

# Shobit Omar

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8334418/publications.pdf>

Version: 2024-02-01

44  
papers

2,454  
citations

361413

20  
h-index

265206

42  
g-index

44  
all docs

44  
docs citations

44  
times ranked

2596  
citing authors

#	ARTICLE	IF	CITATIONS
1	Progress in material selection for solid oxide fuel cell technology: A review. Progress in Materials Science, 2015, 72, 141-337.	32.8	1,143
2	Higher conductivity Sm <sup>3+</sup> and Nd <sup>3+</sup> co-doped ceria-based electrolyte materials. Solid State Ionics, 2008, 178, 1890-1897.	2.7	191
3	Crystal Structure- <sup>+</sup> Ionic Conductivity Relationships in Doped Ceria Systems. Journal of the American Ceramic Society, 2009, 92, 2674-2681.	3.8	172
4	Higher ionic conductive ceria-based electrolytes for solid oxide fuel cells. Applied Physics Letters, 2007, 91, .	3.3	108
5	Electrical Conductivity of 10 <sup>Å</sup> mol% Sc <sub>2</sub> O <sub>3</sub> -1 <sup>Å</sup> mol% M <sub>2</sub> O <sub>3</sub> (M = Sc, Y, Er, Tm, Yb, Lu) Doped ZrO <sub>2</sub> Ceramics. Journal of the American Ceramic Society, 2012, 95, 1965-1972.	3.8	75
6	Designing High Ionic Conducting NASICON-type Na <sub>3</sub> Zr <sub>2</sub> Si <sub>2</sub> PO <sub>12</sub> Solid-Electrolytes for Na-Ion Batteries. Journal of Physical Chemistry C, 2020, 124, 9161-9169.	3.1	55
7	Performance of anode-supported solid oxide fuel cell using novel ceria electrolyte. Journal of Power Sources, 2010, 195, 2131-2135.	7.8	53
8	Scandia stabilized zirconia-ceria solid electrolyte (xSc <sub>1</sub> CeSZ, 5 <math>x</math> 11) for IT-SOFCs: Structure and conductivity studies. Scripta Materialia, 2016, 121, 10-13.	5.2	43
9	Improving the Electrochemical Performance of Na <sub>3</sub> V <sub>2</sub> (PO <sub>4</sub> ) <sub>3</sub> Cathode in Na-Ion Batteries by Si-Doping. ACS Applied Energy Materials, 2020, 3, 12054-12065.	5.1	39
10	High ionic conductivity of Mg <sup>2+</sup> -doped non-stoichiometric sodium bismuth titanate. Acta Materialia, 2018, 159, 8-15.	7.9	38
11	Ionic conductivity ageing investigation of 1Ce10ScSZ in different partial pressures of oxygen. Solid State Ionics, 2011, 184, 2-5.	2.7	35
12	Consistency in the chemical expansion of fluorites: A thermal revision of the doped ceria. Acta Materialia, 2013, 61, 5406-5413.	7.9	34
13	Crystal Growth of Two New Niobates, La <sub>2</sub> KNbO <sub>6</sub> and Nd <sub>2</sub> KNbO <sub>6</sub> : Structural, Dielectric, Photophysical, and Photocatalytic Properties. Chemistry of Materials, 2008, 20, 3327-3335.	6.7	32
14	Ionic Conduction Behavior in Sm <sub>x</sub> Nd <sub>0.15-<sup>~</sup>x</sub> Ce <sub>0.85O<sub>2</sub>-<sup>~</sup>1</sub> . Solid State Ionics, 2014, 263, 190-196.	2.7	31
15	Electrical conductivity study of B-site Ga doped non-stoichiometric sodium bismuth titanate ceramics. Journal of Alloys and Compounds, 2018, 746, 54-61.	5.5	31
16	Solid solutioning in ZrB <sub>2</sub> with HfB <sub>2</sub> : Effect on densification and oxidation resistance. International Journal of Refractory Metals and Hard Materials, 2019, 84, 105041.	3.8	31
17	Oxygen- <sup>+</sup> ion conduction in scandia- <sup>+</sup> stabilized zirconia- <sup>+</sup> ceria solid electrolyte (xSc <sub>2</sub> O <sub>3</sub> -1CeO <sub>2</sub> - <sup>+</sup> (99- <sup>~</sup> x)ZrO <sub>2</sub> ), Tj ETQq1 B. 7843147gBT /Ove		
18	Influence of excess sodium addition on the structural characteristics and electrical conductivity of Na <sub>0.5</sub> Bi <sub>0.5</sub> TiO <sub>3</sub> . Solid State Ionics, 2018, 317, 115-121.	2.7	25

