

Venkataraman Thangadurai

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

182
papers

10,546
citations

43
h-index

100
g-index

209
ext. papers

12,476
ext. citations

7.4
avg, IF

6.86
L-index

#	Paper	IF	Citations
182	LaNi _{0.6} Co _{0.4} Fe _x O ₃ as Air-Side Contact Material for La _{0.3} Ca _{0.7} Fe _{0.7} Cr _{0.3} O ₃ Reversible Solid Oxide Fuel Cell Electrodes. <i>Crystals</i> , 2022 , 12, 73	2.3	0
181	Critical Current Densities for High-Performance All-Solid-State Li-Metal Batteries: Fundamentals, Mechanisms, Interfaces, Materials, and Applications. <i>ACS Energy Letters</i> , 2022 , 7, 1492-1527	20.1	10
180	Deciphering the Interaction of Single-Phase LaSrFeCrO with CO/CO Environments for Application in Reversible Solid Oxide Cells.. <i>ACS Applied Materials & Interfaces</i> , 2022 ,	9.5	1
179	Abundant Canadian pine with polysulfide redox mediating ZnS/CuS nanocomposite to attain high-capacity lithium sulfur battery. <i>Carbon</i> , 2022 , 195, 253-262	10.4	2
178	Synthesis, Structure, Transport Properties, Electrochemical Stability Window, and Lithium Plating/Stripping of Mg and Nb Codoped Li ₇ La ₃ Zr ₂ O ₁₂ Garnet-Type Solid Electrolytes. <i>Journal of Physical Chemistry C</i> , 2022 , 126, 7828-7840	3.8	2
177	Garnet-Based Solid-State Li Batteries: From Materials Design to Battery Architecture. <i>ACS Energy Letters</i> , 2021 , 6, 1920-1941	20.1	19
176	Microstructural Tuning of Solid Electrolyte Na ₃ Zr ₂ Si ₂ PO ₁₂ by Polymer-Assisted Solution Synthesis Method and Its Effect on Ionic Conductivity and Dielectric Properties. <i>ACS Applied Energy Materials</i> , 2021 , 4, 5475-5485	6.1	2
175	A Review on Perovskite-Type LaFeO ₃ Based Electrodes for CO ₂ Reduction in Solid Oxide Electrolysis Cells: Current Understanding of Structure-Functional Property Relationships. <i>Chemistry of Materials</i> , 2021 , 33, 4249-4268	9.6	6
174	Ligand-Engineered Metal-Organic Frameworks for Electrochemical Reduction of Carbon Dioxide to Carbon Monoxide. <i>ACS Catalysis</i> , 2021 , 11, 7350-7357	13.1	17
173	Communication- Anode-Free Lithium Metal Batteries: A Case Study of Compression Effects on Coin Cell Performance. <i>Journal of the Electrochemical Society</i> , 2021 , 168, 060532	3.9	1
172	Facet-Engineered Tungsten Disulfide for Promoting Polysulfide Electrocatalysis in Lithium-Sulfur Batteries. <i>Inorganic Chemistry</i> , 2021 , 60, 12883-12892	5.1	3
171	Water-splitting photoelectrodes consisting of heterojunctions of carbon nitride with a-type low bandgap double perovskite oxide. <i>Nanotechnology</i> , 2021 , 32,	3.4	1
170	Understanding transport properties of conducting solids: Meyer-Neldel rule revisited. <i>Ionics</i> , 2021 , 27, 4917	2.7	0
169	Synthesis and characterization of calcium double perovskites for the potential application of semiconducting CO ₂ sensors. <i>Ceramics International</i> , 2021 , 47, 30483-30503	5.1	2
168	Rational design of a carbonate-glyme hybrid electrolyte for practical anode-free lithium metal batteries. <i>Energy Storage Materials</i> , 2021 , 42, 295-306	19.4	3
167	Seawater electrolysis for hydrogen production: a solution looking for a problem?. <i>Energy and Environmental Science</i> , 2021 , 14, 4831-4839	35.4	31
166	Effect of Postannealing on the Properties of a Ta-Doped Li ₇ La ₃ Zr ₂ O ₁₂ Solid Electrolyte Degraded by Li Dendrite Penetration. <i>ACS Applied Energy Materials</i> , 2020 , 3, 12517-12524	6.1	5

