Francesco Ciucci

List of Publications by Year
in descending order

171 papers	11,102 citations	31976 53 h-index	33894 99 g-index
187 all docs	187 docs citations	187 times ranked	10444 citing authors

#	Article	IF	Citations
1	Tailoring the interfacial active center of MnSxO2â˜x/MnCo2S4 heterostructure to boost the performance for oxygen evolution reaction and Zn-Air batteries in neutral electrolyte. Chemical Engineering Journal, 2022, 427, 131966.	12.7	13
2	The influence of A-site deficiency on the electrochemical properties of (Ba0.95La0.05)1-xFeO3-Î´ as an intermediate temperature solid oxide fuel cell cathode. International Journal of Hydrogen Energy, 2022, 47, 1229-1240.	7.1	21
3	Hierarchical Structure of CuO Nanowires Decorated with Ni(OH)₂ Supported on Cu Foam for Hydrogen Production via Urea Electrocatalysis. Small Methods, 2022, 6, e2101017.	8.6	43
4	In Situ Fabricated Quasiâ€Solid Polymer Electrolyte for Highâ€Energyâ€Density Lithium Metal Battery Capable of Subzero Operation. Advanced Energy Materials, 2022, 12, 2102932.	19.5	69
5	Sodiumâ€rich <scp>NASICON</scp>â€structured cathodes for boosting the energy density and lifespan of sodiumâ€freeâ€anode sodium metal batteries. InformaÄnÃ-MateriÃ¡ly, 2022, 4, .	17.3	41
6	Enhanced oxygen reduction kinetics of IT-SOFC cathode with PrBaCo₂O_{5+Î´}/Gd_{0.1}Ce_{1.9}O_{2â˜Î´} coherent interface. Journal of Materials Chemistry A, 2022, 10, 3495-3505.	10.3	56
7	Quasi-solid electrolytes with tailored lithium solvation for fast-charging lithium metal batteries. Cell Reports Physical Science, 2022, 3, 100722.	5.6	15
8	Membraneless electrolyzers for the production of low-cost, high-purity green hydrogen: A techno-economic analysis. Energy Conversion and Management, 2022, 254, 115156.	9.2	21
9	A hybrid dual-salt polymer electrolyte for sodium metal batteries with stable room temperature cycling performance. Energy Storage Materials, 2022, 46, 182-191.	18.0	14
10	Enhanced Electrocatalysts Fabricated via Quenched Ultrafast Sintering: Physicochemical Properties and Water Oxidation Applications. Advanced Materials Interfaces, 2022, 9, .	3.7	4
11	Realizing Simultaneous Detrimental Reactions Suppression and Multiple Benefits Generation from Nickel Doping toward Improved Protonic Ceramic Fuel Cell Performance. Small, 2022, 18, e2200450.	10.0	25
12	The probabilistic deconvolution of the distribution of relaxation times with finite Gaussian processes. Electrochimica Acta, 2022, 413, 140119.	5.2	18
13	Neural ordinary differential equations and recurrent neural networks for predicting the state of health of batteries. Journal of Energy Storage, 2022, 50, 104209.	8.1	15
14	Hydrated Deep Eutectic Electrolytes for Highâ€Performance Znâ€ion Batteries Capable of Lowâ€Temperature Operation. Advanced Functional Materials, 2022, 32, .	14.9	95
15	Nonflammable, robust and flexible electrolytes enabled by phosphate coupled polymerâ€“polymer for Li-metal batteries. Journal of Colloid and Interface Science, 2022, 621, 222-231.	9.4	11
16	Recovery of Salinity Gradient Energy with an Inorganic Sodium Superionic Conductor. ACS Energy Letters, 2022, 7, 1806-1813.	17.4	0
17	Precise Modulation of Tripleâ€Phase Boundaries towards a Highly Functional Exsolved Catalyst for Dry Reforming of Methane under a Dilutionâ€Free System. Angewandte Chemie, 2022, 134, .	2.0	2
18	Precise Modulation of Tripleâ€Phase Boundaries towards a Highly Functional Exsolved Catalyst for Dry Reforming of Methane under a Dilutionâ€Free System. Angewandte Chemie - International Edition, 2022, 61, .	13.8	12

