

Bin Zhu

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6235668/publications.pdf>

Version: 2024-02-01

229
papers

10,846
citations

25034

57
h-index

46799

89
g-index

251
all docs

251
docs citations

251
times ranked

4094
citing authors

#	ARTICLE	IF	CITATIONS
1	Tunable magneto-optical and interfacial defects of Nd and Cr-doped bismuth ferrite nanoparticles for microwave absorber applications. <i>Journal of Colloid and Interface Science</i> , 2022, 608, 1868-1881.	9.4	28
2	Tuning tin-based perovskite as an electrolyte for semiconductor protonic fuel cells. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 5531-5540.	7.1	16
3	Excellent oxygen reduction electrocatalytic activity of nanostructured CaFe ₂ O ₄ particles embedded microporous Ni-Foam. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 10331-10340.	7.1	9
4	Tuning La ₂ O ₃ to high ionic conductivity by Ni-doping. <i>Chemical Communications</i> , 2022, 58, 4360-4363.	4.1	15
5	Optimizing Na _{0.5} Bi _{0.5} TiO ₃ electrolyte fuel cell through constructing heterostructures. <i>Ceramics International</i> , 2022, 48, 18116-18123.	4.8	3
6	Surface-Engineered Homostructure for Enhancing Proton Transport. <i>Small Methods</i> , 2022, 6, e2100901.	8.6	26
7	Recent advance in physical description and material development for single component SOFC: A mini-review. <i>Chemical Engineering Journal</i> , 2022, 444, 136533.	12.7	50
8	Synergistic effect of sodium content for tuning Sm ₂ O ₃ as a stable electrolyte in proton ceramic fuel cells. <i>Renewable Energy</i> , 2022, 193, 608-616.	8.9	13
9	Demonstrating the potential of iron-doped strontium titanate electrolyte with high-performance for low temperature ceramic fuel cells. <i>Renewable Energy</i> , 2022, 196, 901-911.	8.9	22
10	Design principle and assessing the correlations in Sb-doped Ba _{0.5} Sr _{0.5} FeO ₃ perovskite oxide for enhanced oxygen reduction catalytic performance. <i>Journal of Catalysis</i> , 2021, 395, 168-177.	6.2	44
11	Junction and energy band on novel semiconductor-based fuel cells. <i>IScience</i> , 2021, 24, 102191.	4.1	45
12	Nanoparticle exsolution in perovskite oxide and its sustainable electrochemical energy systems. <i>Journal of Power Sources</i> , 2021, 492, 229626.	7.8	17
13	The role of band structure in Co- and Fe-co-doped Ba _{0.5} Sr _{0.5} Zr _{0.1} Y _{0.1} O ₃ perovskite semiconductor to design an electrochemical aptasensing platform: application in label-free detection of ochratoxin A using voltammetry. <i>Mikrochimica Acta</i> , 2021, 188, 177.	5.0	1
14	Layered LiCoO ₂ /LiFeO ₂ Heterostructure Composite for Semiconductor-Based Fuel Cells. <i>Nanomaterials</i> , 2021, 11, 1224.	4.1	9
15	Novel Perovskite Semiconductor Based on Co/Fe-Codoped LBZY (La _{0.5} Ba _{0.5}) Tj ETQq1 1 0.784314 rgBT /Ove Electrolyte in Ceramic Fuel Cells. <i>ACS Applied Energy Materials</i> , 2021, 4, 5798-5808.	5.1	36
16	Low-temperature solid oxide fuel cells based on Tm-doped SrCeO ₂ semiconductor electrolytes. <i>Materials Today Energy</i> , 2021, 20, 100661.	4.7	17
17	Tailoring triple charge conduction in BaCo _{0.2} Fe _{0.1} Ce _{0.2} Tm _{0.1} Zr _{0.3} Y _{0.1} O ₃ semiconductor electrolyte for boosting solid oxide fuel cell performance. <i>Renewable Energy</i> , 2021, 172, 336-349.	8.9	26
18	PN Heterostructure Interface-Facilitated Proton Conduction in 3C-SiC/Na _{0.6} Co ₂ Electrolyte for Fuel Cell Application. <i>ACS Applied Energy Materials</i> , 2021, 4, 7519-7525.	5.1	17

