Scott A Barnett

List of Publications by Year
in descending order

230 papers	15,547 citations	20759 60 h-index	18075 120 g-index
232 all docs	232 docs citations	232 times ranked	8057 citing authors

#	Article	IF	Citations
1	Advanced anodes for high-temperature fuel cells. Nature Materials, 2004, 3, 17-27.	13.3	1,315
2	A direct-methane fuel cell with a ceria-based anode. Nature, 1999, 400, 649-651.	13.7	1,093
3	Three-dimensional reconstruction of a solid-oxide fuel-cell anode. Nature Materials, 2006, 5, 541-544.	13.3	727
4	A perspective on low-temperature solid oxide fuel cells. Energy and Environmental Science, 2016, 9, 1602-1644.	15.6	698
5	A thermally self-sustained micro solid-oxide fuel-cell stack with high power density. Nature, 2005, 435, 795-798.	13.7	583
6	Model of superlattice yield stress and hardness enhancements. Journal of Applied Physics, 1995, 77, 4403-4411.	1.1	495
7	An Octane-Fueled Solid Oxide Fuel Cell. Science, 2005, 308, 844-847.	6.0	488
8	Oxygen transfer processes in (La,Sr)MnO3/Y2O3-stabilized ZrO2 cathodes: an impedance spectroscopy study. Solid State Ionics, 1998, 110, 235-243.	1.3	368
9	Growth, structure, and microhardness of epitaxial TiN/NbN superlattices. Journal of Materials Research, 1992, 7, 901-911.	1.2	362
10	Direct operation of solid oxide fuel cells with methane fuel. Solid State Ionics, 2005, 176, 1827-1835.	1.3	349
11	Syngas Production By Coelectrolysis of CO₂/H₂O: The Basis for a Renewable Energy Cycle. Energy & Fuels, 2009, 23, 3089-3096.	2.5	230
12	Large-scale electricity storage utilizing reversible solid oxide cells combined with underground storage of CO₂ and CH₄. Energy and Environmental Science, 2015, 8, 2471-2479.	15.6	229
13	Ni-Substituted Sr(Ti,Fe)O3 SOFC Anodes: Achieving High Performance via Metal Alloy Nanoparticle Exsolution. Joule, 2018, 2, 478-496.	11.7	220
14	Measurement of three-dimensional microstructure in a LiCoO2 positive electrode. Journal of Power Sources, 2011, 196, 3443-3447.	4.0	195
15	Deposition and properties of polycrystalline TiN/NbN superlattice coatings. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1992, 10, 1604-1609.	0.9	182
16	Enhanced hardness in latticeâ€matched singleâ€crystal TiN/V0.6Nb0.4N superlattices. Applied Physics Letters, 1990, 57, 2654-2656.	1.5	167
17	High efficiency electrical energy storage using a methaneâ€“oxygen solid oxide cell. Energy and Environmental Science, 2011, 4, 944-951.	15.6	154
18	Solid oxide fuel cell cathodes by infiltration of La0.6Sr0.4Co0.2Fe0.8O3âˆ'Î´ into Gd-Doped Ceria. Solid State Ionics, 2008, 179, 2059-2064.	1.3	150

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19	Effects of three-dimensional cathode microstructure on the performance of lithium-ion battery cathodes. Electrochimica Acta, 2013, 88, 580-588.	2.6	144
20	Quantitative three-dimensional microstructure of a solid oxide fuel cell cathode. Electrochemistry Communications, 2009, 11, 1052-1056.	2.3	141
21	Time-dependent performance changes in LSCF-infiltrated SOFC cathodes: The role of nano-particle coarsening. Solid State Ionics, 2011, 187, 64-67.	1.3	140
22	Effect of composition of (La0.8Sr0.2MnO3â€“Y2O3-stabilized ZrO2) cathodes: Correlating three-dimensional microstructure and polarization resistance. Journal of Power Sources, 2010, 195, 1829-1840.	4.0	139
23	Increased solid-oxide fuel cell power density using interfacial ceria layers. Solid State Ionics, 1997, 98, 191-196.	1.3	135
