Lakshmanan Rajendran

List of Publications by Year
in descending order

143	1,573	394421	501196
papers	citations	19 h-index	28 g-index

144	144	144	537
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Theoretical and Numerical Analysis of Nonlinear Processes in Amperometric Enzyme Electrodes with Cyclic Substrate Conversion. Electrochem, 2022, 3, 70-88.	3.3	3
2	Transport and kinetics in an electroenzymatic process incurred in PPO-based rotating disk bioelectrodes. Journal of Electroanalytical Chemistry, 2022, , 116293.	3.8	1
3	Reaction-diffusion in a packed-bed reactors: Enzymatic isomerization with Michaelis-Menten Kinetics. Journal of Electroanalytical Chemistry, 2022, 910, 116184.	3.8	9
4	Amperometric biosensors and coupled enzyme nonlinear reactions processes: A complete theoretical and numerical approach. Electrochimica Acta, 2022, 415, 140236.	5.2	9
5	Semi-analytical expressions for the concentrations and effectiveness factor for the three general catalyst shapes. Reaction Kinetics, Mechanisms and Catalysis, 2022, 135, 1739-1754.	1.7	8
6	Cyclic voltammetric response of homogeneous catalysis of electrochemical reactions: Part 2. A theoretical and numerical approach for EC scheme. Journal of Electroanalytical Chemistry, 2022, 918, 116453.	3.8	4
7	Cyclic voltammetric response of homogeneous catalysis of electrochemical reactions: Part 1. A theoretical and numerical approach for EEâ€™C scheme. Journal of Electroanalytical Chemistry, 2022, 918, 116429.	3.8	7
8	Modelling of Biotrickling Filters for Treatment of NOx Analytical Expressions for the NOx Concentration in Both Gas and Biofilm Phases. Electrochem, 2022, 3, 361-378.	3.3	1
9	A kinetic model for amperometric immobilized enzymes at planar, cylindrical and spherical electrodes: The Akbari-Ganji method. Journal of Electroanalytical Chemistry, 2021, 880, 114921.	3.8	36
10	Theoretical Analysis of Single-Stage and Multi-Stage Monod Model of Landfill Degradation Through Mathematical Modelling. Current Biochemical Engineering, 2021, 7, 48-62.	1.3	0
11	Solving nonlinear reactionâ€“diffusion problemÂin electrostatic interaction with reaction-generated pH change on the kinetics of immobilized enzyme systems using Taylor series method. Journal of Mathematical Chemistry, 2021, 59, 1332-1347.	1.5	28
12	Steady-state current in product inhibition kinetics in an amperometric biosensor: Adomian decomposition and Taylor series method. Journal of Electroanalytical Chemistry, 2021, 886, 115103.	3.8	15
13	Amperometric biosensors in an uncompetitive inhibition processes: a complete theoretical and numerical analysis. Reaction Kinetics, Mechanisms and Catalysis, 2021, 133, 655-668.	1.7	19
14	Sensitivity and resistance of amperometric biosensors in substrate inhibition processes. Journal of Electroanalytical Chemistry, 2021, 895, 115527.	3.8	14
15	Transient current, sensitivity and resistance of biosensors acting in a trigger mode: Theoretical study. Journal of Electroanalytical Chemistry, 2021, 895, 115421.	3.8	10
16	Mathematical modeling of immobilized enzyme in porous planar, cylindrical, and spherical particle: a reliable semi-analytical approach. Reaction Kinetics, Mechanisms and Catalysis, 2021, 134, 641-651.	1.7	20
17	Transient chronoamperometric current at rotating disc electrode for second-order ECE reactions. Journal of Electroanalytical Chemistry, 2021, 902, 115775.	3.8	14
18	Approximate Analytical Solutions of Biofilm Reactor Problem in Applied Biotechnology. Theoretical Foundations of Chemical Engineering, 2021, 55, 851-861.	0.7	7

