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	Analytical impedance of two-layer oxygen transport media in a PEM fuel cell. Electrochemistry Communications, 2022, 135, 107187.	2.3	3
2	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
3	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
4	Analytical Model for Concentration (Pressure) Impedance of a Low-Pt PEM Fuel Cell Oxygen Electrode. Membranes, 2022, 12, 356.	1.4	1
5	Design of PGM-free cathodic catalyst layers for advanced PEM fuel cells. Applied Catalysis B: Environmental, 2022, 312, 121424.	10.8	26
6	Analytical concentration impedance of a transport layer. Results in Chemistry, 2022, 4, 100378.	0.9	0
7	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
8	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
9	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
10	Impedance and Resistivity of Lowâ€“Pt Cathode in a PEM Fuel Cell. Journal of the Electrochemical Society, 2021, 168, 044512.	1.3	9
11	Understanding the distribution of relaxation times of a lowâ€“Pt PEM fuel cell. Electrochimica Acta, 2021, 391, 138954.	2.6	16
12	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
13	Analytical model for PEM fuel cell concentration impedance. Journal of Electroanalytical Chemistry, 2021, 899, 115672.	1.9	11
14	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
15	A Kernel for Calculating PEM Fuel Cell Distribution of Relaxation Times. Frontiers in Energy Research, 2021, 9, .	1.2	3
16	Impedance Spectroscopy Measurements of Ionomer Film Oxygen Transport Resistivity in Operating Low-Pt PEM Fuel Cell. Membranes, 2021, 11, 985.	1.4	1
17	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
18	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

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19	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
20	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
21	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
22	A model for concentration impedance of a PEM fuel cell. ETransportation, 2019, 2, 100026.	6.8	26
23	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
24	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
25	Fuel cell basics. , 2019, , 1-33.		2
26	Catalyst layer performance. , 2019, , 35-83.		0
27	One-dimensional model of a fuel cell. , 2019, , 85-108.		1
28	Quasi-2D model of a fuel cell. , 2019, , 109-192.		2
29	Modeling of fuel cell stacks. , 2019, , 193-270.		5
30	Applications of analytical models. , 2019, , 271-310.		0
31	Models for PEM fuel cell impedance. , 2019, , 311-344.		0
32	Analytical Impedance of Oxygen Transport in a PEM Fuel Cell Channel. Journal of the Electrochemical Society, 2019, 166, F306-F311.	1.3	21
33	On the distribution of local current density along a PEM fuel cell cathode channel. Electrochemistry Communications, 2019, 101, 35-38.	2.3	17
34	Nafion film transport properties in a low-Pt PEM fuel cell: impedance spectroscopy study. RSC Advances, 2019, 9, 38797-38806.	1.7	15
35	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
36	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

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37	Analytical low-current impedance of the cathode side of a PEM fuel cell. Journal of Electroanalytical Chemistry, 2018, 823, 335-341.	1.9	5
38	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
39	Approximate analytical solution to MHM equations for PEM fuel cell cathode performance. Electrochemistry Communications, 2017, 77, 36-39.	2.3	2
40	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
41	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
42	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
43	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
44	A model for impedance of a PEM fuel cell cathode with poor electronÂconductivity. Journal of Electroanalytical Chemistry, 2017, 801, 122-128.	1.9	17
45	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
46	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
47	A simple physicsâ€"based equation for lowâ€"current impedance of a PEM fuel cell cathode. Electrochimica Acta, 2016, 196, 231-235.	2.6	29
48	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
49	Variation of PEM Fuel Cell Physical Parameters with Current: Impedance Spectroscopy Study. Journal of the Electrochemical Society, 2016, 163, F1100-F1106.	1.3	30
50	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
51	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
52	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
53	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
54	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

