Andrei A Kulikovsky

List of Publications by Year
in descending order

165 papers	4,201 citations	109137 35 h-index	149479 56 g-index
172 all docs	172 docs citations	172 times ranked	1734 citing authors

#	Article	IF	Citations
1	The role of photoionization in positive streamer dynamics. Journal Physics D: Applied Physics, 2000, 33, 1514-1524.	1.3	165
2	Positive streamer between parallel plate electrodes in atmospheric pressure air. Journal Physics D: Applied Physics, 1997, 30, 441-450.	1.3	162
3	Quasi-3D Modeling of Water Transport in Polymer Electrolyte Fuel Cells. Journal of the Electrochemical Society, 2003, 150, A1432.	1.3	138
4	Positive streamer in a weak field in air: A moving avalanche-to-streamer transition. Physical Review E, 1998, 57, 7066-7074.	0.8	133
5	Modeling the Cathode Compartment of Polymer Electrolyte Fuel Cells: Dead and Active Reaction Zones. Journal of the Electrochemical Society, 1999, 146, 3981-3991.	1.3	131
6	A More Accurate Scharfetter-Gummel Algorithm of Electron Transport for Semiconductor and Gas Discharge Simulation. Journal of Computational Physics, 1995, 119, 149-155.	1.9	113
7	Two-Dimensional Simulation of Direct Methanol Fuel Cell. A New (Embedded) Type of Current Collector. Journal of the Electrochemical Society, 2000, 147, 953.	1.3	103
8	Two-dimensional numerical modelling of a direct methanol fuel cell. Journal of Applied Electrochemistry, 2000, 30, 1005-1014.	1.5	100
9	The regimes of catalyst layer operation in a fuel cell. Electrochimica Acta, 2010, 55, 6391-6401.	2.6	88
10	The effect of stoichiometric ratio Î» on the performance of a polymer electrolyte fuel cell. Electrochimica Acta, 2004, 49, 617-625.	2.6	85
11	A simple model of a high temperature PEM fuel cell. International Journal of Hydrogen Energy, 2010, 35, 9954-9962.	3.8	85
12	The structure of streamers in N2. I. fast method of space-charge dominated plasma simulation. Journal Physics D: Applied Physics, 1994, 27, 2556-2563.	1.3	84
13	Two-dimensional simulation of the positive streamer in N2between parallel-plate electrodes. Journal Physics D: Applied Physics, 1995, 28, 2483-2493.	1.3	83
14	The voltageâ€"current curve of a direct methanol fuel cell: â€œexactâ€•and fitting equations. Electrochemistry Communications, 2002, 4, 939-946.	2.3	80
15	Analytical solutions for impedance of the cathode catalyst layer in PEM fuel cell: Layer parameters from impedance spectrum without fitting. Journal of Electroanalytical Chemistry, 2013, 691, 13-17.	1.9	73
16	Production of chemically active species in the air by a single positive streamer in a nonuniform field. IEEE Transactions on Plasma Science, 1997, 25, 439-446.	0.6	72
17	Analytical model of the anode side of DMFC: the effect of non-Tafel kinetics on cell performance. Electrochemistry Communications, 2003, 5, 530-538.	2.3	58
18	Feeding PEM fuel cells. Electrochimica Acta, 2005, 50, 1323-1333.	2.6	58

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19	A physical model for catalyst layer impedance. Journal of Electroanalytical Chemistry, 2012, 669, 28-34.	1.9	57
20	The voltageâ€"current curve of a polymer electrolyte fuel cell: â€œexactâ€•and fitting equations. Electrochemistry Communications, 2002, 4, 845-852.	2.3	49
21	Performance of catalyst layers of polymer electrolyte fuel cells: exact solutions. Electrochemistry Communications, 2002, 4, 318-323.	2.3	48
22	Dynamics of fuel cell performance degradation. Electrochemistry Communications, 2004, 6, 75-82.	2.3	48