#	Article	IF	Citations
19	Phase transition with in situ exsolution nanoparticles in the reduced Pr_{0.5}Ba_{0.5}Fe_{0.8}Ni_{0.2}O_{3â”Î´} electrode for symmetric solid oxide cells. Journal of Materials Chemistry A, 2022, 10, 16490-16496.	10.3	29
20	Carbon-based electrocatalysts for sustainable energy applications. Progress in Materials Science, 2021, 116, 100717.	32.8	216
21	Rationally designed nanostructured metal chalcogenides for advanced sodium-ion batteries. Energy Storage Materials, 2021, 34, 582-628.	18.0	73
22	Unlocking the Potential of Mechanochemical Coupling: Boosting the Oxygen Evolution Reaction by Mating Proton Acceptors with Electron Donors. Advanced Functional Materials, 2021, 31, 2008077.	14.9	40
23	In situ formation of poly(butyl acrylate)-based non-flammable elastic quasi-solid electrolyte for dendrite-free flexible lithium metal batteries with long cycle life for wearable devices. Energy Storage Materials, 2021, 34, 629-639.	18.0	59
24	Establishing structure/property relationships in atomically dispersed Coâ€“Fe dual site Mâ€“N_x catalysts on microporous carbon for the oxygen reduction reaction. Journal of Materials Chemistry A, 2021, 9, 13044-13055.	10.3	49
25	Ultrathin and Nonâ€Flammable Dualâ€Salt Polymer Electrolyte for Highâ€Energyâ€Density Lithiumâ€Metal Battery. Advanced Functional Materials, 2021, 31, 2010261.	14.9	78
26	Redirecting dynamic surface restructuring of a layered transition metal oxide catalyst for superior water oxidation. Nature Catalysis, 2021, 4, 212-222.	34.4	266
27	Ultrafast high-temperature sintering (UHS) of Li1.3Al0.3Ti1.7(PO4)3. Ceramics International, 2021, 47, 21982-21987.	4.8	32
28	Positive/Negative Phototropism: Controllable Molecular Actuators with Different Bending Behavior. CCS Chemistry, 2021, 3, 1491-1500.	7.8	27
29	Spark Plasma Sintering of LiFePO4: AC Field Suppressing Lithium Migration. Materials, 2021, 14, 2826.	2.9	8
30	A solid-like dual-salt polymer electrolyte for Li-metal batteries capable of stable operation over an extended temperature range. Energy Storage Materials, 2021, 37, 609-618.	18.0	49
31	Introducing Ag in Ba0.9La0.1FeO3-: Combining cationic substitution with metal particle decoration. Materials Reports Energy, 2021, 1, 100018.	3.2	6
32	Exploring Transport Behavior in Hybrid Perovskites Solar Cells via Machine Learning Analysis of Environmentalâ€Dependent Impedance Spectroscopy. Advanced Science, 2021, 8, e2002510.	11.2	23
33	Ab Initio Study of the Defect Chemistry and Substitutional Strategies for Highly Conductive Li₃YX₆ (X = F, Cl, Br, and I) Electrolyte for the Application of Solid-State Batteries. ACS Applied Energy Materials, 2021, 4, 7930-7941.	5.1	19
34	Bifunctional Hydrated Gel Electrolyte for Longâ€Cycling Znâ€Ion Battery with NASICONâ€Type Cathode. Advanced Functional Materials, 2021, 31, 2105717.	14.9	34
35	Nanocomposites: A New Opportunity for Developing Highly Active and Durable Bifunctional Air Electrodes for Reversible Protonic Ceramic Cells. Advanced Energy Materials, 2021, 11, 2101899.	19.5	70
36	Editorial for the special issue â€œMachine learning and artificial intelligence for energy materialsâ€. Materials Reports Energy, 2021, 1, 100056.	3.2	0

#	Article	IF	Citations
37	Central retinal thickness fluctuations in patients treated with anti-VEGF for neovascular age related macular degeneration. European Journal of Ophthalmology, 2021, , 112067212110378.	1.3	5
38	Single-atom catalyst for high-performance methanol oxidation. Nature Communications, 2021, 12, 5235.	12.8	113
39	Enhancing Ni Exsolution by Nonmetal B-Site Substituents (Si and P) in SrTiO₃-Based Solid Oxide Fuel Cell Anodes. Energy & Fuels, 2021, 35, 15084-15093.	5.1	6