#	ARTICLE	IF	CITATIONS
19	Analysis model for deformation mechanism of strip foundation of building: Considering shear effect of down-crossing tunnel under excavation. <i>Journal of Central South University</i> , 2021, 28, 2556-2573.	3.0	8
20	Novel K ₂ Ti ₈ O ₁₇ Anode via Na ⁺ /Al ³⁺ Co-Intercalation Mechanism for Rechargeable Aqueous Al-Ion Battery with Superior Rate Capability. <i>Nanomaterials</i> , 2021, 11, 2332.	4.1	3
21	Interface engineering of bi-layer semiconductor SrCoSnO ₃ -CeO ₂ heterojunction electrolyte for boosting the electrochemical performance of low-temperature ceramic fuel cell. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 33969-33977.	7.1	28
22	Promoted electrocatalytic activity and ionic transport simultaneously in dual functional Ba _{0.5} Sr _{0.5} Fe _{0.8} Sb _{0.2} O ₃ -Sm _{0.2} Ce _{0.8} O ₂ heterostructure. <i>Applied Catalysis B: Environmental</i> , 2021, 298, 120503.	20.2	78
23	Semiconductor Nb-Doped SrTiO ₃ Perovskite Electrolyte for a Ceramic Fuel Cell. <i>ACS Applied Energy Materials</i> , 2021, 4, 365-375.	5.1	30
24	Electrochemical Properties of a Dual-Ion Semiconductor-Ionic Co _{0.2} Zn _{0.8} O-Sm _{0.2} Ce _{0.8} O ₂ Composite for a High-Performance Low-Temperature Solid Oxide Fuel Cell. <i>ACS Applied Energy Materials</i> , 2021, 4, 194-207.	5.1	21
25	Validating the efficiency of $\text{Al}_2\text{O}_3/\text{La}_{0.6}\text{Sr}_{0.4}\text{Co}_{0.2}\text{Fe}_{0.8}\text{O}_3$ double-layer electrolyte for low temperature solid oxide fuel cell. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 40014-40021.	7.1	1
26	Semiconductor Electrochemistry for Clean Energy Conversion and Storage. <i>Electrochemical Energy Reviews</i> , 2021, 4, 757-792.	25.5	77
27	Tuning La _{0.6} Sr _{0.4} Co _{0.2} Fe _{0.8} O ₃ perovskite cathode as functional electrolytes for advanced low-temperature SOFCs. <i>Catalysis Today</i> , 2020, 355, 295-303.	4.4	26
28	Functional ceria-based nanocomposites for advanced low-temperature (300–600 °C) solid oxide fuel cell: A comprehensive review. <i>Materials Today Energy</i> , 2020, 15, 100373.	4.7	48
29	Stability study of SOFC using layered perovskite oxide La ₁₋₈₅ Sr _{0.15} CuO ₄ mixed with ionic conductor as membrane. <i>Electrochimica Acta</i> , 2020, 332, 135487.	5.2	38
30	Electrochemical properties of Ni _{0.4} Zn _{0.6} Fe ₂ O ₄ and the heterostructure composites (Ni ²⁺ /Zn ²⁺) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 30	5.2	45
31	Semiconductor Heterostructure SrTiO ₃ /CeO ₂ Electrolyte Membrane Fuel Cells. <i>Journal of the Electrochemical Society</i> , 2020, 167, 054504.	2.9	21
32	Non-doped CeO ₂ -carbonate nanocomposite electrolyte for low temperature solid oxide fuel cells. <i>Ceramics International</i> , 2020, 46, 29290-29296.	4.8	23
33	Application of a Triple-Conducting Heterostructure Electrolyte of Ba _{0.5} Sr _{0.5} Co _{0.1} Fe _{0.7} Zr _{0.1} Y _{0.1} O ₃ and Ca _{0.04} Ce _{0.80} Sm _{0.16} O ₂ in a High-Performance Low-Temperature Solid Oxide Fuel Cell. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 35071-35080.	8.0	84
34	Advanced fuel cell based on semiconductor perovskite La ²⁺ BaZrYO ₃ as an electrolyte material operating at low temperature 550 °C. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 27501-27509.	7.1	38
35	Cubic silicon carbide/zinc oxide heterostructure fuel cells. <i>Applied Physics Letters</i> , 2020, 117, .	3.3	28
36	Superionic Conductivity in Ceria-Based Heterostructure Composites for Low-Temperature Solid Oxide Fuel Cells. <i>Nano-Micro Letters</i> , 2020, 12, 178.	27.0	29

#	ARTICLE	IF	CITATIONS
37	Influence of Blasting Vibration of MLEM Shaft Foundation Pit on Adjacent High-Rise Frame Structure: A Case Study. <i>Energies</i> , 2020, 13, 5140.	3.1	4
38	Electrochemical Properties of a Co-Doped SrSnO ₃ -Based Semiconductor as an Electrolyte for Solid Oxide Fuel Cells. <i>ACS Applied Energy Materials</i> , 2020, 3, 6323-6333.	5.1	38
39	Interface engineering towards low temperature in-situ densification of SOFC. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 10030-10038.	7.1	13
40	Catalytic membrane with high ion/electron conduction made of strongly correlated perovskite LaNiO ₃ and Ce _{0.8} Sm _{0.2} O _{2-δ} for fuel cells. <i>Journal of Catalysis</i> , 2020, 386, 117-125.	6.2	22
41	Semiconductor Fe-doped SrTiO ₃ perovskite electrolyte for low-temperature solid oxide fuel cell (LT-SOFC) operating below 520°C. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 14470-14479.	7.1	52
42	Semiconductor TiO ₂ thin film as an electrolyte for fuel cells. <i>Journal of Materials Chemistry A</i> , 2019, 7, 16728-16734.	10.3	80
43	The semiconductor SrFe _{0.2} Ti _{0.8} O ₃ -ZnO heterostructure electrolyte fuel cells. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 30319-30327.	7.1	75
44	Tuning the Energy Band Structure at Interfaces of the SrFe _{0.75} Ti _{0.25} O ₃ -Sm _{0.25} Ce _{0.75} O _{2-δ} Heterostructure for Fast Ionic Transport. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 38737-38745.	7.1	260
45	Intrinsic and extrinsic natures make changes on the ionic transportation - Response to: Comments on Int J Hydrogen Energy 42 (2017) 17495-17503. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 28056-28064.	7.1	6
46	The sintering temperature effect on electrochemical properties of Ce _{0.8} Sm _{0.05} Ca _{0.15} O _{2-δ} (SCDC)-La _{0.6} Sr _{0.4} Co _{0.2} Fe _{0.8} O _{3-δ} (LSCF) heterostructure pellet. <i>Nanoscale Research Letters</i> , 2019, 14, 162.	5.7	25
47	Fast ionic conduction in semiconductor CeO ₂ electrolyte fuel cells. <i>NPG Asia Materials</i> , 2019, 11, .	7.9	157
48	Proton Shuttles in CeO ₂ /CeO ₂ Core-Shell Structure. <i>ACS Energy Letters</i> , 2019, 4, 2601-2607.	17.4	160
49	Ionic Conducting Properties and Fuel Cell Performance Developed by Band Structures. <i>Journal of Physical Chemistry C</i> , 2019, 123, 8569-8577.	3.1	26
50	Fast ion channels for crab shell-based electrolyte fuel cells. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 15370-15376.	7.1	11
51	Novel high ionic conductivity electrolyte membrane based on semiconductor La _{0.65} Sr _{0.3} Ce _{0.05} Cr _{0.5} Fe _{0.5} O _{3-δ} for low-temperature solid oxide fuel cells. <i>Journal of Power Sources</i> , 2019, 421, 33-40.	7.8	43
52	Shaping triple-conducting semiconductor BaCo _{0.4} Fe _{0.4} Zr _{0.1} Y _{0.1} O _{3-δ} into an electrolyte for low-temperature solid oxide fuel cells. <i>Nature Communications</i> , 2019, 10, 1707.	12.8	218
53	Advanced Fuel Cell Based on New Nanocrystalline Structure Gd _{0.1} Ce _{0.9} O ₂ Electrolyte. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 10642-10650.	8.0	78
54	Processing SCNT(SrCo _{0.8} Nb _{0.1} Ta _{0.1} O _{3-δ})-SCDC(Ce _{0.8} Sm _{0.05} Ca _{0.15} O _{2-δ}) composite into semiconductor-ionic membrane fuel cell (SIMFC) to operate below 500°C. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 31372-31385.	7.1	26