24	Nickel- and Ruthenium-Doped Lanthanum Chromite Anodes: Effects of Nanoscale Metal Precipitation on Solid Oxide Fuel Cell Performance. Journal of the Electrochemical Society, 2010, 157, B279.	1.3	133
25	Transparent conducting Zn1âˆ'xMgxO:(Al,In) thin films. Journal of Applied Physics, 2004, 96, 459-467.	1.1	131
26	A reduced temperature solid oxide fuel cell with nanostructured anodes. Energy and Environmental Science, 2011, 4, 3951.	15.6	121
27	A Study of Screen Printed Yttria-Stabilized Zirconia Layers for Solid Oxide Fuel Cells. Journal of the American Ceramic Society, 2005, 88, 3361-3368.	1.9	119
28	Mechanisms of Performance Degradation of (La,Sr)(Co,Fe)O_{3-Î´}Solid Oxide Fuel Cell Cathodes. Journal of the Electrochemical Society, 2016, 163, F581-F585.	1.3	118
29	Solid Oxide Fuel Cell Niâ€“YSZ Anodes: Effect of Composition on Microstructure and Performance. Electrochemical and Solid-State Letters, 2008, 11, B181.	2.2	113
30	Impact of pore microstructure evolution on polarization resistance of Ni-Yttria-stabilized zirconia fuel cell anodes. Journal of Power Sources, 2011, 196, 2640-2643.	4.0	111
31	Fuel-flexible operation of a solid oxide fuel cell with Sr0.8La0.2TiO3 support. Journal of Power Sources, 2008, 185, 1086-1093.	4.0	109
32	Effect of superlattice layer elastic moduli on hardness. Applied Physics Letters, 1994, 64, 61-63.	1.5	108
33	Simulation of coarsening in three-phase solid oxide fuel cell anodes. Journal of Power Sources, 2011, 196, 1333-1337.	4.0	105
34	Lowâ€Temperature Solidâ€Oxide Fuel Cells Utilizing Thin Bilayer Electrolytes. Journal of the Electrochemical Society, 1997, 144, L130-L132.	1.3	103
35	Improving the stability of direct-methane solid oxide fuel cells using anode barrier layers. Journal of Power Sources, 2006, 158, 1313-1316.	4.0	102
36	Use of a catalyst layer for propane partial oxidation in solid oxide fuel cells. Solid State Ionics, 2005, 176, 871-879.	1.3	101

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37	Linking the microstructure, performance and durability of Ni-yttria-stabilized zirconia solid oxide fuel cell anodes using three-dimensional focused ion beamâ€“scanning electron microscopy imaging. Scripta Materialia, 2011, 65, 67-72.	2.6	95
38	Critical thickness for transformation of epitaxially stabilized cubic AlN in superlattices. Applied Physics Letters, 2001, 78, 892-894.	1.5	93
39	3D analysis of a LiCoO2â€“Li(Ni1/3Mn1/3Co1/3)O2 Li-ion battery positive electrode using x-ray nano-tomography. Electrochemistry Communications, 2013, 28, 127-130.	2.3	93
40	Cobalt-substituted SrTi_{0.3}Fe_{0.7}O_{3âˆ’Î´}: a stable high-performance oxygen electrode material for intermediate-temperature solid oxide electrochemical cells. Energy and Environmental Science, 2018, 11, 1870-1879.	15.6	93
41	High-rate electrochemical partial oxidation of methane in solid oxide fuel cells. Journal of Power Sources, 2006, 161, 460-465.	4.0	91
42	Tortuosity characterization of 3D microstructure at nano-scale for energy storage and conversion materials. Journal of Power Sources, 2014, 249, 349-356.	4.0	91
43	Three-dimensional reconstruction and analysis of an entire solid oxide fuel cell by full-field transmission X-ray microscopy. Journal of Power Sources, 2013, 233, 174-179.	4.0	90
44	Structure and mechanical properties of epitaxial TiN/V_{0.3}Nb_{0.7}N(100) superlattices. Journal of Materials Research, 1994, 9, 1456-1467.	1.2	86
45	Three-Dimensional Analysis of Solid Oxide Fuel Cell Ni-YSZ Anode Interconnectivity. Microscopy and Microanalysis, 2009, 15, 71-77.	0.2	85