40	The deep-DRT: A deep neural network approach to deconvolve the distribution of relaxation times from multidimensional electrochemical impedance spectroscopy data. Electrochimica Acta, 2021, 392, 139010.	5.2	43
41	Nanoparticle Ex-solution for Supported Catalysts: Materials Design, Mechanism and Future Perspectives. ACS Nano, 2021, 15, 81-110.	14.6	95
42	Enhancing the Intrinsic Activity and Stability of Perovskite Cobaltite at Elevated Temperature Through Surface Stress. Small, 2021, 17, e2104144.	10.0	21
43	Dual-phase MoS₂ as a high-performance sodium-ion battery anode. Journal of Materials Chemistry A, 2020, 8, 2114-2122.	10.3	160
44	The Gaussian process distribution of relaxation times: A machine learning tool for the analysis and prediction of electrochemical impedance spectroscopy data. Electrochimica Acta, 2020, 331, 135316.	5.2	85
45	Electro-chemo-mechanical modeling of solid-state batteries. Electrochimica Acta, 2020, 331, 135355.	5.2	35
46	MoSe2 nanosheets embedded in nitrogen/phosphorus co-doped carbon/graphene composite anodes for ultrafast sodium storage. Journal of Power Sources, 2020, 476, 228660.	7.8	28
47	Rechargeable Battery Electrolytes Capable of Operating over Wide Temperature Windows and Delivering High Safety. Advanced Energy Materials, 2020, 10, 2001235.	19.5	75
48	Stability, Elastic Properties, and the Li Transport Mechanism of the Protonated and Fluorinated Antiperovskite Lithium Conductors. ACS Applied Materials & Interfaces, 2020, 12, 55011-55022.	8.0	28
49	A Bayesian view on the Hilbert transform and the Kramers-Kronig transform of electrochemical impedance data: Probabilistic estimates and quality scores. Electrochimica Acta, 2020, 357, 136864.	5.2	39
50	Non-precious-metal catalysts for alkaline water electrolysis: operando characterizations, theoretical calculations, and recent advances. Chemical Society Reviews, 2020, 49, 9154-9196.	38.1	448
51	Sodiophilically Graded Gold Coating on Carbon Skeletons for Highly Stable Sodium Metal Anodes. Small, 2020, 16, e2003815.	10.0	37
52	Sodium Batteries: Sodiophilically Graded Gold Coating on Carbon Skeletons for Highly Stable Sodium Metal Anodes (Small 40/2020). Small, 2020, 16, 2070223.	10.0	1
53	Frontispiece: Molybdenum Disulfide Based Nanomaterials for Rechargeable Batteries. Chemistry - A European Journal, 2020, 26, .	3.3	0
54	Atomically dispersed materials for rechargeable batteries. Nano Energy, 2020, 76, 105085.	16.0	18

#	Article	IF	Citations
55	Superionic conduction in low-dimensional-networked anti-perovskites. Energy Storage Materials, 2020, 28, 146-152.	18.0	27
56	Affinity-engineered carbon nanofibers as a scaffold for Na metal anodes. Journal of Materials Chemistry A, 2020, 8, 14757-14768.	10.3	22
57	The Deep-Prior Distribution of Relaxation Times. Journal of the Electrochemical Society, 2020, 167, 026506.	2.9	24
58	Molybdenum Disulfide Based Nanomaterials for Rechargeable Batteries. Chemistry - A European Journal, 2020, 26, 6296-6319.	3.3	49
59	Highly conductive and nonflammable composite polymer electrolytes for rechargeable quasi-solid-state Li-metal batteries. Journal of Power Sources, 2020, 464, 228182.	7.8	27
60	The Gaussian Process Hilbert Transform (GP-HT): Testing the Consistency of Electrochemical Impedance Spectroscopy Data. Journal of the Electrochemical Society, 2020, 167, 126503.	2.9	17
61	Enabling room-temperature solid-state lithium-metal batteries with fluoroethylene carbonate-modified plastic crystal interlayers. Energy Storage Materials, 2019, 18, 311-319.	18.0	94
62	Facile Patterning of Laserâ€Induced Graphene with Tailored Li Nucleation Kinetics for Stable Lithiumâ€Metal Batteries. Advanced Energy Materials, 2019, 9, 1901796.	19.5	76