#	ARTICLE	IF	CITATIONS
55	Li effects on layer-structured oxide $\text{Li}_x\text{Ni}_{0.8}\text{Co}_{0.15}\text{Al}_{0.05}\text{O}_2$: Improving cell performance via on-line reaction. <i>Electrochimica Acta</i> , 2019, 295, 325-332.	5.2	45
56	Titanium-substituted ferrite perovskite: An excellent sulfur and coking tolerant anode catalyst for SOFCs. <i>Catalysis Today</i> , 2019, 330, 217-221.	4.4	27
57	The composite electrolyte with an insulation Sm_2O_3 and semiconductor NiO for advanced fuel cells. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 12739-12747.	7.1	34
58	High-performance SOFC based on a novel semiconductor-ionic SrFeO_3 - $\text{Ce}_{0.8}\text{Sm}_{0.2}\text{O}_2$ membrane. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 12697-12704.	7.1	27
59	Proton Conduction and Fuel Cell Using the CuFe-Oxide Mineral Composite Based on CuFeO_2 Structure. <i>ACS Applied Energy Materials</i> , 2018, 1, 580-588.	5.1	28
60	Alkaline earth metal and samarium co-doped ceria as efficient electrolytes. <i>Applied Physics Letters</i> , 2018, 112, .	3.3	27
61	Nanomaterials and technologies for low temperature solid oxide fuel cells: Recent advances, challenges and opportunities. <i>Nano Energy</i> , 2018, 45, 148-176.	16.0	363
62	New developments in fuel cells: From traditional to innovative concepts (Preface for China-Europe) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 12595.	7.1	4
63	Electrochemical and electrical properties of doped CeO_2 -ZnO composite for low-temperature solid oxide fuel cell applications. <i>Journal of Power Sources</i> , 2018, 392, 33-40.	7.8	101
64	Experimental and physical approaches on a novel semiconducting-ionic membrane fuel cell. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 12756-12764.	7.1	17
65	Validating the technological feasibility of yttria-stabilized zirconia-based semiconducting-ionic composite in intermediate-temperature solid oxide fuel cells. <i>Journal of Power Sources</i> , 2018, 384, 318-327.	7.8	32
66	Thin-Film Fuel Cells using a Sodium Silicate Binder with $\text{La}_{0.6}\text{Sr}_{0.4}\text{Co}_{0.2}\text{Fe}_{0.8}\text{O}_{3-\delta}$ (LSCF) and LaCePr Oxides (LCP) Membranes. <i>Energy Technology</i> , 2018, 6, 312-317.	3.8	2
67	Natural hematite ore composited with ZnO nanoneedles for energy applications. <i>Composites Part B: Engineering</i> , 2018, 137, 178-183.	12.0	29
68	Advanced Fuel Cell Based on Perovskite LaSrTiO_3 Semiconductor as the Electrolyte with Superoxide-Ion Conduction. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 33179-33186.	8.0	103
69	Crafting MoC ₂ -doped bimetallic alloy nanoparticles encapsulated within N-doped graphene as roust bifunctional electrocatalysts for overall water splitting. <i>Nano Energy</i> , 2018, 50, 212-219.	16.0	205
70	Single-phase electronic-ionic conducting $\text{Sm}^{3+}/\text{Pr}^{3+}/\text{Nd}^{3+}$ triple-doped ceria for new generation fuel cell technology. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 12817-12824.	7.1	18
71	Study on Zinc Oxide-Based Electrolytes in Low-Temperature Solid Oxide Fuel Cells. <i>Materials</i> , 2018, 11, 40.	2.9	69
72	Semiconductor-ionic materials could play an important role in advanced fuel-to-electricity conversion. <i>International Journal of Energy Research</i> , 2018, 42, 3413-3415.	4.5	28