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19	Theoretical Analysis of Voltammetry at a Rotating Disk Electrode in the Absence of Supporting Electrolyte. Journal of Physical Chemistry B, 2020, 124, 443-450.	2.6	21
20	Electric potential and surface oxygen ion density for planar, spherical and cylindrical metal oxide grains. Sensors and Actuators B: Chemical, 2020, 321, 128576.	7.8	18
21	Approximate analytical solution of nonlinear equations in cubic auto-catalytic reaction-diffusion process. AIP Conference Proceedings, 2020, , .	0.4	2
22	Mathematical models for ECE reactions at rotating disk electrodes using homotopy analysis method. AIP Conference Proceedings, 2020, , .	0.4	0
23	Mathematical modeling of hydrogen evolution at a rotating disk electrode. AIP Conference Proceedings, 2020, , .	0.4	2
24	Taylorâ€™s series method for solving the nonlinear reaction-diffusion equation in the electroactive polymer film. Chemical Physics Letters, 2020, 754, 137573.	2.6	34
25	New analytical method for solving nonlinear equation in rotating disk electrodes for second-order ECE reactions. Journal of Electroanalytical Chemistry, 2020, 869, 114106.	3.8	31
26	Steady-state concentrations of carbon dioxide absorbed into phenyl glycidyl ether solutions by residual method. Journal of Mathematical Chemistry, 2020, 58, 1230-1246.	1.5	25
27	Analysis of the steady-state behavior of pseudo-first-order EC-catalytic mechanism at a rotating disk electrode. Electrochimica Acta, 2020, 345, 136175.	5.2	21
28	Analytical study and parameter-sensitivity analysis of catalytic current at a rotating disk electrode. Journal of Physics Communications, 2020, 4, 105017.	1.2	4
29	The theory of steady state current for chronoamperometric and cyclic voltammetry on rotating disk electrodes for ECâ€™ and ECE reactions. Electrochimica Acta, 2019, 313, 441-456.	5.2	23
30	Modelling of reaction-diffusion process at carbon nanotube â€“ Redox enzyme composite modified electrode biosensor. Chemical Physics Letters, 2019, 715, 20-28.	2.6	8
31	Application of modified wavelet and homotopy perturbation methods to nonlinear oscillation problems. Applied Mathematics and Nonlinear Sciences, 2019, 4, 351-364.	1.6	53
32	Theoretical analysis of concentration of lactose hydrolysis in a packed bed reactor using immobilized Î²-galactosidase. Ain Shams Engineering Journal, 2018, 9, 1507-1512.	6.1	2
33	Unprecedented homotopy perturbation method for solving nonlinear equations in the enzymatic reaction of glucose in a spherical matrix. Bioprocess and Biosystems Engineering, 2018, 41, 281-294.	3.4	8
34	Kinetic Mechanism for Modelling of Electrochemical Mediatedenzyme Reactions and Determination of Enzyme Kinetics Parameters. Russian Journal of Electrochemistry, 2018, 54, 783-795.	0.9	0
35	Transient Current for a Rotating Disk Electrodes Produced by a Potential Step. Russian Journal of Electrochemistry, 2018, 54, 1067-1072.	0.9	8
36	A New Approach of Solving the Nonlinear Equations in Biofiltration of Methane in a Closed Biofilter. Journal of Analytical & Bioanalytical Techniques, 2018, 09, .	0.6	0

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37	Mathematical modeling of nonlinear reactionâ€“diffusion processes in enzymatic biofuel cells. Current Opinion in Electrochemistry, 2017, 1, 121-132.	4.8	22
38	The analysis and fabrication of a novel tin-nickel mixed salt electrolytic coloured processing and the performance of coloured films for Al-12.7Si-0.7Mg alloy in acidic and alkali corrosive environments. International Journal of Precision Engineering and Manufacturing, 2017, 18, 93-98.	2.2	3