23	On the Nature of Mixed Potential in a DMFC. Journal of the Electrochemical Society, 2005, 152, A1121.	1.3	48
24	A Model for PEM Fuel Cell Impedance: Oxygen Flow in the Channel Triggers Spatial and Frequency Oscillations of the Local Impedance. Journal of the Electrochemical Society, 2015, 162, F1068-F1077.	1.3	46
25	Model of the flow with bubbles in the anode channel and performance of a direct methanol fuel cell. Electrochemistry Communications, 2005, 7, 237-243.	2.3	42
26	Analytical model of positive streamer in weak field in air: application to plasma chemical calculations. IEEE Transactions on Plasma Science, 1998, 26, 1339-1346.	0.6	41
27	Semi-analytical 1D+1D model of a polymer electrolyte fuel cell. Electrochemistry Communications, 2004, 6, 969-977.	2.3	41
28	1D+1D model of a DMFC: localized solutions and mixedpotential. Electrochemistry Communications, 2004, 6, 1259-1265.	2.3	41
29	Measurement of the current distribution in a direct methanol fuel cellâ€"Confirmation of parallel galvanic and electrolytic operation within one cell. Journal of Power Sources, 2008, 176, 477-483.	4.0	38
30	The structure of streamers in N2. II. Two-dimensional simulation. Journal Physics D: Applied Physics, 1994, 27, 2564-2569.	1.3	37
31	The mechanism of positive streamer acceleration and expansion in air in a strong external field. Journal Physics D: Applied Physics, 1997, 30, 1515-1522.	1.3	37
32	DMFC: Galvanic or electrolytic cell?. Electrochemistry Communications, 2006, 8, 754-760.	2.3	37
33	PEM Fuel Cell Characterization by Means of the Physical Model for Impedance Spectra. Journal of the Electrochemical Society, 2015, 162, F627-F633.	1.3	37
34	Analytical and Numerical Analysis of PEM Fuel Cell Performance Curves. Journal of the Electrochemical Society, 2005, 152, A1290.	1.3	36
35	A simple transient model for a high temperature PEM fuel cell impedance. International Journal of Hydrogen Energy, 2014, 39, 2224-2235.	3.8	36
36	Exact lowâ€"current analytical solution for impedance of the cathode catalyst layer in a PEM fuel cell. Electrochimica Acta, 2014, 147, 773-777.	2.6	34

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37	Comparison of Two Physical Models for Fitting PEM Fuel Cell Impedance Spectra Measured at a Low Air Flow Stoichiometry. Journal of the Electrochemical Society, 2016, 163, F238-F246.	1.3	34
38	On the origin of voltage oscillations of a polymer electrolyte fuel cell in galvanostatic regime. Electrochemistry Communications, 2004, 6, 729-736.	2.3	33
39	Characteristic length of fuel and oxygen consumption in feed channels of polymer electrolyte fuel cells. Electrochimica Acta, 2001, 46, 4389-4395.	2.6	32
40	The current voltage plot of PEM fuel cell with long feed channels. Electrochemistry Communications, 2001, 3, 73-80.	2.3	31
41	Three-dimensional simulation of a positive streamer in air near curved anode. Physics Letters, Section A: General, Atomic and Solid State Physics, 1998, 245, 445-452.	0.9	30
42	Variation of PEM Fuel Cell Physical Parameters with Current: Impedance Spectroscopy Study. Journal of the Electrochemical Society, 2016, 163, F1100-F1106.	1.3	30
43	Gas dynamics in channels of a gas-feed direct methanol fuel cell: exact solutions. Electrochemistry Communications, 2001, 3, 572-579.	2.3	29
44	Voltage loss in bipolar plates in a fuel cell stack. Journal of Power Sources, 2006, 160, 431-435.	4.0	29
45	A simple physicsâ€“based equation for lowâ€“current impedance of a PEM fuel cell cathode. Electrochimica Acta, 2016, 196, 231-235.	2.6	29