165	Editors' Choice Review Solid-State Electrochemical Carbon Dioxide Sensors: Fundamentals, Materials and Applications. <i>Journal of the Electrochemical Society</i> , 2020 , 167, 037567	3.9	16
164	Morphological, dielectric and transport properties of garnet-type $\text{Li}_{6.25+y}\text{Al}_{0.25}\text{La}_3\text{Zr}_2\text{yMnyO}_{12}$ ($y = 0, 0.05, 0.1, \text{ and } 0.2$). <i>Solid State Ionics</i> , 2020 , 351, 115339	3.3	6
163	Electrochemical studies on symmetric solid-state Na-ion full cell using $\text{Na}_3\text{V}_2(\text{PO}_4)_3$ electrodes and polymer composite electrolyte. <i>Journal of Power Sources</i> , 2020 , 454, 227954	8.9	11
162	Particle size dependence of proton conduction in a cationic lanthanum phosphonate MOF. <i>Dalton Transactions</i> , 2020 , 49, 4022-4029	4.3	11
161	Can fossil fuel energy be recovered and used without any CO ₂ emissions to the atmosphere?. <i>Reviews in Environmental Science and Biotechnology</i> , 2020 , 19, 217-240	13.9	2
160	Investigating the effect of Cu-doping on the electrochemical properties of perovskite-type $\text{Ba}_{0.5}\text{Sr}_{0.5}\text{Fe}_{1-x}\text{Cu}_x\text{O}_{3-\delta}$ ($0 \leq x \leq 0.20$) cathodes. <i>Journal of Power Sources</i> , 2020 , 451, 227777	8.9	6
159	A 20 °C operating high capacity solid-state Li-S battery with an engineered carbon support cathode structure. <i>Applied Materials Today</i> , 2020 , 19, 100585	6.6	9
158	The activation entropy for ionic conduction and critical current density for Li charge transfer in novel garnet-type $\text{Li}_{6.5}\text{La}_{2.9}\text{A}_{0.1}\text{Zr}_{1.4}\text{Ta}_{0.6}\text{O}_{12}$ (A = Ca, Sr, Ba) solid electrolytes. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 2581-2590	13	18
157	Garnet-Type Solid-State Electrolytes: Materials, Interfaces, and Batteries. <i>Chemical Reviews</i> , 2020 , 120, 4257-4300	68.1	271
156	Understanding the Role of Solvents on the Morphological Structure and Li-Ion Conductivity of Poly(vinylidene fluoride)-Based Polymer Electrolytes. <i>Journal of the Electrochemical Society</i> , 2020 , 167, 070552	3.9	16
155	An auxiliary electrode mediated membrane-free redox electrochemical cell for energy storage. <i>Sustainable Energy and Fuels</i> , 2020 , 4, 2149-2152	5.8	2
154	Bioelectrochemical remediation of phenanthrene in a microbial fuel cell using an anaerobic consortium enriched from a hydrocarbon-contaminated site. <i>Journal of Hazardous Materials</i> , 2020 , 389, 121845	12.8	19
153	Li_2CO_3 : A Critical Issue for Developing Solid Garnet Batteries. <i>ACS Energy Letters</i> , 2020 , 5, 252-262	20.1	96
152	Studies on effect of Ca-doping on structure and electrochemical properties of garnet-type $\text{Y}_{3-x}\text{Ca}_x\text{Fe}_5\text{O}_{12-\delta}$. <i>Journal of Solid State Chemistry</i> , 2020 , 290, 121530	3.3	1
151	Toward Understanding the Reactivity of Garnet-Type Solid Electrolytes with HO/CO in a Glovebox Using X-ray Photoelectron Spectroscopy and Electrochemical Methods. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 36119-36127	9.5	6
150	Understanding the Na-Ion Storage Mechanism in $\text{Na}_{3+x}\text{V}_2\text{M}_x(\text{PO}_4)_3$ (M = Ni ²⁺ , Co ²⁺ , Mg ²⁺ ; x = 0.1-0.5) Cathodes. <i>ACS Applied Energy Materials</i> , 2020 , 3, 8475-8486	6.1	9
149	LiF modified stable flexible PVDF-garnet hybrid electrolyte for high performance all-solid-state Li-ion batteries. <i>Energy Storage Materials</i> , 2020 , 24, 198-207	19.4	77
148	Electrolyte selection for supercapacitive devices: a critical review. <i>Nanoscale Advances</i> , 2019 , 1, 3807-3835	35.1	337