#	ARTICLE	IF	CITATIONS
73	Electrical properties of nanocube CeO ₂ in advanced solid oxide fuel cells. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 12909-12916.	7.1	87
74	Polymer-assistant ceramic nanocomposite materials for advanced fuel cell technologies. <i>Ceramics International</i> , 2017, 43, 5484-5489.	4.8	9
75	Strategy towards cost-effective low-temperature solid oxide fuel cells: A mixed-conductive membrane comprised of natural minerals and perovskite oxide. <i>Journal of Power Sources</i> , 2017, 342, 779-786.	7.8	42
76	Natural CuFe ₂ O ₄ mineral for solid oxide fuel cells. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 17514-17521.	7.1	27
77	Charge separation and transport in La _{0.6} Sr _{0.4} Co _{0.2} Fe _{0.8} O _{3-δ} and ion-doping ceria heterostructure material for new generation fuel cell. <i>Nano Energy</i> , 2017, 37, 195-202.	16.0	115
78	La _{0.1} Sr _x Ca _{0.9-x} MnO _{3-δ} -Sm _{0.2} Ce _{0.8} O _{1.9} composite material for novel low temperature solid oxide fuel cells. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 17552-17558.	7.1	27
79	Industrial grade rare-earth triple-doped ceria applied for advanced low-temperature electrolyte layer-free fuel cells. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 22273-22279.	7.1	21
80	Analysis of a perovskite-ceria functional layer-based solid oxide fuel cell. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 17536-17543.	7.1	7
81	Electrochemical investigation of mixed metal oxide nanocomposite electrode for low temperature solid oxide fuel cell. <i>International Journal of Modern Physics B</i> , 2017, 31, 1750193.	2.0	2
82	Rare-earth oxide "Li _{0.3} Ni _{0.9} Cu _{0.07} Sr _{0.03} O _{2-δ} " composites for advanced fuel cells. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 22214-22221.	7.1	5
83	An ionic conductor Ce _{0.8} Sm _{0.2} O _{2-δ} (SDC) and semiconductor Sm _{0.5} Sr _{0.5} CoO ₃ (SSC) composite for high performance electrolyte-free fuel cell. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 22228-22234.	7.1	35
84	Electrochemical properties of LaCePr-oxide/K ₂ WO ₄ composite electrolyte for low-temperature SOFCs. <i>Electrochemistry Communications</i> , 2017, 77, 44-48.	4.7	29
85	Bioderived Calcite as Electrolyte for Solid Oxide Fuel Cells: A Strategy toward Utilization of Waste Shells. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 10387-10395.	6.7	17
86	Low-temperature fuel cells using a composite of redox-stable perovskite oxide La _{0.7} Sr _{0.3} Cr _{0.5} Fe _{0.5} O _{3-δ} and ionic conductor. <i>Journal of Power Sources</i> , 2017, 366, 259-264.	7.8	28
87	The electrolyte-layer free fuel cell using a semiconductor-ionic Sr ₂ Fe _{1.5} Mo _{0.5} O _{6-δ} " Ce _{0.8} Sm _{0.2} O _{2-δ} composite functional membrane. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 25001-25007.	7.1	32
88	Semiconductor-ionic Membrane of LaSrCoFe-oxide-doped Ceria Solid Oxide Fuel Cells. <i>Electrochimica Acta</i> , 2017, 248, 496-504.	5.2	74
89	Charge transport study of perovskite solar cells through constructing electron transport channels. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2017, 214, 1700089.	1.8	5
90	Standardized Procedures Important for Improving Single-Component Ceramic Fuel Cell Technology. <i>ACS Energy Letters</i> , 2017, 2, 2752-2755.	17.4	30

#	ARTICLE	IF	CITATIONS
91	Nanocomposites for "nano green energy" applications. , 2017, , 421-449.		0
92	Enhanced ionic conductivity of yttria-stabilized ZrO ₂ with natural CuFe-oxide mineral heterogeneous composite for low temperature solid oxide fuel cells. International Journal of Hydrogen Energy, 2017, 42, 17495-17503.	7.1	37
93	Superionic Conductivity of Sm ³⁺ , Pr ³⁺ , and Nd ³⁺ Triple-Doped Ceria through Bulk and Surface Two-Step Doping Approach. ACS Applied Materials & Interfaces, 2017, 9, 23614-23623.	8.0	98
94	Role of carbonate phase in ceria-carbonate composite for low temperature solid oxide fuel cells: A review. International Journal of Energy Research, 2017, 41, 465-481.	4.5	53
95	Nanotechnology Based Green Energy Conversion Devices with Multifunctional Materials at Low Temperatures. Recent Patents on Nanotechnology, 2017, 11, 85-92.	1.3	3
96	Progress in Electrolyte-Free Fuel Cells. Frontiers in Energy Research, 2016, 4, .	2.3	17
97	A Brief Description of High Temperature Solid Oxide Fuel Cell's Operation, Materials, Design, Fabrication Technologies and Performance. Applied Sciences (Switzerland), 2016, 6, 75.	2.5	128
98	Scaling Up and Characterization of Single-Layer Fuel Cells. Energy Technology, 2016, 4, 967-972.	3.8	4
99	Hybrid power generation system of solar energy and fuel cells. International Journal of Energy Research, 2016, 40, 717-725.	4.5	18
100	Natural Hematite for Next-Generation Solid Oxide Fuel Cells. Advanced Functional Materials, 2016, 26, 938-942.	14.9	85
101	The fuel cells studies from ionic electrolyte Ce _{0.8} Sm _{0.05} Ca _{0.15} O ₂ to the mixture layers with semiconductor Ni _{0.8} Co _{0.15} Al _{0.05} LiO ₂ . International Journal of Hydrogen Energy, 2016, 41, 18761-18768.	7.1	57
102	Photovoltaic properties of Li _x Co _{3-x} O ₄ /TiO ₂ heterojunction solar cells with high open-circuit voltage. Solar Energy Materials and Solar Cells, 2016, 157, 126-133.	6.2	18
103	LiNiFe-based layered structure oxide and composite for advanced single layer fuel cells. Journal of Power Sources, 2016, 316, 37-43.	7.8	42
104	Fabrication of novel electrolyte-layer free fuel cell with semi-ionic conductor (Ba _{0.5} Sr _{0.5} Co _{0.8} Fe _{0.2} O ₃ -Sm _{0.2} Ce _{0.8} O _{1.9}) and Schottky barrier. Journal of Power Sources, 2016, 328, 136-142.	7.8	50
105	Lanthanum-doped Calcium Manganite (La _{0.1} Ca _{0.9} MnO ₃) Cathode for Advanced Solid Oxide Fuel Cell (SOFC). Materials Today: Proceedings, 2016, 3, 2698-2706.	1.8	9
106	Design, fabrication and characterization of a double layer solid oxide fuel cell (DLFC). Journal of Power Sources, 2016, 332, 8-15.	7.8	21
107	Natural Mineral-Based Solid Oxide Fuel Cell with Heterogeneous Nanocomposite Derived from Hematite and Rare-Earth Minerals. ACS Applied Materials & Interfaces, 2016, 8, 20748-20755.	8.0	59
108	Mixed ionic-electronic conductor membrane based fuel cells by incorporating semiconductor Ni _{0.8} Co _{0.15} Al _{0.05} LiO ₂ into the Ce _{0.8} Sm _{0.2} O ₂ -Na ₂ CO ₃ electrolyte. International Journal of Hydrogen Energy, 2016, 41, 15346-15353.	7.1	49