46	A method for analysis of DMFC performance curves. Electrochemistry Communications, 2003, 5, 1030-1036.	2.3	28
47	Bubbles in the anode channel and performance of a DMFC: Asymptotic solutions. Electrochimica Acta, 2006, 51, 2003-2011.	2.6	28
48	A model for concentration impedance of a PEM fuel cell. ETransportation, 2019, 2, 100026.	6.8	26
49	Design of PGM-free cathodic catalyst layers for advanced PEM fuel cells. Applied Catalysis B: Environmental, 2022, 312, 121424.	10.8	26
50	Numerical simulation of a new operational regime for a polymer electrolyte fuel cell. Electrochemistry Communications, 2001, 3, 460-466.	2.3	25
51	Impedance Spectroscopy Study of the PEM Fuel Cell Cathode with Nonuniform Nafion Loading. Journal of the Electrochemical Society, 2017, 164, E3016-E3021.	1.3	25
52	The effect of Nafion film on the cathode catalyst layer performance in a lowâ€“Pt PEM fuel cell. Electrochemistry Communications, 2019, 103, 61-65.	2.3	24
53	A Model for Extraction of Spatially Resolved Data from Impedance Spectrum of a PEM Fuel Cell. Journal of the Electrochemical Society, 2018, 165, F291-F296.	1.3	23
54	The effect of cathodic water on performance of a polymer electrolyte fuel cell. Electrochimica Acta, 2004, 49, 5187-5196.	2.6	22

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55	A simple equation for temperature gradient in a planar SOFC stack. International Journal of Hydrogen Energy, 2010, 35, 308-312.	3.8	22
56	A Simple Model for Carbon Corrosion in PEM Fuel Cell. Journal of the Electrochemical Society, 2011, 158, B957.	1.3	22
57	Optimal temperature for DMFC stack operation. Electrochimica Acta, 2008, 53, 6391-6396.	2.6	21
58	Impedance Spectroscopy Characterization of Oxygen Transport in Lowâ€“ and Highâ€“Pt Loaded PEM Fuel Cells. Journal of the Electrochemical Society, 2017, 164, F1633-F1640.	1.3	21
59	Analytical Impedance of Oxygen Transport in a PEM Fuel Cell Channel. Journal of the Electrochemical Society, 2019, 166, F306-F311.	1.3	21
60	PEM fuel cell distribution of relaxation times: a method for the calculation and behavior of an oxygen transport peak. Physical Chemistry Chemical Physics, 2020, 22, 19131-19138.	1.3	21
61	Distribution of Relaxation Times: A Tool for Measuring Oxygen Transport Resistivity of a Lowâ€“Pt PEM Fuel Cell Cathode. Journal of the Electrochemical Society, 2020, 167, 144505.	1.3	21
62	Mirroring of Current-Free Spots in a Fuel Cell Stack. Journal of the Electrochemical Society, 2007, 154, B817.	1.3	20
63	A model for SOFC anode performance. Electrochimica Acta, 2009, 54, 6686-6695.	2.6	20
64	Comment on â€œSpontaneous Branching of Anode-Directed Streamers between Planar Electrodesâ€. Physical Review Letters, 2002, 89, 229401; author reply 229402.	2.9	19
65	Optimal Effective Diffusion Coefficient of Oxygen in the Cathode Catalyst Layer of Polymer Electrode Membrane Fuel Cells. Electrochemical and Solid-State Letters, 2009, 12, B53.	2.2	19
66	Electron and proton conductivity of Fe-N-C cathodes for PEM fuel cells: A model-based electrochemical impedance spectroscopy measurement. Electrochemistry Communications, 2020, 118, 106795.	2.3	19
67	The efficiency of radicals production by positive streamer in air: the role of Laplacian field. IEEE Transactions on Plasma Science, 2001, 29, 313-317.	0.6	18
68	Performance of a polymer electrolyte fuel cell with long oxygen channel. Electrochemistry Communications, 2002, 4, 527-534.	2.3	18
