	Enhanced electrocatalytic overall water splitting over novel one-pot synthesized Ru-MoO ₃ - and Fe ₃ O ₄ -NiFe layered double hydroxide on Ni foam. <i>Renewable Energy</i> , 2021, 177, 1346-1355.	4.3	26
137	Enhanced oxygen reduction and methanol oxidation reaction over self-assembled Pt-M (M=Co, Ni) nanoflowers. <i>Journal of Colloid and Interface Science</i> , 2022, 607, 1411-1423.	5.0	26
138	Cost Effective Synthesis of Graphene Nanomaterials for Non-Enzymatic Electrochemical Sensors for Glucose: A Comprehensive Review. <i>Sensors</i> , 2022, 22, 355.	2.1	26
139	A green approach for enhancing the electrocatalytic activity and stability of NiFe ₂ O ₄ /CB nanospheres towards hydrogen production. <i>Renewable Energy</i> , 2020, 154, 704-714.	4.3	25
140	Two-step sequence for synthesis of efficient PtSn@Rh/C catalyst for oxidizing ethanol and intermediate products. <i>Applied Catalysis B: Environmental</i> , 2012, 119-120, 227-233.	10.8	24
141	Heterojunction architecture of pTTh nanoflowers with CuOx nanoparticles hybridized for efficient photoelectrocatalytic degradation of organic pollutants. <i>Applied Catalysis B: Environmental</i> , 2020, 277, 119249.	10.8	24
142	ZIF@Mg(OH) ₂ Dual Template Assisted Self-Confinement of Small PtCo NPs as Promising Oxygen Reduction Reaction in PEM Fuel Cell. <i>Advanced Energy Materials</i> , 2022, 12, .	10.2	24
143	A novel efficient electrocatalyst for oxygen reduction and oxygen evolution reaction in Li-O ₂ batteries: Co/CoSe embedded N, Se co-doped carbon. <i>Applied Catalysis B: Environmental</i> , 2022, 317, 121698.	10.8	24
144	High temperature electrolyzer based on solid oxide co-ionic electrolyte: A theoretical model. <i>Journal of Power Sources</i> , 2007, 171, 205-211.	4.0	23

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145	Degradation of perfluorinated sulfonic acid films: An in-situ infrared spectro-electrochemical study. <i>Polymer Degradation and Stability</i> , 2009, 94, 1707-1713.	2.7	23
146	Exergy Analysis of an Intermediate Temperature Solid Oxide Fuel Cell-Gas Turbine Hybrid System Fed with Ethanol. <i>Energies</i> , 2012, 5, 4268-4287.	1.6	23
147	Application of Solid oxide proton-conducting electrolytes for amperometric analysis of hydrogen in H ₂ +N ₂ +H ₂ O gas mixtures. <i>Electrochimica Acta</i> , 2014, 141, 120-125.	2.6	23
148	Nitrogen-doped 3D hierarchical ordered mesoporous carbon supported palladium electrocatalyst for the simultaneous detection of ascorbic acid, dopamine, and glucose. <i>Ionics</i> , 2019, 25, 6061-6070.	1.2	23
149	Effect of isovalent substitution of La ³⁺ in Ca-doped LaNbO ₄ on the thermal and electrical properties. <i>Ceramics International</i> , 2019, 45, 209-215.	2.3	23
150	Investigation of the structural and electrical properties of Co-doped BaCe _{0.9} Gd _{0.1} O _{3-δ} . <i>Solid State Ionics</i> , 2011, 182, 41-46.	1.3	22
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