#	ARTICLE	IF	CITATIONS
109	Preparation and characterization of Sm and Ca co-doped ceria-La _{0.6} Sr _{0.4} Co _{0.2} Fe _{0.8} O _{3-δ} semiconductor-ionizer composites for electrolyte-layer-free fuel cells. Journal of Materials Chemistry A, 2016, 4, 15426-15436.	7.7	17
110	CoFeZrAl-oxide based composite for advanced solid oxide fuel cells. Electrochemistry Communications, 2016, 73, 15-19.	4.7	21
111	Steam/CO ₂ electrolysis in symmetric solid oxide electrolysis cell with barium cerate-carbonate composite electrolyte. Electrochimica Acta, 2016, 190, 193-198.	5.2	25
112	Industrial-grade rare-earth and perovskite oxide for high-performance electrolyte layer-free fuel cell. Journal of Power Sources, 2016, 307, 270-279.	7.8	91
113	Cobalt oxides coated commercial Ba _{0.5} Sr _{0.5} Co _{0.8} Fe _{0.2} O _{3-δ} as high performance cathode for low-temperature SOFCs. Electrochimica Acta, 2016, 191, 223-229.	5.2	27
114	All in One Multifunctional Perovskite Material for Next Generation SOFC. Electrochimica Acta, 2016, 193, 225-230.	5.2	37
115	Novel fuel cell with nanocomposite functional layer designed by perovskite solar cell principle. Nano Energy, 2016, 19, 156-164.	16.0	137
116	Flowerlike CeO ₂ microspheres coated with Sr ₂ Fe _{1.5} Mo _{0.5} O _x nanoparticles for an advanced fuel cell. Scientific Reports, 2015, 5, 11946.	3.3	25
117	Composite electrolyte with proton conductivity for low-temperature solid oxide fuel cell. Applied Physics Letters, 2015, 107, .	3.3	15
118	Schottky Junction Effect on High Performance Fuel Cells Based on Nanocomposite Materials. Advanced Energy Materials, 2015, 5, 1401895.	19.5	166
119	Floss-like Ni-Co binary hydroxides assembled by whisker-like nanowires for high-performance supercapacitor. Ionics, 2015, 21, 1655-1663.	2.4	16
120	Significant enhancement of UV emission in ZnO nanorods subject to Ga ⁺ ion beam irradiation. Nano Research, 2015, 8, 1857-1864.	10.4	9
121	Scaled up low-temperature SOFCs with symmetrical electrode for applications. Journal of Solid State Electrochemistry, 2015, 19, 2361-2368.	2.5	2
122	Electrochemical study of lithiated transition metal oxide composite for single layer fuel cell. Journal of Power Sources, 2015, 286, 388-393.	7.8	39
123	Synthesis of Ba _{0.3} Ca _{0.7} Co _{0.8} Fe _{0.2} O _{3-δ} composite material as novel catalytic cathode for ceria-carbonate electrolyte fuel cells. Electrochimica Acta, 2015, 178, 385-391.	5.2	30
124	Significance enhancement in the conductivity of core shell nanocomposite electrolytes. RSC Advances, 2015, 5, 86322-86329.	3.6	31
125	Comparative study on three commercial carbons for supercapacitor applications. Russian Journal of Electrochemistry, 2015, 51, 77-85.	0.9	15
126	Effects of composition on the electrochemical property and cell performance of single layer fuel cell. Journal of Power Sources, 2015, 275, 476-482.	7.8	40