39	Theoretical treatment of diffusion and kinetics of osmium redox polymer mediated glucose oxidase enzyme electrodes: Analytical expression of current density for varying potential. Electrochimica Acta, 2017, 230, 89-97.	5.2	13
40	Non-linear Differential Equations and Rotating Disc Electrodes: PadÃ© approximationTechnique. Electrochimica Acta, 2017, 243, 1-6.	5.2	14
41	Part-2: Analytical Expressions of Concentrations of Glucose, Oxygen, and Gluconic Acid in a Composite Membrane for Closed-Loop Insulin Delivery for the Non-steady State Conditions. Journal of Membrane Biology, 2017, 250, 89-101.	2.1	1
42	Empirical and Analytical Correlation of the Reaction Kinetics Parameters of Cuttle Bone Powder Immobilized Lipase Catalyzed Ethyl Ferulate Synthesis. Catalysis Letters, 2017, 147, 2232-2245.	2.6	6
43	Analytical solution of the convection-diffusion equation for uniformly accessible rotating disk electrodes via the homotopy perturbation method. Journal of Electroanalytical Chemistry, 2017, 799, 175-180.	3.8	19
44	Mathematical modeling and analysis of the molar concentrations of ethanol, acetaldehyde and ethyl acetate inside the catalyst particle. Kinetics and Catalysis, 2016, 57, 125-134.	1.0	6
45	A new mathematical modelling using Homotopyperturbation method to solve nonlinear equations in enzymatic glucose fuel cells. Chemical Physics Letters, 2016, 662, 317-326.	2.6	14
46	Theoretical analysis of the enzyme reaction processes within the multiscale porous biocatalytic electrodes. Russian Journal of Electrochemistry, 2016, 52, 143-153.	0.9	2
47	Mathematical modeling of gas phase and biofilm phase biofilter performance. Egyptian Journal of Basic and Applied Sciences, 2016, 3, 94-105.	0.6	10
48	Hydrogen Production by a Photosynthetic Bacterium: Some Analytical Solutions. Chemical Engineering and Technology, 2015, 38, 1235-1242.	1.5	4
49	Mathematical analysis of an enzyme-entrapped conducting polymer modified electrode. Applied Mathematical Modelling, 2015, 39, 7351-7363.	4.2	9
50	Currentâ€“potential response and concentration profiles of redox polymer-mediated enzyme catalysis in biofuel cells â€“ Estimation of Michaelisâ€“Menten constants. Chemical Physics Letters, 2015, 621, 117-123.	2.6	14
51	Approximate analytical solution for non-linear reaction diffusion equations in a mono-enzymatic biosensor involving Michaelisâ€“Menten kinetics. Journal of Electroanalytical Chemistry, 2015, 751, 119-127.	3.8	21
52	Theoretical Analysis of Reaction and Diffusion Processes in a Biofuel Cell Electrode. Fuel Cells, 2015, 15, 523-536.	2.4	9
53	Non-linear analysis of Haldane kinetic model in phenol degradation in batch operations. Kinetics and Catalysis, 2015, 56, 141-146.	1.0	5
54	Theoretical analysis through mathematical modeling of two-phase flow transport in an immobilized-cell photobioreactor. Chemical Physics Letters, 2015, 625, 193-201.	2.6	5

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55	The Mathematical Theory of Diffusion and Reaction in Enzymes Immoblized Artificial Membrane. The Theory of the Non-Steady State. Journal of Membrane Biology, 2015, 248, 1127-1135.	2.1	1
56	Enzyme-Catalyzed Oxygen Reduction Reaction in Biofuel Cells: Analytical Expressions for Chronoamperometric Current Densities. Journal of the Electrochemical Society, 2015, 162, H671-H680.	2.9	18
57	Analytical expression of transient current-potential for redox enzymatic homogenous system. Sensors and Actuators B: Chemical, 2015, 208, 128-136.	7.8	19