63	A New Lithiumâ€Ion Conductor LiTaSiO₅: Theoretical Prediction, Materials Synthesis, and Ionic Conductivity. Advanced Functional Materials, 2019, 29, 1904232.	14.9	15
64	Enabling non-flammable Li-metal batteries via electrolyte functionalization and interface engineering. Journal of Materials Chemistry A, 2019, 7, 17995-18002.	10.3	46
65	Towards succinonitrile-based lithium metal batteries with long cycle life: The influence of fluoroethylene carbonate loading and the separator. Journal of Power Sources, 2019, 436, 226802.	7.8	19
66	P-Substituted Ba_{0.95}La_{0.05}FeO_{3â^'Î´} as a Cathode Material for SOFCs. ACS Applied Energy Materials, 2019, 2, 5472-5480.	5.1	36
67	Solid Electrolytes: A New Lithiumâ€Ion Conductor LiTaSiO₅: Theoretical Prediction, Materials Synthesis, and Ionic Conductivity (Adv. Funct. Mater. 37/2019). Advanced Functional Materials, 2019, 29, 1970253.	14.9	4
68	A general model for the impedance of batteries and supercapacitors: The non-linear distribution of diffusion times. Electrochimica Acta, 2019, 324, 134853.	5.2	35
69	CoNi/Ba0.5Sr0.5Co0.8Fe0.2O3â^'Î´/N-doped-carbon as a highly-active bifunctional electrocatalyst for water splitting. Journal of Power Sources, 2019, 415, 91-98.	7.8	11
70	Stabilizing Na-metal batteries with a manganese oxide cathode using a solid-state composite electrolyte. Journal of Power Sources, 2019, 416, 21-28.	7.8	19
71	Non-flammable electrolyte for dendrite-free sodium-sulfur battery. Energy Storage Materials, 2019, 23, 8-16.	18.0	92
72	In-situ synthesis of bimetallic phosphide with carbon tubes as an active electrocatalyst for oxygen evolution reaction. Applied Catalysis B: Environmental, 2019, 254, 292-299.	20.2	141

#	Article	IF	Citations
73	On-chip suspended gold nanowire electrode with a rough surface: Fabrication and electrochemical properties. Electrochimica Acta, 2019, 304, 20-29.	5.2	4
74	Preface: Proceedings of the 5th International Electronic Conference on Sensors and Applications. Proceedings (mdpi), 2019, 4, 52.	0.2	0
75	Modeling electrochemical impedance spectroscopy. Current Opinion in Electrochemistry, 2019, 13, 132-139.	4.8	234
76	A theoretical study on the stability and ionic conductivity of the Na11M2PS12 (M = Sn, Ge) superionic conductors. Journal of Power Sources, 2019, 409, 94-101.	7.8	27
77	Anti-perovskite cathodes for lithium batteries. Journal of Materials Chemistry A, 2018, 6, 5185-5192.	10.3	39
78	Hierarchical MoS₂/Carbon microspheres as long-life and high-rate anodes for sodium-ion batteries. Journal of Materials Chemistry A, 2018, 6, 5668-5677.	10.3	128
79	Towards a consistent understanding of the metal hydride reaction kinetics: Measurement, modeling and data processing. Journal of Alloys and Compounds, 2018, 741, 610-621.	5.5	12
80	Promotion of Oxygen Reduction with Both Amorphous and Crystalline MnO_x through the Surface Engineering of La_{0.8}Sr_{0.2}MnO_{3â€Î´} Perovskite. ChemElectroChem, 2018, 5, 1105-1112.	3.4	43
81	Revealing Pseudocapacitive Mechanisms of Metal Dichalcogenide SnS₂/Grapheneâ€CNT Aerogels for Highâ€Energy Na Hybrid Capacitors. Advanced Energy Materials, 2018, 8, 1702488.	19.5	135
82	CoFe nanoalloy particles encapsulated in nitrogen-doped carbon layers as bifunctional oxygen catalyst derived from a Prussian blue analogue. Journal of Alloys and Compounds, 2018, 740, 743-753.	5.5	43
83	A first principle study of the phase stability, ion transport and substitution strategy for highly ionic conductive sodium antiperovskite as solid electrolyte for sodium ion batteries. Journal of Power Sources, 2018, 390, 61-70.	7.8	31
84	Water Splitting with an Enhanced Bifunctional Double Perovskite. ACS Catalysis, 2018, 8, 364-371.	11.2	186