69	Electrostatic broadening of current-free spots in a fuel cell stack: The mechanism of stack aging?. Electrochemistry Communications, 2006, 8, 1225-1228.	2.3	18
70	Bifunctional activation of a direct methanol fuel cell. Journal of Power Sources, 2007, 173, 420-423.	4.0	18
71	A model for mixed potential in direct methanol fuel cell cathode. Electrochimica Acta, 2012, 62, 185-191.	2.6	18
72	Why impedance of the gas diffusion layer in a PEM fuel cell differs from the Warburg finite-length impedance?. Electrochemistry Communications, 2017, 84, 28-31.	2.3	18

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73	The role of the absorption length of photoionizing radiation in streamer dynamics in weak fields: a characteristic scale of ionization domain. Journal Physics D: Applied Physics, 2000, 33, L5-L7.	1.3	17
74	How important is oxygen transport in agglomerates in a PEM fuel cell catalyst layer?. Electrochimica Acta, 2014, 130, 826-829.	2.6	17
75	Analytical physicsâ€“based impedance of the cathode catalyst layer in a PEM fuel cell at typical working currents. Electrochimica Acta, 2017, 225, 559-565.	2.6	17
76	A model for impedance of a PEM fuel cell cathode with poor electronÂconductivity. Journal of Electroanalytical Chemistry, 2017, 801, 122-128.	1.9	17
77	On the distribution of local current density along a PEM fuel cell cathode channel. Electrochemistry Communications, 2019, 101, 35-38.	2.3	17
78	On the Origin of High Frequency Impedance Feature in a PEM Fuel Cell. Journal of the Electrochemical Society, 2019, 166, F1253-F1257.	1.3	17
79	Largeâ€scale DMFC Stack Model: Feed Disturbances and Their Impact on Stack Performance. Fuel Cells, 2012, 12, 1032-1041.	1.5	16
80	Performance of a PEM fuel cell with oscillating air flow velocity: A modeling study based on cell impedance. ETransportation, 2021, 7, 100104.	6.8	16
81	Understanding the distribution of relaxation times of a lowâ€“Pt PEM fuel cell. Electrochimica Acta, 2021, 391, 138954.	2.6	16
82	Optimal shape of catalyst loading across the active layer of a fuel cell. Electrochemistry Communications, 2009, 11, 1951-1955.	2.3	15
83	A model for DMFC cathode impedance: The effect of methanol crossover. Electrochemistry Communications, 2012, 24, 65-68.	2.3	15
84	Catalyst Layer Performance in PEM Fuel Cell: Analytical Solutions. Electrocatalysis, 2012, 3, 132-138.	1.5	15
85	A simple equation for in situ measurement of the catalyst layer oxygen diffusivity in PEM fuel cell. Journal of Electroanalytical Chemistry, 2014, 720-721, 47-51.	1.9	15
86	Nafion film transport properties in a low-Pt PEM fuel cell: impedance spectroscopy study. RSC Advances, 2019, 9, 38797-38806.	1.7	15
87	Model of a Direct Methanol Fuel Cell Stack. Journal of the Electrochemical Society, 2006, 153, A1672.	1.3	14
88	Analysis of DamjanoviÄ‡ kinetics of the oxygen reduction reaction: Stability, polarization curve and impedance spectra. Journal of Electroanalytical Chemistry, 2015, 738, 130-137.	1.9	14
89	A Fast Low-Current Model for Impedance of a PEM Fuel Cell Cathode at Low Air Stoichiometry. Journal of the Electrochemical Society, 2017, 164, F911-F915.	1.3	14
90	Heat transport in a PEFC: Exact solutions and a novel method for measuring thermal conductivities of the catalyst layers and membrane. Electrochemistry Communications, 2007, 9, 6-12.	2.3	13

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91	Direct methanolâ€“hydrogen fuel cell: The mechanism of functioning. Electrochemistry Communications, 2008, 10, 1415-1418.	2.3	13