58	Analytical expressions for the concentration of nitric oxide removal in the gas and biofilm phase in a biotrickling filter. Journal of the Association of Arab Universities for Basic and Applied Sciences, 2015, 18, 19-28.	1.0	1
59	A new mathematical model for effectiveness factors in biofilm under toxic conditions. AEJ - Alexandria Engineering Journal, 2014, 53, 917-928.	6.4	6
60	Analytical Solution of Nonlinear Dynamics of a Self-Igniting Reaction-Diffusion System Using Modified Adomian Decomposition Method. International Journal of Chemical Engineering, 2014, 2014, 1-8.	2.4	0
61	Analysis of Mathematical Modelling on Potentiometric Biosensors. , 2014, 2014, 1-11.		4
62	Theoretical Analysis of an Amperometric Biosensor Based on Parallel Substrates Conversion. ISRN Electrochemistry, 2014, 2014, 1-12.	0.9	1
63	Analytical model for Binding Refresh Request to reduce storage and communication overhead in MIPv6 network. International Journal of Network Management, 2014, 24, 402-414.	2.2	0
64	Analytical expression for concentration and sensitivity of a thin film semiconductor gas sensor. Ain Shams Engineering Journal, 2014, 5, 885-893.	6.1	17
65	Analytical expression of transient and steady-state catalytic current of mediated bioelectrocatalysis. Electrochimica Acta, 2014, 147, 678-687.	5.2	8
66	Theoretical analysis of intrinsic reaction kinetics and the behavior of immobilized enzymes system for steady-state conditions. Biochemical Engineering Journal, 2014, 91, 129-139.	3.6	19
67	Analytical Expressions of the Concentrations of Substrate, Biomass, and Ethanol for Solidâ€State Fermentation in Biofuel Production. Energy Technology, 2014, 2, 574-578.	3.8	2
68	Mathematical Modeling of Multienzyme Biosensor System. International Journal of Computational Mathematics, 2014, 2014, 1-15.	0.8	5
69	Mathematical Model of Cell Growth for Biofuel Production under Synthetic Feedback. Natural Science, 2014, 06, 262-277.	0.4	0
70	Analytical expression of the concentration of species and effectiveness factors in porous catalysts using the Adomian decomposition method. Kinetics and Catalysis, 2013, 54, 95-105.	1.0	9
71	Mathematical Modeling of a Carrier-Mediated Transport Process in a Liquid Membrane. Journal of Membrane Biology, 2013, 246, 435-442.	2.1	10
72	Analytical Expressions for the Steady-State Concentrations of Glucose, Oxygen and Gluconic Acid in a Composite Membrane for Closed-Loop Insulin Delivery. Journal of Membrane Biology, 2013, 246, 121-129.	2.1	9

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73	Theoretical Analysis of the Chemical Absorption of Carbon Dioxide using an Aqueous Elastic Xanthanâ€Gum Solution Containing NaOH. Energy Technology, 2013, 1, 405-411.	3.8	0
74	Analytical expressions for the concentrations of substrate, oxygen and mediator in an amperometric enzyme electrode. Applied Mathematical Modelling, 2013, 37, 5343-5358.	4.2	4
75	Approximate Analytical Expressions for the Steadyâ€State Concentration of Substrate and Cosubstrate over Amperometric Biosensors for Different Enzyme Kinetics. International Journal of Chemical Kinetics, 2013, 45, 322-336.	1.6	6
76	Reply to â€œComments on analytical solution of amperometric enzymatic reactions based on Homotopy perturbation method,â€• by Ji-Huan He, Lu-Feng Mo [Electrochim. Acta (2013)]. Electrochimica Acta, 2013, 102, 474-476.	5.2	33
77	Analytical expression of concentrations of adsorbed CO molecules, O atoms and oxide oxygen. Natural Science, 2013, 05, 326-332.	0.4	0
78	Analytical Expressions for Steady-State Concentrations of Substrate and Oxidized and Reduced Mediator in an Amperometric Biosensor. International Journal of Electrochemistry, 2013, 2013, 1-12.	2.4	6