147	Efficient Synthesis and Characterization of Robust MoS and S Cathode for Advanced Li-S Battery: Combined Experimental and Theoretical Studies. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 35729-35737	9.5	8
146	A bird's-eye view of Li-stuffed garnet-type Li ₇ La ₃ Zr ₂ O ₁₂ ceramic electrolytes for advanced all-solid-state Li batteries. <i>Energy and Environmental Science</i> , 2019 , 12, 2957-2975	35.4	192
145	Microstructural and Electrochemical Properties of Alkaline Earth Metal-Doped Li Garnet-Type Solid Electrolytes Prepared by Solid-State Sintering and Spark Plasma Sintering Methods. <i>ACS Applied Energy Materials</i> , 2019 , 2, 1765-1773	6.1	15
144	Electrochemical Stability of Garnet-Type Li ₇ La _{2.75} Ca _{0.25} Zr _{1.75} Nb _{0.25} O ₁₂ with and without Atomic Layer Deposited-Al ₂ O ₃ under CO ₂ and Humidity. <i>Journal of the Electrochemical Society</i> , 2019 , 166, A1844-A1852	3.9	18
143	Interface in Solid-State Lithium Battery: Challenges, Progress, and Outlook. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 22029-22050	9.5	127
142	Amphiphilic Cyclodextrin-Based Liquid Crystals for Proton Conduction. <i>Journal of the American Chemical Society</i> , 2019 , 141, 9217-9224	16.4	13
141	Liquid crystalline lithium-ion electrolytes derived from biodegradable cyclodextrin. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 12201-12213	13	12
140	Fabrication of a Dendrite-Free all Solid-State Li Metal Battery via Polymer Composite/Garnet/Polymer Composite Layered Electrolyte. <i>Advanced Materials Interfaces</i> , 2019 , 6, 1900186	4.6	31
139	Comparative Evaluation of Coated and Non-Coated Carbon Electrodes in a Microbial Fuel Cell for Treatment of Municipal Sludge. <i>Energies</i> , 2019 , 12, 1034	3.1	14
138	A perovskite-type NdSrCoFeO cathode for advanced solid oxide fuel cells. <i>Chemical Communications</i> , 2019 , 55, 3713-3716	5.8	13
137	Electrical Properties of Hollandite-Type BaGaTiO, KGaTiO, and KMgTiO. <i>Inorganic Chemistry</i> , 2019 , 58, 4782-4791	5.1	5
136	Hierarchical carbon-free NiCo ₂ O ₄ cathode for Li-O ₂ batteries. <i>Ionics</i> , 2019 , 25, 1669-1677	2.7	6
135	Perspective of perovskite-type oxides for proton conducting solid oxide fuel cells. <i>Solid State Ionics</i> , 2019 , 339, 114951	3.3	24
134	Solid-State Electrolytes: Structural Approach 2019 , 3-24		1
133	Sintering temperature, excess sodium, and phosphorous dependencies on morphology and ionic conductivity of NASICON Na ₃ Zr ₂ Si ₂ PO ₁₂ . <i>Solid State Ionics</i> , 2019 , 331, 22-29	3.3	29
132	Electrochemical studies of Ruddlesden-Popper layered perovskite-type La _{0.6} Sr _{1.4} Co _{0.2} Fe _{0.8} O _{4+δ} cathode for solid oxide fuel cells and associated electrical loss phenomena. <i>Ceramics International</i> , 2019 , 45, 1641-1650	5.1	10
131	Structure Evolution and Reactivity of the ScV O (0 \leq δ \leq 2.0) System. <i>Inorganic Chemistry</i> , 2018 , 57, 5607-5614	5.6	3
130	Role of Presulfidation and H ₂ S Cofeeding on Carbon Formation on SS304 Alloy during the Ethane-steam Cracking Process at 700 °C. <i>Industrial & Engineering Chemistry Research</i> , 2018 , 57, 1146-1158	3.9	3