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55	Polarization Curve of a Non-Uniformly Aged PEM Fuel Cell. Energies, 2014, 7, 351-364.	1.6	8
56	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
57	How important is oxygen transport in agglomerates in a PEM fuel cell catalyst layer?. Electrochimica Acta, 2014, 130, 826-829.	2.6	17
58	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
59	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
60	A simple transient model for a high temperature PEM fuel cell impedance. International Journal of Hydrogen Energy, 2014, 39, 2224-2235.	3.8	36
61	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
62	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
63	Understanding Catalyst Layer Degradation in PEM Fuel Cell Through Polarization Curve Fitting. Electrocatalysis, 2014, 5, 221-225.	1.5	9
64	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
65	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
66	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
67	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
68	Analytical Description of a Dead Spot in a PEM Fuel Cell Anode. ECS Electrochemistry Letters, 2013, 2, F64-F67.	1.9	8
69	Largeâ€scale DMFC Stack Model: Feed Disturbances and Their Impact on Stack Performance. Fuel Cells, 2012, 12, 1032-1041.	1.5	16
70	A model for DMFC cathode impedance: The effect of methanol crossover. Electrochemistry Communications, 2012, 24, 65-68.	2.3	15
71	A physical model for catalyst layer impedance. Journal of Electroanalytical Chemistry, 2012, 669, 28-34.	1.9	57
72	A model for optimal catalyst layer in a fuel cell. Electrochimica Acta, 2012, 79, 31-36.	2.6	12

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73	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
74	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
75	Catalyst Layer Performance in PEM Fuel Cell: Analytical Solutions. Electrocatalysis, 2012, 3, 132-138.	1.5	15
76	A model for mixed potential in direct methanol fuel cell cathode. Electrochimica Acta, 2012, 62, 185-191.	2.6	18
77	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
78	Heat flux from the catalyst layer of a fuel cell. Electrochimica Acta, 2011, 56, 9172-9179.	2.6	5
79	A model for carbon and Ru corrosion due to methanol depletion in DMFC. Electrochimica Acta, 2011, 56, 9846-9850.	2.6	8
80	Thermal stability of the catalyst layer operation in a fuel cell. Journal of Electroanalytical Chemistry, 2011, 652, 66-70.	1.9	5
81	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
82	A Simple Model for Carbon Corrosion in PEM Fuel Cell. Journal of the Electrochemical Society, 2011, 158, B957.	1.3	22
83	A Model for Cr Poisoning of SOFC Cathode. Journal of the Electrochemical Society, 2011, 158, B253.	1.3	5
84	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
85	The regimes of catalyst layer operation in a fuel cell. Electrochimica Acta, 2010, 55, 6391-6401.	2.6	88
86	A Simple and Accurate Method for Highâ€Temperature PEM Fuel Cell Characterisation. Fuel Cells, 2010, 10, 363-368.	1.5	13
87	A simple equation for temperature gradient in a planar SOFC stack. International Journal of Hydrogen Energy, 2010, 35, 308-312.	3.8	22
88	A simple model of a high temperature PEM fuel cell. International Journal of Hydrogen Energy, 2010, 35, 9954-9962.	3.8	85
89	Polarization curve of partially degraded catalyst layer. Electrochemistry Communications, 2010, 12, 1780-1783.	2.3	9
90	Anomalous Transport of Thermal Disturbance in a Planar SOFC Stack. Journal of the Electrochemical Society, 2010, 157, B572.	1.3	7