46	Pd-substituted (La,Sr)CrO3âˆ’â€“Ce0.9Gd0.1O2âˆ’ solid oxide fuel cell anodes exhibiting regenerative behavior. Journal of Power Sources, 2011, 196, 3089-3094.	4.0	85
47	Stability and coking of direct-methane solid oxide fuel cells: Effect of CO2 and air additions. Journal of Power Sources, 2010, 195, 271-279.	4.0	83
48	Fe-substituted SrTiO3âˆ’Î´â€“Ce0.9Gd0.1O2 composite anodes for solid oxide fuel cells. Energy and Environmental Science, 2013, 6, 1850.	15.6	82
49	Comprehensive Enhancement of Nanostructured Lithium-Ion Battery Cathode Materials via Conformal Graphene Dispersion. Nano Letters, 2017, 17, 2539-2546.	4.5	81
50	Growth of In[sub x]Ga[sub 1âˆ’x]As/GaAs heterostructures using Bi as a surfactant. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2000, 18, 1232.	1.6	78
51	Measurements and Modeling of Sm[sub 0.5]Sr[sub 0.5]CoO[sub 3âˆ’x]â€“Ce[sub 0.9]Gd[sub 0.1]O[sub 1.95] SOFC Cathodes Produced Using Infiltrate Solution Additives. Journal of the Electrochemical Society, 2010, 157, B536.	1.3	77
52	Co-Firing of Anode-Supported SOFCs with Thin La[sub 0.9]Sr[sub 0.1]Ga[sub 0.8]Mg[sub 0.2]O[sub 3âˆ’Î] Electrolytes. Electrochemical and Solid-State Letters, 2006, 9, A285.	2.2	73
53	Microstructural 3D Reconstruction and Performance Evaluation of LSCF Cathodes Obtained by Electrostatic Spray Deposition. Chemistry of Materials, 2011, 23, 5340-5348.	3.2	68
54	Thin Yttriumâ€Stabilized Zirconia Electrolyte Solid Oxide Fuel Cells by Centrifugal Casting. Journal of the American Ceramic Society, 2002, 85, 3096-3098.	1.9	67

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55	3D Non-destructive morphological analysis of a solid oxide fuel cell anode using full-field X-ray nano-tomography. Journal of Power Sources, 2012, 218, 348-351.	4.0	67
56	Modeling and experimental performance of an intermediate temperature reversible solid oxide cell for high-efficiency, distributed-scale electrical energy storage. Journal of Power Sources, 2015, 283, 329-342.	4.0	67
57	Effect of Firing Temperature on LSM-YSZ Composite Cathodes: A Combined Three-Dimensional Microstructure and Impedance Spectroscopy Study. Journal of the Electrochemical Society, 2012, 159, B385-B393.	1.3	66
58	Three-dimensional morphological measurements of LiCoO2 and LiCoO2/Li(Ni1/3Mn1/3Co1/3)O2 lithium-ion battery cathodes. Journal of Power Sources, 2013, 227, 267-274.	4.0	66
59	Solid oxide cells with zirconia/ceria Bi-Layer electrolytes fabricated by reduced temperature firing. Journal of Materials Chemistry A, 2015, 3, 9955-9964.	5.2	66
60	Deposition, structure, and hardness of polycrystalline transition-metal nitride superlattice films. Journal of Materials Research, 1999, 14, 2500-2507.	1.2	62
61	Boosting solid oxide fuel cell performance <i>via</i> electrolyte thickness reduction and cathode infiltration. Journal of Materials Chemistry A, 2020, 8, 11626-11631.	5.2	62
62	Bias Sputter Deposition of Dense Yttriaâ€Stabilized Zirconia Films on Porous Substrates. Journal of the Electrochemical Society, 1995, 142, 3084-3087.	1.3	61
63	Conditions for stable operation of solid oxide electrolysis cells: oxygen electrode effects. Energy and Environmental Science, 2019, 12, 3053-3062.	15.6	61
64	Life testing of LSMâ€“YSZ composite electrodes under reversing-current operation. Physical Chemistry Chemical Physics, 2013, 15, 17257.	1.3	60
65	Application of LaSr[sub 2]Fe[sub 2]CrO[sub 9âˆ'Î´] in Solid Oxide Fuel Cell Anodes. Electrochemical and Solid-State Letters, 2008, 11, B51.	2.2	59
66	Operation of anode-supported solid oxide fuel cells on propaneâ€“air fuel mixtures. Applied Catalysis A: General, 2004, 262, 255-259.	2.2	58