129	Cruising in ceramics—discovering new structures for all-solid-state batteries—fundamentals, materials, and performances. <i>Ionics</i> , 2018 , 24, 639-660	2.7	33
128	Insights into B-Site Ordering in Double Perovskite-Type BaCaNbO (0 $\leq x \leq 0.45$): Combined Synchrotron and Neutron Diffraction and Electrical Transport Analyses. <i>Inorganic Chemistry</i> , 2018 , 57, 2609-2619	5.1	6
127	Characterization of lithium-rich garnet-type Li _{6.5} La _{2.5} Ba _{0.5} ZrTaO ₁₂ for beyond intercalation chemistry-based lithium-ion batteries. <i>Solid State Ionics</i> , 2018 , 318, 71-81	3.3	12
126	Establishment and practical application of the electron transfer model in lithium-air batteries. <i>Ionics</i> , 2018 , 24, 743-752	2.7	1
125	Engineering Materials for Progressive All-Solid-State Na Batteries. <i>ACS Energy Letters</i> , 2018 , 3, 2181-2198	20.1	78
124	A surfactant-assisted strategy to tailor Li-ion charge transfer interfacial resistance for scalable all-solid-state Li batteries. <i>Sustainable Energy and Fuels</i> , 2018 , 2, 2165-2170	5.8	38
123	High Performance Tubular Solid Oxide Fuel Cell Based on Ba _{0.5} Sr _{0.5} Ce _{0.6} Zr _{0.2} Gd _{0.1} Y _{0.1} O _{3-δ} Proton Conducting Electrolyte. <i>Journal of the Electrochemical Society</i> , 2018 , 165, F764-F769	3.9	10
122	Present understanding of the stability of Li-stuffed garnets with moisture, carbon dioxide, and metallic lithium. <i>Journal of Power Sources</i> , 2018 , 390, 297-312	8.9	66
121	Towards Mixed Ionic and Electronic Conducting Li-Stuffed Garnets. <i>Journal of the Electrochemical Society</i> , 2018 , 165, A2303-A2311	3.9	9
120	Li-Ion-Permeable and Electronically Conductive Membrane Comprising Garnet-Type Li ₆ La ₃ Ta _{1.5} Y _{0.5} O ₁₂ and Graphene Toward Ultrastable and High-Rate Lithium Sulfur Batteries. <i>ACS Applied Energy Materials</i> , 2018 , 1, 3733-3741	6.1	9
119	Understanding of Oxygen Reduction Reaction on Perovskite-Type Ba _{0.5} Sr _{0.5} Fe _{0.91} Al _{0.09} O _{3-δ} and Ba _{0.5} Sr _{0.5} Fe _{0.8} Cu _{0.2} O _{3-δ} Using AC Impedance Spectroscopy Genetic Programming. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 15097-15107	3.8	9
118	X-ray Photoelectron Spectroscopy and AC Impedance Spectroscopy Studies of Li-La-Zr-O Solid Electrolyte Thin Film/LiCoO ₂ Cathode Interface for All-Solid-State Li Batteries. <i>Journal of the Electrochemical Society</i> , 2017 , 164, A1133-A1139	3.9	44
117	Thermochemical CO ₂ splitting using double perovskite-type Ba ₂ Ca _{0.66} Nb _{1.34} FexO ₆ . <i>Journal of Materials Chemistry A</i> , 2017 , 5, 6874-6883	13	19
116	Synthesis and characterization of novel Li-stuffed garnet-like LiLaTaGdO (0 $\leq x \leq 0.55$): structure-property relationships. <i>Dalton Transactions</i> , 2017 , 46, 933-946	4.3	12
115	Negating interfacial impedance in garnet-based solid-state Li metal batteries. <i>Nature Materials</i> , 2017 , 16, 572-579	27	1192
114	Structure, Ionic Conductivity, and Dielectric Properties of Li-Rich Garnet-type LiLaTaSmO (0 $\leq x \leq 0.55$) and Their Chemical Stability. <i>Inorganic Chemistry</i> , 2017 , 56, 8865-8877	5.1	18
113	Overview of Lithium-Ion Grid-Scale Energy Storage Systems. <i>Current Sustainable/Renewable Energy Reports</i> , 2017 , 4, 197-208	2.8	8
112	Formulation of a Statistical Mechanical Theory To Understand the Li Ion Conduction in Crystalline Electrolytes: A Case Study on Li-Stuffed Garnets. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 17137-17142	2.8	2