#	ARTICLE	IF	CITATIONS
127	Ceria-carbonate composite for low temperature solid oxide fuel cell: Sintering aid and composite effect. International Journal of Hydrogen Energy, 2014, 39, 12309-12316.	7.1	40
128	Ce _{0.8} (SmZr) _{0.2} O ₂ -carbonate nanocomposite electrolyte for solid oxide fuel cell. International Journal of Energy Research, 2014, 38, 524-529.	4.5	31
129	Electrochemical study of nanostructured electrode for low-temperature solid oxide fuel cell (LTSOFC). International Journal of Energy Research, 2014, 38, 518-523.	4.5	34
130	A commercial lithium battery LiMn-oxide for fuel cell applications. Materials Letters, 2014, 126, 85-88.	2.6	10
131	Highly Oxidized Graphene Anchored Ni(OH) ₂ Nanoflakes as Pseudocapacitor Materials for Ultrahigh Loading Electrode with High Areal Specific Capacitance. Journal of Physical Chemistry C, 2014, 118, 24866-24876.	3.1	55
132	Functional semiconductor/ionic composite GDC/KZnAl/LiNiCuZnOx for single-component fuel cell. RSC Advances, 2014, 4, 9920.	3.6	42
133	Study on GDC-KZnAl composite electrolytes for low-temperature solid oxide fuel cells. International Journal of Hydrogen Energy, 2014, 39, 17460-17465.	7.1	17
134	Microstructure and catalytic activity of Li _{0.15} Ni _{0.25} Cu _{0.3} Zn _{0.3} O ₂ -Ce _{0.8} Sm _{0.2} O _{1.9} -carbonate nanocomposite materials functioning as single component fuel cell. International Journal of Hydrogen Energy, 2014, 39, 19140-19147.	7.1	8
135	Effect of titania concentration on the grain boundary conductivity of calcium-doped ceria electrolyte. Ceramics International, 2014, 40, 9775-9781.	4.8	16
136	Synthesis of hierarchically porous LiNiCuZn-oxide and its electrochemical performance for low-temperature fuel cells. International Journal of Hydrogen Energy, 2014, 39, 12317-12322.	7.1	19
137	Fabrication of electrolyte-free fuel cell with Mg _{0.4} Zn _{0.6} O/Ce _{0.8} Sm _{0.2} O ₂ -Li _{0.3} Ni _{0.6} Cu _{0.07} Sr _{0.03} O ₂ layer. Journal of Power Sources, 2014, 248, 577-581.	7.8	44
138	Understanding the electrochemical mechanism of the core-shell ceria-LiZnO nanocomposite in a low temperature solid oxide fuel cell. Journal of Materials Chemistry A, 2014, 2, 5399.	10.3	62
139	Time-dependent performance change of single layer fuel cell with Li _{0.4} Mg _{0.3} Zn _{0.3} O/Ce _{0.8} Sm _{0.2} O ₂ composite. International Journal of Hydrogen Energy, 2014, 39, 10718-10723.	7.1	33
140	Direct lignin fuel cell for power generation. RSC Advances, 2013, 3, 5083.	3.6	55
141	Recent development of ceria-based (nano)composite materials for low temperature ceramic fuel cells and electrolyte-free fuel cells. Journal of Power Sources, 2013, 234, 154-174.	7.8	229
142	Breakthrough fuel cell technology using ceria-based multi-functional nanocomposites. Applied Energy, 2013, 106, 163-175.	10.1	126
143	A new energy conversion technology based on nano-redox and nano-device processes. Nano Energy, 2013, 2, 1179-1185.	16.0	117
144	Studies of modified lithiated NiO cathode for low temperature solid oxide fuel cell with ceria-carbonate composite electrolyte. International Journal of Hydrogen Energy, 2013, 38, 370-376.	7.1	34

#	ARTICLE	IF	CITATIONS
145	Electrochemical study of lithiated transition metal oxide composite as symmetrical electrode for low temperature ceramic fuel cells. International Journal of Hydrogen Energy, 2013, 38, 11398-11405.	7.1	80
146	Study of CuNiZnGdCe-Nanocomposite Anode for Low Temperature SOFC. Nanoscience and Nanotechnology Letters, 2012, 4, 389-393.	0.4	16
147	La _{0.3} Sr _{0.2} Mn _{0.1} Zn _{0.4} Oxide-Sm _{0.2} Ce _{0.8} O _{1.9} (LSMZ-SDC) Nanocomposite Cathode for Low Temperature SOFCs. Journal of Nanoscience and Nanotechnology, 2012, 12, 4994-4997.	0.9	8
148	Study of Ceria-Carbonate Nanocomposite Electrolytes for Low-Temperature Solid Oxide Fuel Cells. Journal of Nanoscience and Nanotechnology, 2012, 12, 4941-4945.	0.9	17
149	State of the art ceria-carbonate composites (3C) electrolyte for advanced low temperature ceramic fuel cells (LTCFCs). International Journal of Hydrogen Energy, 2012, 37, 19417-19425.	7.1	66
150	A new energy conversion technology joining electrochemical and physical principles. RSC Advances, 2012, 2, 5066.	3.6	51
151	Advanced electrolyte-free fuel cells based on functional nanocomposites of a single porous component: analysis, modeling and validation. RSC Advances, 2012, 2, 8036.	3.6	38
152	Mixed ion and electron conductive composites for single component fuel cells: I. Effects of composition and pellet thickness. Journal of Power Sources, 2012, 217, 164-169.	7.8	76
153	Design of a 5kW advanced fuel cell polygeneration system. Wiley Interdisciplinary Reviews: Energy and Environment, 2012, 1, 173-180.	4.1	10
154	Enhanced ionic conductivity in calcium doped ceria " Carbonate electrolyte: A composite effect. International Journal of Hydrogen Energy, 2012, 37, 19401-19406.	7.1	34
155	Pr ₂ NiO ₄ "Ag composite cathode for low temperature solid oxide fuel cells with ceria-carbonate composite electrolyte. International Journal of Hydrogen Energy, 2012, 37, 19388-19394.	7.1	29
156	SDC/Na ₂ CO ₃ nanocomposite: New freeze drying based synthesis and application as electrolyte in low-temperature solid oxide fuel cells. International Journal of Hydrogen Energy, 2012, 37, 19380-19387.	7.1	31
157	Integration design of membrane electrode assemblies in low temperature solid oxide fuel cell. International Journal of Hydrogen Energy, 2012, 37, 19365-19370.	7.1	11
158	Nanocomposite electrode materials for low temperature solid oxide fuel cells using the ceria-carbonate composite electrolytes. International Journal of Hydrogen Energy, 2012, 37, 19351-19356.	7.1	29
159	Low temperature ceramic fuel cells using all nano composite materials. Nano Energy, 2012, 1, 631-639.	16.0	51
160	Synthesis and Electrochemical Performances of LiNiCuZn Oxides as Anode and Cathode Catalyst for Low Temperature Solid Oxide Fuel Cell. Journal of Nanoscience and Nanotechnology, 2012, 12, 5102-5105.	0.9	9
161	Single-component fuel cells fabricated by spark plasma sintering. RSC Advances, 2012, 2, 12140.	3.6	6
162	A novel core-shell nanocomposite electrolyte for low temperature fuel cells. Journal of Power Sources, 2012, 201, 164-168.	7.8	24