92	Analysis of Thermal Stability of Direct Methanol Fuel Cell Stack Operation. Journal of the Electrochemical Society, 2008, 155, B509.	1.3	13
93	Efficient Parallel Algorithm for Fuel Cell Stack Simulation. SIAM Journal on Applied Mathematics, 2009, 70, 531-542.	0.8	13
94	A Simple and Accurate Method for Highâ€Temperature PEM Fuel Cell Characterisation. Fuel Cells, 2010, 10, 363-368.	1.5	13
95	A Model for Highâ€Temperature PEM Fuel Cell: The Role of Transport in the Cathode Catalyst Layer. Fuel Cells, 2012, 12, 577-582.	1.5	13
96	Largeâ€“scale DMFC stack model: The effect of a condensation front on stack performance. International Journal of Hydrogen Energy, 2013, 38, 3373-3379.	3.8	13
97	Sodium excitation in non-equilibrium conditions behind shock waves in nitrogen. Chemical Physics Letters, 1977, 45, 351-355.	1.2	12
98	Reply to comment on `The role of photoionization in positive streamer dynamics'. Journal Physics D: Applied Physics, 2001, 34, 251-252.	1.3	12
99	Active layer of variable thickness: The limiting regime of anode catalyst layer operation in a DMFC. Electrochemistry Communications, 2005, 7, 969-975.	2.3	12
100	A model for optimal catalyst layer in a fuel cell. Electrochimica Acta, 2012, 79, 31-36.	2.6	12
101	The effect of nonâ€“uniform aging of a polymer electrolyte fuel cell on the polarization curve: A modeling study. Electrochimica Acta, 2014, 123, 542-550.	2.6	12
102	Characterization of a Commercial Polymer Electrolyte Membrane Fuel Cell Stack by Means of Physics-Based Modeling and Distribution of Relaxation Times. Journal of Physical Chemistry C, 2022, 126, 2424-2429.	1.5	12
103	Two models of a PEFC: semi-analytical vs numerical. International Journal of Energy Research, 2005, 29, 1153-1165.	2.2	11
104	Heat balance in the catalyst layer and the boundary condition for heat transport equation in a low-temperature fuel cell. Journal of Power Sources, 2006, 162, 1236-1240.	4.0	11
105	Polarization curve of a PEM fuel cell with poor oxygen or proton transport in the cathode catalyst layer. Electrochemistry Communications, 2011, 13, 1395-1399.	2.3	11
106	Impedance Spectroscopy Characterization of PEM Fuel Cells with Fe-N-C-Based Cathodes. Journal of the Electrochemical Society, 2019, 166, F653-F660.	1.3	11
107	A Model for Local Impedance: Validation of the Model for Local Parameters Recovery from a Single Spectrum of PEM Fuel Cell. Journal of the Electrochemical Society, 2019, 166, F431-F439.	1.3	11
108	Analytical model for PEM fuel cell concentration impedance. Journal of Electroanalytical Chemistry, 2021, 899, 115672.	1.9	11

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109	Heat transport in the membraneâ€“electrode assembly of a direct methanol fuel cell: Exact solutions. Electrochimica Acta, 2007, 53, 1353-1359.	2.6	10
110	Temperature and Current Distribution Along the Air Channel in Planar SOFC Stack: Model and Asymptotic Solution. Journal of Fuel Cell Science and Technology, 2010, 7, .	0.8	10
111	Polarization curve of a PEM fuel cell with the account of a finite rate of oxygen adsorption on Pt surface. International Journal of Hydrogen Energy, 2014, 39, 19018-19023.	3.8	10
112	Impedance of a PEM fuel cell cathode with nonuniform ionomer loading: Analytical and numerical study. Journal of Electroanalytical Chemistry, 2017, 789, 174-180.	1.9	10
113	The Effect of Proton Conductivity of Feâ€“Nâ€“Câ€“Based Cathode on PEM Fuel cell Performance. Journal of the Electrochemical Society, 2020, 167, 084501.	1.3	10