67	Anode barrier layers for tubular solid-oxide fuel cells with methane fuel streams. Journal of Power Sources, 2006, 161, 413-419.	4.0	58
68	Combined electrochemical and X-ray tomography study of the high temperature evolution of Nickel â€“ Yttria Stabilized Zirconia solid oxide fuel cell anodes. Journal of Power Sources, 2016, 307, 604-612.	4.0	57
69	Operation of ceria-electrolyte solid oxide fuel cells on iso-octaneâ€“air fuel mixtures. Journal of Power Sources, 2006, 157, 422-429.	4.0	56
70	Deposition and properties of yttriaâ€stabilized zirconia thin films using reactive direct current magnetron sputtering. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1991, 9, 3054-3060.	0.9	55
71	Effect of fuel composition on the performance of ceramic-based solid oxide fuel cell anodes. Solid State Ionics, 2005, 176, 2545-2553.	1.3	55
72	Multidimensional flow, thermal, and chemical behavior in solid-oxide fuel cell button cells. Journal of Power Sources, 2009, 187, 123-135.	4.0	54

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73	Three-Dimensional Microstructural Evolution of Ni- Yttria-Stabilized Zirconia Solid Oxide Fuel Cell Anodes At Elevated Temperatures. Journal of the Electrochemical Society, 2013, 160, F1293-F1304.	1.3	54
74	Structural and Chemical Evolution of the SOFC Anode La_{0.30}Sr_{0.70}Fe_{0.70}Cr_{0.30}O_{3â^'Î´} upon Reduction and Oxidation: An in Situ Neutron Diffraction Study. Chemistry of Materials, 2010, 22, 3283-3289.	3.2	51
75	A solid oxide cell yielding high power density below 600 Â°C. RSC Advances, 2012, 2, 4075.	1.7	51
76	Effect of Mixedâ€Conducting Interfacial Layers on Solid Oxide Fuel Cell Anode Performance. Journal of the Electrochemical Society, 1998, 145, 1696-1701.	1.3	50
77	Hydrogen Oxidation Mechanisms on Perovskite Solid Oxide Fuel Cell Anodes. Journal of the Electrochemical Society, 2016, 163, F952-F961.	1.3	50
78	Exsolution and electrochemistry in perovskite solid oxide fuel cell anodes: Role of stoichiometry in Sr(Ti,Fe,Ni)O3. Journal of Power Sources, 2019, 439, 227077.	4.0	50
79	Reactive magnetron sputter deposition of niobium nitride films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1993, 11, 1528-1533.	0.9	49
80	An ultrahigh vacuum, magnetron sputtering system for the growth and analysis of nitride superlattices. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1992, 10, 75-81.	0.9	48
81	A High Power Density Intermediateâ€Temperature Solid Oxide Fuel Cell with Thin (La_{0.9}Sr_{0.1})_{0.98}(Ga_{0.8}Mg_{0.2})O_{3â€Î´} Electrolyte and Nanoâ€Scale Anode. Advanced Functional Materials, 2014, 24, 5703-5709.	7.8	48
82	Stable, Low Polarization Resistance Solid Oxide Fuel Cell Anodes: La_{1â€"<i>x</i>}Sr_{<i>x</i>}Cr_{1â€"<i>x</i>}Fe_{<i>x</i>}O_{3-Î´} (<i>x</i> = 0.2â€"0.67). Chemistry of Materials, 2014, 26, 3113-3120.	3.2	48
83	Decreasing the Polarization Resistance of (La,Sr)CrO_{3â^'Î´} Solid Oxide Fuel Cell Anodes by Combined Fe and Ru Substitution. Chemistry of Materials, 2015, 27, 3683-3693.	3.2	48
84	Electron microscopy investigations of changes in morphology and conductivity of LiFePO4/C electrodes. Journal of Power Sources, 2016, 307, 259-269.	4.0	48
85	Ionâ€irradiationâ€induced suppression of threeâ€dimensional island formation during InAs growth on Si(100). Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1990, 8, 1587-1592.	0.9	47
86	Use of the Simple Infiltrated Microstructure Polarization Loss Estimation (SIMPLE) model to describe the performance of nano-composite solid oxide fuel cell cathodes. Physical Chemistry Chemical Physics, 2012, 14, 15379.	1.3	47