#	ARTICLE	IF	CITATIONS
163	Electrochemical study on co-doped ceria-carbonate composite electrolyte. Journal of Power Sources, 2012, 201, 121-127.	7.8	40
164	High performance transition metal oxide composite cathode for low temperature solid oxide fuel cells. Journal of Power Sources, 2012, 203, 65-71.	7.8	64
165	Direct biofuel low-temperature solid oxide fuel cells. Energy and Environmental Science, 2011, 4, 1273.	30.8	45
166	Characterization and Development of Bio-Ethanol Solid Oxide Fuel Cell. Journal of Fuel Cell Science and Technology, 2011, 8, .	0.8	6
167	Nanocomposites for Advanced Fuel Cell Technology. Journal of Nanoscience and Nanotechnology, 2011, 11, 8873-8879.	0.9	21
168	LiAlO ₂ -LiNaCO ₃ Composite Electrolyte for Solid Oxide Fuel Cells. Journal of Nanoscience and Nanotechnology, 2011, 11, 5402-5407.	0.9	4
169	Synthesis of uniform quasi-octahedral CeO ₂ mesocrystals via a surfactant-free route. Journal of Nanoparticle Research, 2011, 13, 5879-5885.	1.9	13
170	An Electrolyte-Free Fuel Cell Constructed from One Homogenous Layer with Mixed Conductivity. Advanced Functional Materials, 2011, 21, 2465-2469.	14.9	143
171	Advanced Multi-Fuelled Solid Oxide Fuel Cells (ASOFCs) Using Functional Nanocomposites for Polygeneration. Advanced Energy Materials, 2011, 1, 1225-1233.	19.5	22
172	Development of methanol-fueled low-temperature solid oxide fuel cells. International Journal of Energy Research, 2011, 35, 690-696.	4.5	30
173	Thermodynamic analysis of ITSOFC co-generation system fueled by ethanol. International Journal of Energy Research, 2011, 35, 1025-1031.	4.5	5
174	Advanced fuel cells: from materials and technologies to applications. International Journal of Energy Research, 2011, 35, 1023-1024.	4.5	5
175	A fuel cell with a single component functioning simultaneously as the electrodes and electrolyte. Electrochemistry Communications, 2011, 13, 225-227.	4.7	94
176	Preparation and characterization of Sm _{0.2} Ce _{0.8} O _{1.9} /Na ₂ CO ₃ nanocomposite electrolyte for low-temperature solid oxide fuel cells. International Journal of Hydrogen Energy, 2011, 36, 3984-3988.	7.1	36
177	A single-component fuel cell reactor. International Journal of Hydrogen Energy, 2011, 36, 8536-8541.	7.1	67
178	Ceria-based nanocomposite with simultaneous proton and oxygen ion conductivity for low-temperature solid oxide fuel cells. Journal of Power Sources, 2011, 196, 2754-2758.	7.8	168
179	Single-component and three-component fuel cells. Journal of Power Sources, 2011, 196, 6362-6365.	7.8	93
180	Electrochemical study of the composite electrolyte based on samaria-doped ceria and containing yttria as a second phase. Solid State Ionics, 2011, 188, 58-63.	2.7	30

#	ARTICLE	IF	CITATIONS
181	Fuel cells based on electrolyte and non-electrolyte separators. Energy and Environmental Science, 2011, 4, 2986.	30.8	111
182	Electrochemical Characterization on SDC/Na ₂ CO ₃ Nanocomposite Electrolyte for Low Temperature Solid Oxide Fuel Cells. Journal of Nanoscience and Nanotechnology, 2011, 11, 5413-5417.	0.9	3
183	Microwave Sintered Nanocomposite Electrodes for Solid Oxide Fuel Cells. Journal of Nanoscience and Nanotechnology, 2011, 11, 5450-5454.	0.9	3
184	GDC - Y ₂ O ₃ Oxide Based Two Phase Nanocomposite Electrolyte. Journal of Fuel Cell Science and Technology, 2011, 8, .	0.8	11
185	Preparation and Characterization of Nanocomposite Calcium Doped Ceria Electrolyte With Alkali Carbonates (NK-CDC) for SOFC. Journal of Fuel Cell Science and Technology, 2011, 8, .	0.8	22
186	Study on Nanocomposites Based on Carbonate @ Ceria. Journal of Nanoscience and Nanotechnology, 2010, 10, 1203-1207.	0.9	13
187	Samarium-Doped Ceria Nanowires: Novel Synthesis and Application in Low-Temperature Solid Oxide Fuel Cells. Advanced Materials, 2010, 22, 1640-1644.	21.0	120
188	Samarium doped ceria-(Li/Na) ₂ CO ₃ composite electrolyte and its electrochemical properties in low temperature solid oxide fuel cell. Journal of Power Sources, 2010, 195, 4695-4699.	7.8	108
189	A nanostructure anode (Cu _{0.2} Zn _{0.8}) for low-temperature solid oxide fuel cell at 400-600°C. Journal of Power Sources, 2010, 195, 8067-8070.	7.8	34
190	Improved ceria-carbonate composite electrolytes. International Journal of Hydrogen Energy, 2010, 35, 2684-2688.	7.1	129
191	Carbon anode in direct carbon fuel cell. International Journal of Hydrogen Energy, 2010, 35, 2732-2736.	7.1	69
192	Thermodynamic analysis of ITSOFC hybrid system for polygenerations. International Journal of Hydrogen Energy, 2010, 35, 2824-2828.	7.1	20
193	Synthesis and characterization of composite electrolytes based on samaria-doped ceria and Na/Li carbonates. International Journal of Hydrogen Energy, 2010, 35, 2953-2957.	7.1	68
194	SDC-LiNa carbonate composite and nanocomposite electrolytes. International Journal of Hydrogen Energy, 2010, 35, 2970-2975.	7.1	43
195	Theoretical description of superionic conductivities in samaria doped ceria based nanocomposites. Applied Physics Letters, 2010, 97, .	3.3	30
196	Enhancement of Conductivity in Ceria-Carbonate Nanocomposites for LTSOFCs. Journal of Nano Research, 2009, 6, 197-203.	0.8	11
197	Solid oxide fuel cell (SOFC) technical challenges and solutions from nano-aspects. International Journal of Energy Research, 2009, 33, 1126-1137.	4.5	113
198	Electrochemical Performances of Nanocomposite Solid Oxide Fuel Cells Using Nano-Size Material LaNi _{0.2} Fe _{0.65} Cu _{0.15} O ₃ as Cathode. Journal of Nanoscience and Nanotechnology, 2009, 9, 3824-3827.	0.9	11