114	Experimental verification of the effect of bridge formation in a direct methanol fuel cell. Electrochemistry Communications, 2005, 7, 394-397.	2.3	9
115	Polarization curve of partially degraded catalyst layer. Electrochemistry Communications, 2010, 12, 1780-1783.	2.3	9
116	Understanding Catalyst Layer Degradation in PEM Fuel Cell Through Polarization Curve Fitting. Electrocatalysis, 2014, 5, 221-225.	1.5	9
117	Impedance and Resistivity of Lowâ€“Pt Cathode in a PEM Fuel Cell. Journal of the Electrochemical Society, 2021, 168, 044512.	1.3	9
118	Comment on â€œElectrochemical Reactions in a DMFC under Open-Circuit Conditionsâ€•[Electrochem. Solid-State Lett., 8, A52 (2005)]. Electrochemical and Solid-State Letters, 2006, 9, L7.	2.2	8
119	A model for carbon and Ru corrosion due to methanol depletion in DMFC. Electrochimica Acta, 2011, 56, 9846-9850.	2.6	8
120	A model for mixed potential in direct methanol fuel cell cathode and a novel cell design. Electrochimica Acta, 2012, 79, 52-56.	2.6	8
121	Analytical Description of a Dead Spot in a PEM Fuel Cell Anode. ECS Electrochemistry Letters, 2013, 2, F64-F67.	1.9	8
122	Polarization Curve of a Non-Uniformly Aged PEM Fuel Cell. Energies, 2014, 7, 351-364.	1.6	8
123	Nonlinear expansion of the cathode region in atmospheric pressure glow discharge. Journal Physics D: Applied Physics, 1993, 26, 431-435.	1.3	7
124	Simple and Accurate Scheme for Nonlinear Convectionâ€“Diffusion Equation. Journal of Computational Physics, 2001, 173, 716-729.	1.9	7
125	Anomalous Transport of Thermal Disturbance in a Planar SOFC Stack. Journal of the Electrochemical Society, 2010, 157, B572.	1.3	7
126	A model for a crack or a delaminated region in a PEM fuel cell anode: analytical solutions. Electrochimica Acta, 2015, 174, 424-429.	2.6	7

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127	Analytical Models of a Direct Methanol Fuel Cell. Advances in Fuel Cells, 2007, , 337-417.	0.9	6
128	General relations for power generated and lost in a fuel cell stack. Electrochimica Acta, 2007, 53, 1346-1352.	2.6	6
129	Thermal Waves in SOFC Stacks. Journal of the Electrochemical Society, 2008, 155, A693.	1.3	6
130	A method for detection and location of current-free spots in a fuel cell stack: Numerical study. International Journal of Hydrogen Energy, 2011, 36, 4449-4453.	3.8	6
131	In situ measurement of the oxygen diffusion coefficient in the cathode catalyst layer of a direct methanol fuel cell. Electrochimica Acta, 2014, 141, 212-215.	2.6	6
132	Optimal shape of catalyst loading along the oxygen channel of a PEM fuel cell. Electrochimica Acta, 2009, 54, 7001-7005.	2.6	5
133	Heat flux from the catalyst layer of a fuel cell. Electrochimica Acta, 2011, 56, 9172-9179.	2.6	5
134	Thermal stability of the catalyst layer operation in a fuel cell. Journal of Electroanalytical Chemistry, 2011, 652, 66-70.	1.9	5
135	A Model for Cr Poisoning of SOFC Cathode. Journal of the Electrochemical Society, 2011, 158, B253.	1.3	5
136	A simple and accurate fitting equation for half of the faradaic impedance arc of a PEM fuel cell. Journal of Electroanalytical Chemistry, 2015, 738, 108-112.	1.9	5
137	Analytical low-current impedance of the cathode side of a PEM fuel cell. Journal of Electroanalytical Chemistry, 2018, 823, 335-341.	1.9	5
138	Modeling of fuel cell stacks. , 2019, , 193-270.		5