87	Reduced-temperature firing of solid oxide fuel cells with zirconia/ceria bi-layer electrolytes. Journal of Power Sources, 2014, 260, 259-263.	4.0	46
88	Observing the microstructural evolution of Ni-Yttria-stabilized zirconia solid oxide fuel cell anodes. Acta Materialia, 2016, 103, 204-210.	3.8	44
89	Formation of polyhedral voids at surface cusps during growth of epitaxial TiN/NbN superlattice and alloy films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1992, 10, 1618-1624.	0.9	43
90	The Electrochemical Properties of Sr(Ti,Fe)O_{3-Î´}for Anodes in Solid Oxide Fuel Cells. Journal of the Electrochemical Society, 2017, 164, F364-F371.	1.3	41

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91	The enhanced electrochemical response of Sr(Ti_{0.3}Fe_{0.7}Ru_{0.07})O_{3âˆ’Î´} anodes due to exsolved Ruâ€“Fe nanoparticles. Journal of Materials Chemistry A, 2018, 6, 5193-5201.	5.2	41
92	SOFC Anode Performance Enhancement through Precipitation of Nanoscale Catalysts. ECS Transactions, 2007, 7, 1339-1348.	0.3	39
93	Short-period segmented-in-series solid oxide fuel cells on flattened tube supports. Journal of Power Sources, 2007, 163, 960-965.	4.0	38
94	Effective elastic constants and acoustic properties of single-crystal TiN/NbN superlattices. Journal of Materials Research, 1992, 7, 2248-2256.	1.2	37
95	Direct E0 energy gaps of bismuthâ€containing IIIâ€“V alloys predicted using quantum dielectric theory. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1987, 5, 2845-2848.	0.9	36
96	Deposition, Structure, and Properties of Cermet Thin Films Composed of Ag and Yâ€Stabilized Zirconia. Journal of the Electrochemical Society, 1992, 139, 1134-1140.	1.3	36
97	Solid oxide fuel cells operated by internal partial oxidation reforming of iso-octane. Journal of Power Sources, 2006, 155, 353-357.	4.0	36
98	Enhancement of Niâ€“(Y₂O₃)_{0.08}(ZrO₂)_{0.92} fuel electrode performance by infiltration of Ce_{0.8}Gd_{0.2}O_{2âˆ’Î´} nanoparticles. Journal of Materials Chemistry A, 2020, 8, 4099-4106.	5.2	36
99	Electrochemical Partial Oxidation of Methane in Solid Oxide Fuel Cells: Effect of Anode Reforming Activity. Catalysis Letters, 2008, 121, 19-23.	1.4	35
100	Epitaxial growth of ZrN on Si(100). Applied Physics Letters, 1988, 53, 400-402.	1.5	34
101	Growth and characterization of epitaxial Mo/NbN superlattices. Applied Physics Letters, 1996, 68, 2198-2200.	1.5	34
102	Deposition and mechanical properties of polycrystalline Y₂O₃/ZrO₂ superlattices. Journal of Materials Research, 1999, 14, 3614-3622.	1.2	34
103	Oxygen electrode characteristics of Pr2NiO4+Î´-infiltrated porous (La0.9Sr0.1)(Ga0.8Mg0.2)O3â€“Î´. Solid State Ionics, 2015, 274, 134-139.	1.3	34
104	Three-Phase 3D Reconstruction of a LiCoO₂ Cathode via FIB-SEM Tomography. Microscopy and Microanalysis, 2016, 22, 140-148.	0.2	34
105	Relating the 3D electrode morphology to Li-ion battery performance; a case for LiFePO 4. Journal of Power Sources, 2016, 324, 358-367.	4.0	33
106	La0.9Sr0.1Ga0.8Mg0.2O3âˆ’Î´-La0.6Sr0.4Co0.2Fe0.8O3âˆ’Î, composite cathodes for intermediate-temperature solid oxide fuel cells. Solid State Ionics, 2008, 179, 420-427.	1.3	32
107	Three-dimensional microstructure of high-performance pulsed-laser deposited Niâ€“YSZ SOFC anodes. Physical Chemistry Chemical Physics, 2014, 16, 15249.	1.3	32
108	High stability SrTi_{1âˆ’x}Fe_xO_{3âˆ’Î´} electrodes for oxygen reduction and oxygen evolution reactions. Journal of Materials Chemistry A, 2019, 7, 21447-21458.	5.2	32