111	Evaluation on the effect of gadolinium-doping for niobium on the morphology and ionic conductivity of garnet-like $\text{Li}_5\text{La}_3\text{Nb}_2\text{O}_{12}$. <i>Canadian Journal of Chemistry</i> , 2016 , 94, 321-329	0.9	2
110	Ni-Ba $_{0.5}$ Sr $_{0.5}$ Ce $_{0.6}$ Zr $_{0.2}$ Gd $_{0.1}$ Y $_{0.1}$ O $_3$ -Delta Anode Composites for Proton Conducting Solid Oxide Fuel Cells (H-SOFCs). <i>Journal of Materials Science Research</i> , 2016 , 5, 34	1	1
109	Synthesis and characterisation of ceramic proton conducting perovskite-type multi-element-doped Ba $_{0.5}$ Sr $_{0.5}$ Ce $_{1-x}$ Y $_x$ Zr $_x$ Gd $_y$ YzO $_3$ (0 International Journal of Hydrogen Energy, 2016 , 41, 13227-13237	6.7	13
108	Evaluation of MIEC Ce $_{0.8}$ Y $_{0.1}$ Mn $_{0.1}$ O $_2$ -Anode in Electrolyte-Supported SOFC. <i>Journal of the Electrochemical Society</i> , 2016 , 163, F3091-F3098	3.9	2
107	The synthesis and electrical properties of hybrid gel electrolytes derived from Keggin-type heteropoly acids and 3-(pyridin-1-ium-1-yl)propane-1-sulfonate (PyPs). <i>RSC Advances</i> , 2016 , 6, 102549-102556	3.7	6
106	Trends in electrode development for next generation solid oxide fuel cells. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 17913-17932	13	97
105	Semiconducting SnO $_2$ -TiO $_2$ (S-T) composites for detection of SO $_2$ gas. <i>Ionics</i> , 2016 , 22, 1927-1935	2.7	11
104	Electrochemical studies of Gd $_{0.5}$ Pr $_{0.5}$ BaCo $_2$ O $_5$ + (GPBC) cathode for oxide ion and proton conducting solid oxide fuel cells. <i>Solid State Ionics</i> , 2016 , 288, 351-356	3.3	11
103	Profound Understanding of Effect of Transition Metal Dopant, Sintering Temperature, and pO $_2$ on the Electrical and Optical Properties of Proton Conducting BaCe $_{0.9}$ Sm $_{0.1}$ O $_3$ <i>Inorganic Chemistry</i> , 2016 , 55, 729-44	5.1	5
102	Grain Boundary Space Charge Effect and Proton Dynamics in Chemically Stable Perovskite-Type Ba $_{0.5}$ Sr $_{0.5}$ Ce $_{0.6}$ Zr $_{0.2}$ Gd $_{0.1}$ Y $_{0.1}$ O $_3$ (BSCZGY): A Case Study on Effect of Sintering Temperature. <i>Journal of the American Ceramic Society</i> , 2016 , 99, 866-875	3.8	10
101	Probing surface valence, magnetic property, and oxide ion diffusion pathway in B-site ordered perovskite-type Ba $_2$ Ca $_{0.67}$ M $_{0.33}$ NbO $_6$ (M Mn, Fe, Co). <i>Solid State Ionics</i> , 2016 , 290, 90-97	3.3	7
100	Dielectric characteristics of fast Li ion conducting garnet-type Li $_{5+2x}$ La $_3$ Nb $_2$ -xYxO $_12$ (x = 0.25, 0.5 and 0.75). <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 15418-26	3.6	31
99	Dopant Concentration-Porosity-Li-Ion Conductivity Relationship in Garnet-Type Li $_{5+2x}$ La $_3$ Ta $_2$ -xYxO $_12$ (0.05 \leq x \leq 0.75) and Their Stability in Water and 1 M LiCl. <i>Inorganic Chemistry</i> , 2015 , 54, 6968-77	5.1	32
98	Magnetically aligned iron oxide/gold nanoparticle-decorated carbon nanotube hybrid structure as a humidity sensor. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 15506-13	9.5	44
97	Highly conductive Li garnets by a multielement doping strategy. <i>Inorganic Chemistry</i> , 2015 , 54, 3600-7	5.1	57
96	Hybrid Gel Electrolytes Derived from Keggin-Type Polyoxometalates and Imidazolium-Based Ionic Liquid with Enhanced Electrochemical Stability and Fast Ionic Conductivity. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 7621-7630	3.8	29
95	Surface and bulk study of strontium-rich chromium ferrite oxide as a robust solid oxide fuel cell cathode. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 22614-22626	13	29
94	Effect of Excess Li on the Structural and Electrical Properties of Garnet-Type Li $_6$ La $_3$ Ta $_{1.5}$ Y $_{0.5}$ O $_12$. <i>Journal of the Electrochemical Society</i> , 2015 , 162, A1772-A1777	3.9	22