139	Analysis of proton and electron transport impedance of a PEM fuel cell in H2/N2 regime. Electrochemical Science Advances, 2021, 1, e2000023.	1.2	5
140	Direct Methanolâ€“Hydrogen Fuel Cell. Electrochemical and Solid-State Letters, 2007, 10, B126.	2.2	4
141	A Combination Model for Macroscopic Transport in Polymer-Electrolyte Membranes. Topics in Applied Physics, 2009, , 157-198.	0.4	4
142	Analytical Impedance of Oxygen Transport in the Channel and Gas Diffusion Layer of a PEM Fuel Cell. Journal of the Electrochemical Society, 2021, 168, 114520.	1.3	4
143	Analytical Impedance of PEM Fuel Cell Cathode Including Oxygen Transport in the Channel, Gas Diffusion, and Catalyst Layers. Journal of the Electrochemical Society, 2022, 169, 034527.	1.3	4
144	Hydrodynamic description of electron multiplication in the cathode region: elementary beams model. Journal Physics D: Applied Physics, 1991, 24, 1954-1963.	1.3	3

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145	Comment on â€œA one dimensional model of a methanol fuel cell anodeâ€•[K. Scott, P. Argyropoulos, J. Power Sources 137 (2004) 228]. Journal of Power Sources, 2005, 148, 54.	4.0	3
146	Resistive Spot in a Fuel Cell Stack: Exact Solutions. Journal of Fuel Cell Science and Technology, 2009, 6, .	0.8	3
147	The features of a direct methanol fuel cell cathode impedance due to methanol crossover: Modeling and experiment. Electrochimica Acta, 2013, 108, 376-383.	2.6	3
148	Theoretical considerations on fuel cell electrodes design for in operando transmission X-ray absorption spectroscopy of the cell cathode. Journal of Solid State Electrochemistry, 2014, 18, 1281-1289.	1.2	3
149	Proton and Electron Transport Impedance of Inactive Catalyst Layer Embedded in PEM Fuel Cell. Journal of the Electrochemical Society, 2021, 168, 034501.	1.3	3
150	A Kernel for Calculating PEM Fuel Cell Distribution of Relaxation Times. Frontiers in Energy Research, 2021, 9, .	1.2	3
151	Analytical impedance of two-layer oxygen transport media in a PEM fuel cell. Electrochemistry Communications, 2022, 135, 107187.	2.3	3
152	Approximate analytical solution to MHM equations for PEM fuel cell cathode performance. Electrochemistry Communications, 2017, 77, 36-39.	2.3	2
153	Fuel cell basics. , 2019, , 1-33.		2
154	Quasi-2D model of a fuel cell. , 2019, , 109-192.		2
155	One-dimensional model of a fuel cell. , 2019, , 85-108.		1
156	Fitting of Lowâ€"Pt PEM Fuel Cell Polarization Curves by Means of a Singleâ€"Pore Catalyst Layer Model. Journal of the Electrochemical Society, 2021, 168, 094508.	1.3	1
157	Analytical Model for Concentration (Pressure) Impedance of a Low-Pt PEM Fuel Cell Oxygen Electrode. Membranes, 2022, 12, 356.	1.4	1
158	Impedance Spectroscopy Measurements of Ionomer Film Oxygen Transport Resistivity in Operating Low-Pt PEM Fuel Cell. Membranes, 2021, 11, 985.	1.4	1
159	Direct methanol fuel cell with non-equipotential electrodes. Electrochimica Acta, 2006, 51, 4405-4411.	2.6	0
160	Local Current Distribution in Direct Methanol Fuel Cells. , 0, , 449-486.		0
161	Two States of the Cathode Catalyst Layer Operation in a PEM Fuel Cell. Journal of the Electrochemical Society, 2018, 165, F821-F826.	1.3	0
162	Catalyst layer performance. , 2019, , 35-83.		0

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163	Applications of analytical models. , 2019, , 271-310.		0
164	Models for PEM fuel cell impedance. , 2019, , 311-344.		0
165	Analytical concentration impedance of a transport layer. Results in Chemistry, 2022, 4, 100378.	0.9	0