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109	Determination of Electrode Oxygen Transport Kinetics Using Electrochemical Impedance Spectroscopy Combined with Three-Dimensional Microstructure Measurement: Application to Nd₂NiO_{4+Î´}. Journal of the Electrochemical Society, 2014, 161, F1366-F1374.	1.3	31
110	Effectiveness of dense Gd-doped ceria barrier layers for (La,Sr)(Co,Fe)O3 cathodes on Yttria-stabilized zirconia electrolytes. Solid State Ionics, 2019, 335, 74-81.	1.3	30
111	Modeling electrochemical partial oxidation of methane for cogeneration of electricity and syngas in solid-oxide fuel cells. Journal of Power Sources, 2008, 183, 143-150.	4.0	29
112	Degradation Mechanisms of Porous La_{0.6}Sr_{0.4}Co_{0.2}Fe_{0.8}O_{3-Î´}Solid Oxide Fuel Cell Cathodes. Journal of the Electrochemical Society, 2018, 165, F564-F570.	1.3	29
113	Effect of cathode sheet resistance on segmented-in-series SOFC power density. Journal of Power Sources, 2007, 164, 742-745.	4.0	28
114	Tape Casting of High-Performance Low-Temperature Solid Oxide Cells with Thin La_{0.8}Sr_{0.2}Ga_{0.8}Mg_{0.2}O_{3âˆ'Î´} Electrolytes and Impregnated Nano Anodes. ACS Applied Materials & Interfaces, 2017, 9, 7115-7124.	4.0	28
115	Design considerations for segmented-in-series fuel cells. Journal of Power Sources, 2005, 147, 85-94.	4.0	27
116	Finite-Element Modeling of Idealized Infiltrated Composite Solid Oxide Fuel Cell Cathodes. Journal of the Electrochemical Society, 2009, 156, B458.	1.3	27
117	Electrochemical performance and stability of SrTi0.3Fe0.6Co0.1O3-Î´ infiltrated La0.8Sr0.2MnO3Zr0.92Y0.16O2-Î´ oxygen electrodes for intermediate-temperature solid oxide electrochemical cells. Journal of Power Sources, 2019, 426, 233-241.	4.0	27
118	Redox and phase behavior of Pd-substituted (La,Sr)CrO3 perovskite solid oxide fuel cell anodes. Solid State Ionics, 2016, 296, 90-105.	1.3	26
119	Stable high current density operation of La_{0.6}Sr_{0.4}Co_{0.2}Fe_{0.8}O_{3âˆ'Î´} oxygen electrodes. Journal of Materials Chemistry A, 2019, 7, 13531-13539.	5.2	26
120	Solid Oxide Fuel Cell with Oxide Anode-Side Support. Electrochemical and Solid-State Letters, 2008, 11, B174.	2.2	25
121	Studies of Solid Oxide Fuel Cell Electrode Evolution Using 3D Tomography. Fuel Cells, 2013, 13, 449-454.	1.5	25
122	Degradation of nano-scale cathodes: a new paradigm for selecting low-temperature solid oxide cell materials. Physical Chemistry Chemical Physics, 2016, 18, 13216-13222.	1.3	25
123	Mechanisms of PrOx performance enhancement of oxygen electrodes for low and intermediate temperature solid oxide fuel cells. Materials Today Energy, 2019, 14, 100362.	2.5	25
124	Agâ€"Cuâ€"Ti Braze Materials for Sealing SOFCs. Journal of Fuel Cell Science and Technology, 2008, 5, .	0.8	24
125	Effect of Ethane and Propane in Simulated Natural Gas on the Operation of Niâ€"YSZ Anode Supported Solid Oxide Fuel Cells. Fuel Cells, 2010, 10, 1129-1134.	1.5	24
126	Nucleation and epitaxial growth of InAs on Siâ€‰(100) by ionâ€assisted deposition. Applied Physics Letters, 1989, 55, 2319-2321.	1.5	23

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127	Sputter deposition of cermet fuel electrodes for solid oxide fuel cells. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1995, 13, 1073-1077.	0.9	22
128	Effect of Ni content on the morphological evolution of Ni-YSZ solid oxide fuel cell electrodes. Applied Physics Letters, 2016, 108, .	1.5	22
129	High-temperature stability of epitaxial, non-isostructural Mo/NbN superlattices. Journal of Materials Research, 2000, 15, 554-559.	1.2	21