93	Fast Solid-State Li Ion Conducting Garnet-Type Structure Metal Oxides for Energy Storage. <i>Journal of Physical Chemistry Letters</i> , 2015 , 6, 292-9	6.4	158
92	Challenges and prospects of anodes for solid oxide fuel cells (SOFCs). <i>Ionics</i> , 2015 , 21, 301-318	2.7	35
91	Effect of V-doping on the structure and conductivity of garnet-type $\text{Li}_5\text{La}_3\text{Nb}_2\text{O}_{12}$. <i>Ionics</i> , 2015 , 21, 373-379	7	7
90	Effect of composition and microstructure on electrical properties and CO_2 stability of donor-doped, proton conducting $\text{BaCe}_{1-x}(\text{La}_x\text{Y}_y)\text{Zr}_x\text{Nb}_y\text{O}_3$. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 2363	13	52
89	Synthesis, Structure and Li Ion Conductivity of Garnet-like $\text{Li}_{5+2x}\text{La}_3\text{Nb}_2\text{-xSm}_x\text{O}_{12}$ ($0 \leq x \leq 0.7$). <i>Journal of the Electrochemical Society</i> , 2014 , 161, A2060-A2067	3.9	20
88	Determination of Fe oxidation states in the B-site ordered perovskite-type $\text{Ba}_2\text{Ca}_{0.67}\text{Fe}_{0.33}\text{NbO}_6$ at the surface (nano-scale) and bulk by variable temperature XPS and TGA and their impact on electrochemical catalysis. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 8736	13	13
87	Evaluation of fundamental transport properties of Li-excess garnet-type $\text{Li}_{(5+2x)}\text{La}_{(3)}\text{Ta}_{(2-x)}\text{Y}_{(x)}\text{O}_{(12)}$ ($x = 0.25, 0.5$ and 0.75) electrolytes using AC impedance and dielectric spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 11356-65	3.6	61
86	Studies on polymorphic sequence during the formation of the 1:1 ordered perovskite-type $\text{BaCa}_{(0.335)}\text{M}_{(0.165)}\text{Nb}_{(0.5)}\text{O}_{(3-\square)}$ ($\text{M} = \text{Mn}, \text{Fe}, \text{Co}$) using in situ and ex situ powder X-ray diffraction. <i>Inorganic Chemistry</i> , 2014 , 53, 10085-93	5.1	11
85	Garnet-type solid-state fast Li ion conductors for Li batteries: critical review. <i>Chemical Society Reviews</i> , 2014 , 43, 4714-27	58.5	934
84	Electrochemical characterization of multi-element-doped ceria as potential anodes for SOFCs. <i>Solid State Ionics</i> , 2014 , 262, 359-364	3.3	10
83	CO_2 and SO_2 tolerant Fe-doped metal oxides for solid state gas sensors. <i>Solid State Ionics</i> , 2014 , 262, 274-278	3.3	15
82	Effect of Sintering Temperature on Microstructure, Chemical Stability, and Electrical Properties of Transition Metal or Yb-Doped $\text{BaZr}_{0.1}\text{Ce}_{0.7}\text{Y}_{0.1}\text{Mo}_{0.1}\text{O}_{3-\square}$ ($\text{M} = \text{Fe}, \text{Ni}, \text{Co},$ and Yb). <i>Frontiers in Energy Research</i> , 2014 , 2,	3.8	13
81	Research status in preparation of FePO_4 : a review. <i>Ionics</i> , 2014 , 20, 1501-1510	2.7	14
80	Chemical reactivity between $\text{Ce}_{0.7}\text{RE}_{0.2}\text{Mo}_{0.1}\text{O}_2$ ($\text{RE} = \text{Y}, \text{Sm}$) and 8YSZ, and conductivity studies of their solid solutions. <i>Solid State Ionics</i> , 2014 , 262, 444-448	3.3	3
79	Chemically stable proton conducting doped BaCeO_3 —no more fear to SOFC wastes. <i>Scientific Reports</i> , 2013 , 3, 2138	4.9	55
78	Detecting CO_2 at ppm level in synthetic air using mixed conducting double perovskite-type metal oxides. <i>Sensors and Actuators B: Chemical</i> , 2013 , 178, 598-605	8.5	14
77	Interstitial oxygens and cation deficiency in Mo-doped ceria, an anode material for SOFCs. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 8344	13	5
76	Facile proton conduction in H^+/Li^+ ion-exchanged garnet-type fast Li-ion conducting $\text{Li}_5\text{La}_3\text{Nb}_2\text{O}_{12}$. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 13469	13	49