#	ARTICLE	IF	CITATIONS
19	Conductivity ageing studies on 1M10ScSZ (M4+=Ce, Hf). Solid State Ionics, 2011, 189, 100-106.	2.7	22
20	Effect of sintering on mechanical properties of ceria reinforced yttria stabilized zirconia. Ceramics International, 2016, 42, 11393-11403.	4.8	22
21	Ionic conductivity ageing behaviour of 10Åmol.% Sc2O3â€“1Åmol.% CeO2â€“ZrO2 ceramics. Journal of Materials Science, 2010, 45, 6406-6410.	3.7	19
22	Interfacial Effect of the Oxygen-Ion Distribution on the Conduction Mechanism in Strontium-Added Ce<sub>0.8</sub>Sm<sub>0.2</sub>O<sub>2</sub>â€“Y<sub>2</sub>/Na<sub>2</sub>CO<sub>3</sub> Nanocomposite. Journal of Physical Chemistry C, 2016, 120, 25068-25077.	3.1	19
23	Structural Characteristics and Electrical Conductivity of Spark Plasma Sintered Ytterbia Coâ€“doped Scandia Stabilized Zirconia. Journal of the American Ceramic Society, 2017, 100, 204-214.	3.8	19
24	Phase stability and conductivity in the pseudo ternary system of xYb2O3-(12-x)Sc2O3-88ZrO2 (0â€“â‰‰xâ€“â‰‰5). Solid State Ionics, 2019, 332, 93-101.	2.7	19
25	Phase stability and ionic conductivity of cubic xNb2O5-(11-x)Sc2O3-ZrO2 (0â‰‰xâ‰‰4). Journal of Alloys and Compounds, 2017, 703, 643-651.	5.5	18
26	A Strategic Co-doping Approach Using Sc<sup>3+</sup> and Ce<sup>4+</sup> toward Enhanced Conductivity in NASICON-Type Na<sub>3</sub>Zr<sub>2</sub>Si<sub>2</sub>PO<sub>12</sub>. Journal of Physical Chemistry C, 2021, 125, 27723-27735.	3.1	17
27	Effect of Thermal Aging on the Phase Stability of 1Yb<sub>2</sub>O<sub>3</sub>â€“xSc<sub>2</sub>O<sub>3</sub>â€“(99 â€“ x) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T		
28	High 3D Proton Conductivity of a 2D Zn(II) Metalâ€“Organic Framework Synthesized via Water-Assisted Single-Crystal-to-Single-Crystal Phase Transformation. Journal of Physical Chemistry C, 2020, 124, 18901-18910.	3.1	15
29	Hot Corrosion of Stabilized Zirconia Thermal Barrier Coatings and the Role of Mg Inhibitor. Journal of the American Ceramic Society, 2015, 98, 2655-2661.	3.8	10
30	Validation of defect association energy on modulating oxygen ionic conductivity in low temperature solid oxide fuel cell. Journal of Power Sources, 2020, 480, 229106.	7.8	10
31	Mechanical properties of spark plasma sintered ceria reinforced 8 mol% yttria-stabilized zirconia electrolyte. Nanomaterials and Energy, 2012, 1, 306-315.	0.2	9
32	Phase evolution in CeO 2 -doped SrTiO 3. Journal of Alloys and Compounds, 2015, 623, 197-202.	5.5	9
33	Ceria/Bismuth Oxide Bilayer Electrolyte based Low-Temperature SOFCs with Stable Electrochemical Performance. ECS Transactions, 2017, 78, 361-370.	0.5	9
34	Long-Term Conductivity Stability of Metastable Tetragonal Phases in 1Yb2O3â€“xSc2O3â€“(99 â€“ x)ZrO2 (x =) Tj ETQq0 0 0 rgBT /Ov	3.1	9
35	High-performance SrFe0.1Mo0.9O3- based composites for the anode application in solid oxide fuel cells. Electrochimica Acta, 2020, 354, 136759.	5.2	8
36	Editorial: Solid-state conductors. Nanomaterials and Energy, 2019, 8, 1-1.	0.2	7

#	ARTICLE	IF	CITATIONS
37	Doped Ceria for Solid Oxide Fuel Cells. , 2019, , .		5
38	Long-term conductivity stability of acceptor-doped $\text{Na}_{0.54}\text{Bi}_{0.46}\text{TiO}_3$ . Solid State Ionics, 2019, 330, 40-46.	2.7	5
39	Effect of sintering temperature on the microstructure and conductivity of $\text{Na}_{0.54}\text{Bi}_{0.46}\text{Ti}_{0.99}\text{Mg}_{0.01}\text{O}_3$ . Solid State Ionics, 2021, 360, 115547.	2.7	5
40	Electrochemical Performance of $\text{SrMg}_{0.1}\text{Mo}_{0.9}\text{O}_3$ -Based Composites for Solid Oxide Fuel Cell Anodes. ACS Applied Energy Materials, 0, , .	5.1	5
41	Electrical conductivity study of $\text{CeO}_2$ - doped $\text{SrTiO}_3$ ceramics using impedance spectroscopy. Solid State Ionics, 2017, 309, 1-8.	2.7	4
42	Temporal stability of oxygen-ion conductivity in $1\text{Nb}_2\text{O}_5\text{-}10\text{Sc}_2\text{O}_3\text{-}89\text{ZrO}_2$ . Journal of the European Ceramic Society, 2018, 38, 1688-1694.	5.7	4
43	Forty years of the Staebler-Wronski effect. Philosophical Magazine, 2018, 98, 2512-2528.	1.6	3
44	Densification Kinetics of $\text{CeO}_2$ Reinforced 8 Mol.% $\text{Y}_2\text{O}_3$ Stabilized $\text{ZrO}_2$ Ceramics. Jom, 2018, 70, 1937-1945.	1.9	3