130	La[sub 0.8]Sr[sub 0.2]Cr[sub 0.98]V[sub 0.02]O[sub 3â^'Î]Ce[sub 0.9]Gd[sub 0.1]O[sub 1.95]â€"Ni Anodes for Solid Oxide Fuel Cells. Journal of the Electrochemical Society, 2007, 154, B501.	1.3	20
131	Durability Testing of Solid Oxide Cell Electrodes with Current Switching. Journal of the Electrochemical Society, 2012, 159, F858-F863.	1.3	20
132	High-Pressure Performance of Mixed-Conducting Oxygen Electrodes: Effect of Interstitial versus Vacancy Conductivity. Journal of the Electrochemical Society, 2016, 163, F1433-F1439.	1.3	20
133	Effect of high-temperature ageing on (La,Sr)(Co,Fe)O3-Î´ cathodes in microtubular solid oxide fuel cells. Solid State Ionics, 2018, 323, 85-91.	1.3	20
134	(La0.8Sr0.2)0.98MnO3-Î´-Zr0.92Y0.16O2-Î´:PrOx for oxygen electrode supported solid oxide cells. Applied Catalysis B: Environmental, 2022, 306, 121114.	10.8	20
135	Performance and Stability of LaSr₂Fe₂CrO_{9-Î´}-Based Solid Oxide Fuel Cell Anodes in Hydrogen and Carbon Monoxide. Journal of the Electrochemical Society, 2013, 160, F90-F93.	1.3	19
136	Electrochemical and microstructural properties of Niâ€"(Y2O3)0.08(ZrO2)0.92â€"(Ce0.9Gd0.1)O1.95 anode-supported microtubular solid oxide fuel cells. Solid State Ionics, 2016, 285, 227-233.	1.3	19
137	Sr Surface Segregation on La0.6Sr0.4Co0.2Fe0.8O3-ÎPorous Solid Oxide Fuel Cell Cathodes. ECS Transactions, 2017, 78, 905-913.	0.3	18
138	Pulsed Laser Deposition and Characterization of Heteroepitaxial LiMn₂O₄/La_{0.5}Sr_{0.5}CoO₃ Bilayer Thin Films as Model Lithium Ion Battery Cathodes. ACS Applied Nano Materials, 2018, 1, 642-653.	2.4	18
139	The oxygen reduction reaction in solid oxide fuel cells: from kinetic parameters measurements to electrode design. JPhys Energy, 2020, 2, 042004.	2.3	18
140	An ion-beam technique for measuring surface diffusion coefficients. Applied Physics Letters, 1999, 74, 1719-1721.	1.5	17
141	Effect of Cell Width on Segmented-in-Series SOFCs. Electrochemical and Solid-State Letters, 2004, 7, A78.	2.2	17
142	On the accuracy of triple phase boundary lengths calculated from tomographic image data. Journal of Power Sources, 2014, 261, 198-205.	4.0	17
143	Degradation of (La_{0.8}Sr_{0.2})_{0.98}MnO_{3â^'Î´}â€"Zr_{0.84}Y_{0.16}O<sub>2â^'Î composite electrodes during reversing current operation. Faraday Discussions, 2015, 182, 365-377.	1.6	17
144	Degradation of La_{0.6}Sr_{0.4}Fe_{0.8}Co_{0.2}O_{3-Î´}Oxygen Electrodes on Ce_{0.9}Gd_{0.1}O_{2-Î´}Electrolytes during Reversing Current Operation. Journal of the Electrochemical Society, 2017, 164, F3083-F3090.	1.3	17

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145	ZrO₂ atomic layer deposition into Sr_{0.5}Sm_{0.5}CoO_{3âˆ'Î´}â€"Ce_{0.9}Gd_{0.1}O_{2âˆ'Î´} solid oxide fuel cell cathodes: mechanisms of stability enhancement. Journal of Materials Chemistry A, 2019, 7, 27585-27593.	5.2	17
146	Revealing the complex layered-mosaic structure of the cathode electrolyte interphase in Li-ion batteries. Applied Materials Today, 2020, 20, 100748.	2.3	17
147	Tuning electrochemical and transport processes to achieve extreme performance and efficiency in solid oxide cells. Journal of Materials Chemistry A, 2020, 8, 11687-11694.	5.2	17
148	Advanced oxygen-electrode-supported solid oxide electrochemical cells with Sr(Ti,Fe)O_{3âˆ'Î´}-based fuel electrodes for electricity generation and hydrogen production. Journal of Materials Chemistry A, 2020, 8, 25867-25879.	5.2	16
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