75	Kinetics and thermodynamics of carbonation of a promising SOFC cathode material La _{0.5} Ba _{0.5} CoO _{3-δ} (LBC). <i>Journal of Materials Chemistry A</i> , 2013 , 1, 15117	13	9
74	Synthesis and characterization of perovskite-type BaMg _{0.33} Nb _{0.67-δ} FexO _{3-δ} for potential high temperature CO ₂ sensors application. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 6874	13	8
73	Electrical properties of ionic liquid and double perovskite-type metal oxide composites – A new method to tailor grain-boundary impedance of ceramic electrolytes. <i>Solid State Ionics</i> , 2013 , 232, 106-111	3.3	3
72	BaCe _{0.85-x} ZrxSm _{0.15} O _{3-δ} (0.01) <i>Journal of the Electrochemical Society</i> , 2013 , 160, F18-F26	3.9	33
71	Amphoteric oxide semiconductors for energy conversion devices: a tutorial review. <i>Chemical Society Reviews</i> , 2013 , 42, 1961-72	58.5	62
70	Sr-rich chromium ferrites as symmetrical solid oxide fuel cell electrodes. <i>Journal of Power Sources</i> , 2013 , 236, 68-79	8.9	68
69	Chemical stability of Li-stuffed garnet-type Li _{5+x} BaxLa _{3-δ} Ta ₂ O ₁₂ (x=0, 0.5, 1) in water: a comparative analysis with the Nb analogue. <i>Solid State Ionics</i> , 2013 , 247-248, 1-7	3.3	23
68	Effect of Zr substitution for Ce in BaCe _{0.8} Gd _{0.15} Pr _{0.05} O _{3-δ} on the chemical stability in CO ₂ and water, and electrical conductivity. <i>RSC Advances</i> , 2013 , 3, 3599	3.7	15
67	Evaluation of chemical stability, thermal expansion coefficient, and electrical properties of solid state and wet-chemical synthesized Y and Mn-codoped CeO ₂ for solid oxide fuel cells. <i>Journal of Power Sources</i> , 2013 , 243, 458-471	8.9	15
66	Highly Li-Stuffed Garnet-Type Li _{7+x} La ₃ Zr _{2-x} YxO ₁₂ . <i>Journal of the Electrochemical Society</i> , 2013 , 160, A1248-A1255	3.9	34
65	Growth of Crystalline Tungsten Carbides Using 1,1,3,3-Tetramethyl-1,3-disilacyclobutane on a Heated Tungsten Filament. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 3389-3395	3.8	11
64	Materials for All-Solid-State Lithium Ion Batteries. <i>Materials Research Society Symposia Proceedings</i> , 2013 , 1496, 1		
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56	Synthesis, structure, chemical stability, and electrical properties of Nb-, Zr-, and Nb-codoped BaCeO ₃ perovskites. <i>Inorganic Chemistry</i> , 2011 , 50, 6493-9	5.1	14
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