85	Metallic MoS₂ nanosheets: multifunctional electrocatalyst for the ORR, OER and Liâ€“O₂ batteries. Nanoscale, 2018, 10, 22549-22559.	5.6	93
86	Mechanochemical Coupling of MoS₂ and Perovskites for Hydrogen Generation. ACS Applied Energy Materials, 2018, 1, 6409-6416.	5.1	33
87	Model development and comparison of low hemorrhage-risk endoluminal patch thrombolytic treatment for ischemic stroke. Medical Engineering and Physics, 2018, 61, 32-40.	1.7	3
88	Bimetal-decorated nanocarbon as a superior electrocatalyst for overall water splitting. Journal of Power Sources, 2018, 401, 312-321.	7.8	41
89	Energetics of Nanoparticle Exsolution from Perovskite Oxides. Journal of Physical Chemistry Letters, 2018, 9, 3772-3778.	4.6	65
90	Novel 2D Sb₂S₃ Nanosheet/CNT Coupling Layer for Exceptional Polysulfide Recycling Performance. Advanced Energy Materials, 2018, 8, 1800710.	19.5	93

#	Article	IF	Citations
91	Mesoporous MnCo₂S₄ nanosheet arrays as an efficient catalyst for Liâ€“O₂ batteries. Nanoscale, 2018, 10, 15588-15599.	5.6	65
92	Preface: Proceedings of the 4th International Electronic Conference on Sensors and Applications. Proceedings (mdpi), 2018, 2, .	0.2	0
93	A Ceramicâ€PVDF Composite Membrane with Modified Interfaces as an Ionâ€Conducting Electrolyte for Solidâ€State Lithiumâ€Ion Batteries Operating at Room Temperature. ChemElectroChem, 2018, 5, 2873-2881.	3.4	69
94	Data mining of molecular dynamics data reveals Li diffusion characteristics in garnet Li7La3Zr2O12. Scientific Reports, 2017, 7, 40769.	3.3	52
95	In situ growth of Pt₃Ni nanoparticles on an A-site deficient perovskite with enhanced activity for the oxygen reduction reaction. Journal of Materials Chemistry A, 2017, 5, 6399-6404.	10.3	70
96	Boosting Bifunctional Oxygen Electrolysis for Nâ€Doped Carbon via Bimetal Addition. Small, 2017, 13, 1604103.	10.0	118
97	H 2 O 2 Treated La 0.8 Sr 0.2 CoO 3-Î´ as an Efficient Catalyst for Oxygen Evolution Reaction. Electrochimica Acta, 2017, 244, 139-145.	5.2	33
98	Continuum Level Transport and Electro-Chemo-Mechanics Couplingâ€”Solid Oxide Fuel Cells and Lithium Ion Batteries. Kluwer International Series in Electronic Materials: Science and Technology, 2017, , 161-189.	0.5	3
99	Unveiling the Unique Phase Transformation Behavior and Sodiation Kinetics of 1D van der Waals Sb₂S₃ Anodes for Sodium Ion Batteries. Advanced Energy Materials, 2017, 7, 1602149.	19.5	152
100	Metal Borohydrides as Electrolytes for Solid-State Li, Na, Mg, and Ca Batteries: A First-Principles Study. Chemistry of Materials, 2017, 29, 9308-9319.	6.7	115
101	Activating the Bifunctionality of a Perovskite Oxide toward Oxygen Reduction and Oxygen Evolution Reactions. ACS Applied Materials & Interfaces, 2017, 9, 35829-35836.	8.0	53
102	Low temperature pulsed laser deposition of garnet Li 6.4 La 3 Zr 1.4 Ta 0.6 O 12 films as all solid-state lithium battery electrolytes. Journal of Power Sources, 2017, 365, 43-52.	7.8	65
103	Modeling the impedance spectra of mixed conducting thin films with exposed and embedded current collectors. Physical Chemistry Chemical Physics, 2017, 19, 26310-26321.	2.8	17
104	Bayesian and Hierarchical Bayesian Based Regularization for Deconvolving the Distribution of Relaxation Times from Electrochemical Impedance Spectroscopy Data. Electrochimica Acta, 2017, 247, 1117-1129.	5.2	109
105	Nb-substituted PrBaCo2O5+Î´ as a cathode for solid oxide fuel cells: A systematic study of structural, electrical, and electrochemical properties. International Journal of Hydrogen Energy, 2017, 42, 19204-19215.	7.1	28
106	Electrical Conductivity Relaxation in the Nonlinear Regime. Journal of the Electrochemical Society, 2017, 164, F1671-F1689.	2.9	6