#	ARTICLE	IF	CITATIONS
199	Theoretical approach on ceria-based two-phase electrolytes for low temperature (300–600°C) solid oxide fuel cells. <i>Electrochemistry Communications</i> , 2008, 10, 302-305.	4.7	119
200	Novel core-shell SDC/amorphous Na ₂ CO ₃ nanocomposite electrolyte for low-temperature SOFCs. <i>Electrochemistry Communications</i> , 2008, 10, 1617-1620.	4.7	196
201	Solid oxide fuel cell (SOFC) using industrial grade mixed rare-earth oxide electrolytes. <i>International Journal of Hydrogen Energy</i> , 2008, 33, 3385-3392.	7.1	83
202	Structural Studies on Ceria-Carbonate Composite Electrolytes. <i>Key Engineering Materials</i> , 2008, 368-372, 278-281.	0.4	4
203	Fuel Cell Studies Using the CeO ₂ -La ₂ O ₃ Based Electrolytes. <i>Key Engineering Materials</i> , 2007, 336-338, 490-493.	0.4	1
204	Novel ceramic fuel cell using non-ceria-based composites as electrolyte. <i>Electrochemistry Communications</i> , 2007, 9, 2863-2866.	4.7	27
205	Electrolysis studies based on ceria-based composites. <i>Electrochemistry Communications</i> , 2006, 8, 495-498.	4.7	72
206	Next generation fuel cell R&D. <i>International Journal of Energy Research</i> , 2006, 30, 895-903.	4.5	97
207	A High Functional Cathode Material: Formula for Low-Temperature Solid Oxide Fuel Cells. <i>Electrochemical and Solid-State Letters</i> , 2006, 9, A86-A87.	2.2	28
208	Novel hybrid conductors based on doped ceria and BCY20 for ITSOFC applications. <i>Electrochemistry Communications</i> , 2004, 6, 378-383.	4.7	110
209	Calcium doped ceria-based materials for cost-effective intermediate temperature solid oxide fuel cells. <i>Solid State Sciences</i> , 2003, 5, 1127-1134.	3.2	47
210	Innovative low temperature SOFCs and advanced materials. <i>Journal of Power Sources</i> , 2003, 118, 47-53.	7.8	204
211	Functional ceria-salt-composite materials for advanced ITSOFC applications. <i>Journal of Power Sources</i> , 2003, 114, 1-9.	7.8	275
212	Doped ceria-chloride composite electrolyte for intermediate temperature ceramic membrane fuel cells. <i>Materials Letters</i> , 2002, 53, 186-192.	2.6	27
213	Fundamental study on biomass-fuelled ceramic fuel cell. <i>International Journal of Energy Research</i> , 2002, 26, 57-66.	4.5	31
214	Intermediate temperature fuel cells based on doped ceria-LiCl-SrCl ₂ composite electrolyte. <i>Journal of Power Sources</i> , 2002, 104, 73-78.	7.8	61
215	Proton and oxygen ion-mixed-conducting ceramic composites and fuel cells. <i>Solid State Ionics</i> , 2001, 145, 371-380.	2.7	30
216	Advantages of intermediate temperature solid oxide fuel cells for tractionary applications. <i>Journal of Power Sources</i> , 2001, 93, 82-86.	7.8	136

#	ARTICLE	IF	CITATIONS
217	Innovative solid carbonate- λ -ceria composite electrolyte fuel cells. <i>Electrochemistry Communications</i> , 2001, 3, 566-571.	4.7	148
218	Title is missing!. <i>Journal of Materials Science Letters</i> , 2001, 20, 591-594.	0.5	40
219	Applications of hydrofluoride ceramic membranes for advanced fuel cell technology. <i>International Journal of Energy Research</i> , 2000, 24, 39-49.	4.5	6
220	Proton conducting materials based on hydrofluorides. <i>Journal of Materials Science Letters</i> , 2000, 19, 971-973.	0.5	0
221	Using a fuel cell to study fluoride-based electrolytes. <i>Electrochemistry Communications</i> , 1999, 1, 242-246.	4.7	45
222	Intermediate temperature proton conducting salt-oxide composites. <i>Solid State Ionics</i> , 1999, 125, 397-405.	2.7	45
223	Intermediate-temperature proton-conducting fuel cells – Present experience and future opportunities. <i>Solid State Ionics</i> , 1999, 125, 439-446.	2.7	52
224	CaH ₂ containing halide electrolytes and fuel cells. <i>Journal of Materials Science Letters</i> , 1999, 18, 1807-1809.	0.5	4
225	Calcium fluoride-based ceramic composites for fuel cell applications. <i>Journal of Materials Science Letters</i> , 1999, 18, 1039-1041.	0.5	5
226	Impedance spectroscopy study of gadolinia-doped ceria. <i>Ionics</i> , 1999, 5, 286-291.	2.4	4
227	Natural salt and fluoride based electrolytes fuel cells. <i>Ionics</i> , 1999, 5, 472-476.	2.4	0
228	Intermediate temperature fuel cells with electrolytes based on oxyacid salts. <i>Journal of Power Sources</i> , 1994, 52, 289-293.	7.8	46
229	Low Temperature Solid Oxide Fuel Cells with SDC-Carbonate Electrolytes. <i>Advanced Materials Research</i> , 0, 105-106, 687-690.	0.3	10