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91	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
92	A model for SOFC anode performance. Electrochimica Acta, 2009, 54, 6686-6695.	2.6	20
93	Optimal shape of catalyst loading across the active layer of a fuel cell. Electrochemistry Communications, 2009, 11, 1951-1955.	2.3	15
94	Optimal shape of catalyst loading along the oxygen channel of a PEM fuel cell. Electrochimica Acta, 2009, 54, 7001-7005.	2.6	5
95	Efficient Parallel Algorithm for Fuel Cell Stack Simulation. SIAM Journal on Applied Mathematics, 2009, 70, 531-542.	0.8	13
96	Resistive Spot in a Fuel Cell Stack: Exact Solutions. Journal of Fuel Cell Science and Technology, 2009, 6, .	0.8	3
97	A Combination Model for Macroscopic Transport in Polymer-Electrolyte Membranes. Topics in Applied Physics, 2009, , 157-198.	0.4	4
98	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
99	Direct methanolâ€"hydrogen fuel cell: The mechanism of functioning. Electrochemistry Communications, 2008, 10, 1415-1418.	2.3	13
100	Optimal temperature for DMFC stack operation. Electrochimica Acta, 2008, 53, 6391-6396.	2.6	21
101	Thermal Waves in SOFC Stacks. Journal of the Electrochemical Society, 2008, 155, A693.	1.3	6
102	Analysis of Thermal Stability of Direct Methanol Fuel Cell Stack Operation. Journal of the Electrochemical Society, 2008, 155, B509.	1.3	13
103	Direct Methanolâ€"Hydrogen Fuel Cell. Electrochemical and Solid-State Letters, 2007, 10, B126.	2.2	4
104	Mirroring of Current-Free Spots in a Fuel Cell Stack. Journal of the Electrochemical Society, 2007, 154, B817.	1.3	20
105	Analytical Models of a Direct Methanol Fuel Cell. Advances in Fuel Cells, 2007, , 337-417.	0.9	6
106	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
107	General relations for power generated and lost in a fuel cell stack. Electrochimica Acta, 2007, 53, 1346-1352.	2.6	6
108	Heat transport in the membraneâ€"electrode assembly of a direct methanol fuel cell: Exact solutions. Electrochimica Acta, 2007, 53, 1353-1359.	2.6	10

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109	Bifunctional activation of a direct methanol fuel cell. Journal of Power Sources, 2007, 173, 420-423.	4.0	18
110	DMFC: Galvanic or electrolytic cell?. Electrochemistry Communications, 2006, 8, 754-760.	2.3	37
111	Bubbles in the anode channel and performance of a DMFC: Asymptotic solutions. Electrochimica Acta, 2006, 51, 2003-2011.	2.6	28
112	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
113	Direct methanol fuel cell with non-equipotential electrodes. Electrochimica Acta, 2006, 51, 4405-4411.	2.6	0
114	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
115	Voltage loss in bipolar plates in a fuel cell stack. Journal of Power Sources, 2006, 160, 431-435.	4.0	29
116	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
117	Model of a Direct Methanol Fuel Cell Stack. Journal of the Electrochemical Society, 2006, 153, A1672.	1.3	14
118	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
119	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
120	Experimental verification of the effect of bridge formation in a direct methanol fuel cell. Electrochemistry Communications, 2005, 7, 394-397.	2.3	9
121	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
122	Feeding PEM fuel cells. Electrochimica Acta, 2005, 50, 1323-1333.	2.6	58
123	Two models of a PEFC: semi-analytical vs numerical. International Journal of Energy Research, 2005, 29, 1153-1165.	2.2	11
124	Analytical and Numerical Analysis of PEM Fuel Cell Performance Curves. Journal of the Electrochemical Society, 2005, 152, A1290.	1.3	36
125	On the Nature of Mixed Potential in a DMFC. Journal of the Electrochemical Society, 2005, 152, A1121.	1.3	48
126	On the origin of voltage oscillations of a polymer electrolyte fuel cell in galvanostatic regime. Electrochemistry Communications, 2004, 6, 729-736.	2.3	33