107	Foreword: Proceedings of the 3rd International Electronic Conference on Sensors and Applications. Proceedings (mdpi), 2017, 1, .	0.2	0
108	Modeling efforts in the key areas of thermal management and safety of lithium ion battery cells: a mini review. Asia-Pacific Journal of Chemical Engineering, 2016, 11, 399-406.	1.5	25

#	Article	IF	Citations
109	A bi-functional catalyst for oxygen reduction and oxygen evolution reactions from used baby diapers: Î±-Fe₂O₃ wrapped in P and S dual doped graphitic carbon. RSC Advances, 2016, 6, 64258-64265.	3.6	18
110	Ca and In co-doped BaFeO 3â^'Î´ as a cobalt-free cathode material for intermediate-temperature solid oxide fuel cells. Journal of Power Sources, 2016, 324, 224-232.	7.8	79
111	Ba0.5Sr0.5Co0.8Fe0.2O3â^'Î´ on N-doped mesoporous carbon derived from organic waste as a bi-functional oxygen catalyst. International Journal of Hydrogen Energy, 2016, 41, 10744-10754.	7.1	52
112	Boosting oxygen reduction/evolution reaction activities with layered perovskite catalysts. Chemical Communications, 2016, 52, 10739-10742.	4.1	83
113	Designing Fe-Based Oxygen Catalysts by Density Functional Theory Calculations. Chemistry of Materials, 2016, 28, 7058-7065.	6.7	43
114	From material design to mechanism study: Nanoscale Ni exsolution on a highly active A-site deficient anode material for solid oxide fuel cells. Nano Energy, 2016, 27, 499-508.	16.0	206
115	In situ preparation of Ca_{0.5}Mn_{0.5}O/C as a novel high-activity catalyst for the oxygen reduction reaction. Journal of Materials Chemistry A, 2016, 4, 19147-19153.	10.3	17
116	Structural origin of the superionic Na conduction in Na₂B₁₀H₁₀closo-borates and enhanced conductivity by Na deficiency for high performance solid electrolytes. Journal of Materials Chemistry A, 2016, 4, 17740-17748.	10.3	59
117	Chemisorption Threshold of Thiol-based Monolayer on Copper: Effect of Electric Potential and Elevated Temperature. Electrochimica Acta, 2016, 198, 185-194.	5.2	8
118	Egg yolk-derived phosphorus and nitrogen dual doped nano carbon capsules for high-performance lithium ion batteries. Materials Letters, 2016, 167, 93-97.	2.6	38
119	Borophene: A promising anode material offering high specific capacity and high rate capability for lithium-ion batteries. Nano Energy, 2016, 23, 97-104.	16.0	454
120	Improving the estimation quality of parameters in kinetic models for hydriding/dehydriding reactions: An OED study. International Journal of Hydrogen Energy, 2016, 41, 5176-5187.	7.1	2
121	Advances in Cathode Materials for Solid Oxide Fuel Cells: Complex Oxides without Alkaline Earth Metal Elements. Advanced Energy Materials, 2015, 5, 1500537.	19.5	229
122	A molecular dynamics study of oxygen ion diffusion in A-site ordered perovskite PrBaCo₂O_{5.5}: data mining the oxygen trajectories. Physical Chemistry Chemical Physics, 2015, 17, 7831-7837.	2.8	22
123	In situ synthesis of mesoporous manganese oxide/sulfur-doped graphitized carbon as a bifunctional catalyst for oxygen evolution/reduction reactions. Carbon, 2015, 94, 1028-1036.	10.3	72
124	Evaluation of pulsed laser deposited SrNb0.1Co0.9O3â^'Î´ thin films as promising cathodes for intermediate-temperature solid oxide fuel cells. Journal of Power Sources, 2015, 295, 117-124.	7.8	26
125	Ba0.95La0.05FeO3â^'â€“multi-layer graphene as a low-cost and synergistic catalyst for oxygen evolution reaction. Carbon, 2015, 90, 122-129.	10.3	29
126	Analysis of Electrochemical Impedance Spectroscopy Data Using the Distribution of Relaxation Times: A Bayesian and Hierarchical Bayesian Approach. Electrochimica Acta, 2015, 167, 439-454.	5.2	297

#	Article	IF	Citations
127	Comparison of Information Passing Strategies in System-Level Modeling. AIAA Journal, 2015, 53, 1121-1133.	2.6	10
128	Compositional Engineering of Perovskite Oxides for Highly Efficient Oxygen Reduction Reactions. ACS Applied Materials & Interfaces, 2015, 7, 8562-8571.	8.0	66
129	The effect of A-site and B-site substitution on BaFeO3â^Î´: An investigation as a cathode material for intermediate-temperature solid oxide fuel cells. Journal of Power Sources, 2015, 297, 511-518.	7.8	102
130	A DFT+U study of A-site and B-site substitution in BaFeO_{3â^Î´}. Physical Chemistry Chemical Physics, 2015, 17, 23511-23520.	2.8	46
131	Unraveling the effect of La A-site substitution on oxygen ion diffusion and oxygen catalysis in perovskite BaFeO₃by data-mining molecular dynamics and density functional theory. Physical Chemistry Chemical Physics, 2015, 17, 24011-24019.	2.8	42
132	Enhanced cycle life of lead-acid battery using graphene as a sulfation suppression additive in negative active material. RSC Advances, 2015, 5, 71314-71321.	3.6	51
133	Nonstoichiometric Oxides as Low-Cost and Highly-Efficient Oxygen Reduction/Evolution Catalysts for Low-Temperature Electrochemical Devices. Chemical Reviews, 2015, 115, 9869-9921.	47.7	770
134	Influence of the Discretization Methods on the Distribution of Relaxation Times Deconvolution: Implementing Radial Basis Functions with DRTtools. Electrochimica Acta, 2015, 184, 483-499.	5.2	921
135	Defect chemistry and lithium transport in Li₃OCl anti-perovskite superionic conductors. Physical Chemistry Chemical Physics, 2015, 17, 32547-32555.	2.8	105
136	Oriented PrBaCo2O5+Î´ thin films for solid oxide fuel cells. Journal of Power Sources, 2015, 278, 623-629.	7.8	26
137	Assessing the identifiability of k and D in electrical conductivity relaxation via analytical results and nonlinearity estimates. Solid State Ionics, 2015, 270, 18-32.	2.7	11
138	Electrochemical Assembly of Thiol-based Monolayer on Copper for Epoxy-Cu Adhesion Improvement. Electrochimica Acta, 2014, 121, 57-63.	5.2	9
139	Cobalt-free polycrystalline Ba0.95La0.05FeO3â^Î´ thin films as cathodes for intermediate-temperature solid oxide fuel cells. Journal of Power Sources, 2014, 250, 188-195.	7.8	65
140	Computational and experimental analysis of Ba_{0.95}La_{0.05}FeO_{3â^Î´} as a cathode material for solid oxide fuel cells. Journal of Materials Chemistry A, 2014, 2, 14154-14163.	10.3	59
141	3D coreâ€“shell architecture from infiltration and beneficial reactive sintering as highly efficient and thermally stable oxygen reduction electrode. Journal of Materials Chemistry A, 2014, 2, 1284-1293.	10.3	44
142	Modeling the impedance response of mixed-conducting thin film electrodes. Physical Chemistry Chemical Physics, 2014, 16, 11573.	2.8	28
143	A CO2-tolerant nanostructured layer for oxygen transport membranes. RSC Advances, 2014, 4, 25924.	3.6	24
144	Optimal Regularization in Distribution of Relaxation Times applied to Electrochemical Impedance Spectroscopy: Ridge and Lasso Regression Methods - A Theoretical and Experimental Study. Electrochimica Acta, 2014, 147, 470-482.	5.2	218

#	Article	IF	Citations
145	Assessing the identifiability in isotope exchange depth profiling measurements. Solid State Ionics, 2014, 262, 897-900.	2.7	1
146	Nanoscaled Sm-doped CeO2 buffer layers for intermediate-temperature solid oxide fuel cells. Electrochemistry Communications, 2013, 35, 131-134.	4.7	50
147	Electrical conductivity relaxation measurements: Statistical investigations using sensitivity analysis, optimal experimental design and ECRTOOLS. Solid State Ionics, 2013, 239, 28-40.	2.7	63