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127	Semi-analytical 1D+1D model of a polymer electrolyte fuel cell. Electrochemistry Communications, 2004, 6, 969-977.	2.3	41
128	1D+1D model of a DMFC: localized solutions and mixedpotential. Electrochemistry Communications, 2004, 6, 1259-1265.	2.3	41
129	Dynamics of fuel cell performance degradation. Electrochemistry Communications, 2004, 6, 75-82.	2.3	48
130	The effect of stoichiometric ratio Î» on the performance of a polymer electrolyte fuel cell. Electrochimica Acta, 2004, 49, 617-625.	2.6	85
131	The effect of cathodic water on performance of a polymer electrolyte fuel cell. Electrochimica Acta, 2004, 49, 5187-5196.	2.6	22
132	A method for analysis of DMFC performance curves. Electrochemistry Communications, 2003, 5, 1030-1036.	2.3	28
133	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
134	Quasi-3D Modeling of Water Transport in Polymer Electrolyte Fuel Cells. Journal of the Electrochemical Society, 2003, 150, A1432.	1.3	138
135	Comment on â€œSpontaneous Branching of Anode-Directed Streamers between Planar Electrodesâ€• Physical Review Letters, 2002, 89, 229401; author reply 229402.	2.9	19
136	Performance of catalyst layers of polymer electrolyte fuel cells: exact solutions. Electrochemistry Communications, 2002, 4, 318-323.	2.3	48
137	Performance of a polymer electrolyte fuel cell with long oxygen channel. Electrochemistry Communications, 2002, 4, 527-534.	2.3	18
138	The voltageâ€"current curve of a polymer electrolyte fuel cell: â€œexactâ€•and fitting equations. Electrochemistry Communications, 2002, 4, 845-852.	2.3	49
139	The voltageâ€"current curve of a direct methanol fuel cell: â€œexactâ€•and fitting equations. Electrochemistry Communications, 2002, 4, 939-946.	2.3	80
140	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
141	The current voltage plot of PEM fuel cell with long feed channels. Electrochemistry Communications, 2001, 3, 73-80.	2.3	31
142	Numerical simulation of a new operational regime for a polymer electrolyte fuel cell. Electrochemistry Communications, 2001, 3, 460-466.	2.3	25
143	Gas dynamics in channels of a gas-feed direct methanol fuel cell: exact solutions. Electrochemistry Communications, 2001, 3, 572-579.	2.3	29
144	Simple and Accurate Scheme for Nonlinear Convectionâ€"Diffusion Equation. Journal of Computational Physics, 2001, 173, 716-729.	1.9	7

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145	Characteristic length of fuel and oxygen consumption in feed channels of polymer electrolyte fuel cells. Electrochimica Acta, 2001, 46, 4389-4395.	2.6	32
146	Reply to comment on `The role of photoionization in positive streamer dynamics'. Journal Physics D: Applied Physics, 2001, 34, 251-252.	1.3	12
147	Two-dimensional numerical modelling of a direct methanol fuel cell. Journal of Applied Electrochemistry, 2000, 30, 1005-1014.	1.5	100
148	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
149	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
150	The role of photoionization in positive streamer dynamics. Journal Physics D: Applied Physics, 2000, 33, 1514-1524.	1.3	165
151	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
152	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
153	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
154	Positive streamer in a weak field in air: A moving avalanche-to-streamer transition. Physical Review E, 1998, 57, 7066-7074.	0.8	133
155	Positive streamer between parallel plate electrodes in atmospheric pressure air. Journal Physics D: Applied Physics, 1997, 30, 441-450.	1.3	162
156	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
157	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
158	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
159	Two-dimensional simulation of the positive streamer in N2between parallel-plate electrodes. Journal Physics D: Applied Physics, 1995, 28, 2483-2493.	1.3	83
160	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
161	The structure of streamers in N2. II. Two-dimensional simulation. Journal Physics D: Applied Physics, 1994, 27, 2564-2569.	1.3	37
162	Nonlinear expansion of the cathode region in atmospheric pressure glow discharge. Journal Physics D: Applied Physics, 1993, 26, 431-435.	1.3	7

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163	Hydrodynamic description of electron multiplication in the cathode region: elementary beams model. Journal Physics D: Applied Physics, 1991, 24, 1954-1963.	1.3	3
164	Sodium excitation in non-equilibrium conditions behind shock waves in nitrogen. Chemical Physics Letters, 1977, 45, 351-355.	1.2	12
165	Local Current Distribution in Direct Methanol Fuel Cells. , 0, , 449-486.		0