148	Frequency spectroscopy of irreversible electrochemical nucleation kinetics on the nanoscale. Nanoscale, 2013, 5, 11964.	5.6	12
149	Probing Biasâ€Dependent Electrochemical Gasâ€“Solid Reactions in (La_xSr_{1â€“x})CoO_{3â€“}_{Î´} Cathode Materials. Advanced Functional Materials, 2013, 23, 5027-5036.	14.9	9
150	Spatially Resolved Mapping of Oxygen Reduction/Evolution Reaction on Solid-Oxide Fuel Cell Cathodes with Sub-10 nm Resolution. ACS Nano, 2013, 7, 3808-3814.	14.6	25
151	Revisiting parameter identification in electrochemical impedance spectroscopy: Weighted least squares and optimal experimental design. Electrochimica Acta, 2013, 87, 532-545.	5.2	40
152	A statistical perspective on oxygen diffusion and surface exchange experiments: Sensitivity analysis, parameter estimation and robust optimal experimental design. Solid State Ionics, 2013, 232, 97-105.	2.7	10
153	Generalized transport model for phase transition with memory. Physics Letters, Section A: General, Atomic and Solid State Physics, 2013, 377, 2668-2672.	2.1	1
154	ELECTROCHEMICAL STRAIN MICROSCOPY OF OXYGEN-ION CONDUCTORS: FUEL CELLS AND OXIDE ELECTRONICS. World Scientific Series in Nanoscience and Nanotechnology, 2013, , 253-298.	0.1	2
155	Chemisorption on semiconductors: The role of quantum corrections on the space charge regions in multiple dimensions. Applied Physics Letters, 2012, 100, 183106.	3.3	10
156	Frequency dependent dynamical electromechanical response of mixed ionic-electronic conductors. Journal of Applied Physics, 2012, 111, 014107.	2.5	30
157	Electrochemical strain microscopy: Probing ionic and electrochemical phenomena in solids at the nanometer level. MRS Bulletin, 2012, 37, 651-658.	3.5	83
158	Electrochemical impedance spectroscopy of phase transition materials. Electrochimica Acta, 2012, 81, 205-216.	5.2	22
159	An information-passing strategy for achieving Pareto optimality in the design of complex systems. Research in Engineering Design - Theory, Applications, and Concurrent Engineering, 2012, 23, 71-83.	2.1	23
160	Surface reaction and transport in mixed conductors with electrochemically-active surfaces: a 2-D numerical study of ceria. Physical Chemistry Chemical Physics, 2011, 13, 2121-2135.	2.8	53
161	Measuring oxygen reduction/evolution reactions on the nanoscale. Nature Chemistry, 2011, 3, 707-713.	13.6	233
162	Derivation of Micro/Macro Lithium Battery Models from Homogenization. Transport in Porous Media, 2011, 88, 249-270.	2.6	54

#	Article	IF	Citations
163	Mathematical modeling of porous battery electrodesâ€”Revisit of Newman's model. Electrochimica Acta, 2011, 56, 4369-4377.	5.2	139
164	Reducing error and measurement time in impedance spectroscopy using model based optimal experimental design. Electrochimica Acta, 2011, 56, 5416-5434.	5.2	51
165	Small-Signal Apparent Diffusion Impedance of Intercalation Battery Electrodes. Journal of the Electrochemical Society, 2011, 158, A115.	2.9	37
166	AN EXPLORATION OF THE ROLE OF SYSTEM LEVEL VARIABLE CHOICE IN MULTIDISCIPLINARY DESIGN. , 2010, , .		0
167	A Comparison of Information Passing Strategies in System Level Modeling. , 2010, , .		4
168	Thermodynamics and kinetics of phase transformation in intercalation battery electrodes â€“ phenomenological modeling. Electrochimica Acta, 2010, 56, 531-542.	5.2	41
169	Impedance spectra of mixed conductors: a 2D study of ceria. Physical Chemistry Chemical Physics, 2009, 11, 11243.	2.8	29
170	Non Linear Modeling of Mixed Ionic Electronic Conductors. ECS Transactions, 2007, 7, 2075-2082.	0.5	6
171	Functionalized Metalâ€Supported Reversible Protonic Ceramic Cells with Exceptional Performance and Durability. Advanced Energy and Sustainability Research, 0, , 2100171.	5.8	2