79	An Approximate Analytical Method for the Evaluation of the Concentrations and Current for Hybrid Enzyme Biosensor. , 2013, 2013, 1-12.		1
80	Analytical Solution of Non-Isothermal Diffusion-Reaction Processes and Effectiveness Factors. , 2013, 2013, 1-14.		5
81	Mathematical Modeling and Analysis of Nonlinear Enzyme Catalyzed Reaction Processes. Journal of Theoretical Chemistry, 2013, 2013, 1-7.	1.5	5
82	Analytical expressions of the concentrations of substrate and product in enzyme inhibition process. Natural Science, 2013, 05, 1047-1055.	0.4	1
83	Analytical Expressions Pertaining to the Concentration of Substrates and Product in Phenol-Polyphenol Oxidase System Immobilized in Laponite Hydrogels: A Reciprocal Competitive Inhibition Process. Advances in Physical Chemistry, 2012, 2012, 1-11.	2.0	3
84	Approximate analytical solution of the concentration of phenol and oxygen and rate of phenol degradation in fluidized bed bioreactor. Biochemical Engineering Journal, 2012, 68, 42-53.	3.6	2
85	Analytical expression of non steady-state concentration for the CE mechanism at a planar electrode. Journal of Mathematical Chemistry, 2012, 50, 1277-1288.	1.5	4
86	Mathematical modelling of steady-state concentration in immobilized glucose isomerase of packed-bed reactors. Journal of Mathematical Chemistry, 2012, 50, 1333-1346.	1.5	8
87	Theoretical Analysis of Mass Transfer with Chemical Reaction Using Absorption of Carbon Dioxide into Phenyl Glycidyl Ether Solution. Applied Mathematics, 2012, 03, 1179-1186.	0.4	9
88	Approximate Analytical Solution of Nonlinear Reactionâ€™s Diffusion Equation at Conducting Polymer Ultramicroelectrodes. , 2012, 2012, 1-12.		3
89	New Approximate Analytical Expressions for Transient Concentration Profiles and Current Pertaining to a Homogeneous Chemical Reaction at Hemispherical Microelectrodes. Journal of Physical Chemistry A, 2011, 115, 10950-10961.	2.5	5
90	Analytical Expression of Non-Steady-State Concentrations and Current Pertaining to Compounds Present in the Enzyme Membrane of Biosensor. Journal of Physical Chemistry A, 2011, 115, 4299-4306.	2.5	4

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91	Analytical expressions of concentration of nitrate pertaining to the electrocatalytic reduction of nitrate ion. Journal of Electroanalytical Chemistry, 2011, 661, 137-143.	3.8	7
92	Mathematical modeling of cyclic voltammetry for EC reaction. Russian Journal of Electrochemistry, 2011, 47, 181-190.	0.9	9
93	Mathematical modeling of cyclic voltammetry for EC2 reaction. Russian Journal of Electrochemistry, 2011, 47, 191-199.	0.9	6
94	Analytical solution of nonlinear diffusion processes in modified electrode. Russian Journal of Electrochemistry, 2011, 47, 147-155.	0.9	3
95	Mathematical modeling of a tubular spectrochemical cell using the finite Hankel transformation. Russian Journal of Electrochemistry, 2011, 47, 883-889.	0.9	1
96	Modeling of nonlinear boundary value problems in enzyme-catalyzed reaction diffusion processes. Journal of Mathematical Chemistry, 2011, 49, 457-474.	1.5	6
97	Analytical solution of non-linear enzyme reaction equations arising in mathematical chemistry. Journal of Mathematical Chemistry, 2011, 49, 1713-1726.	1.5	13
98	Analytical expression of the steady-state catalytic current of mediated bioelectrocatalysis and the application of Heâ€™s Homotopy perturbation method. Journal of Mathematical Chemistry, 2011, 49, 1727-1740.	1.5	9
99	Analytical expressions of concentration and current in homogeneous catalytic reactions at spherical microelectrodes: Homotopy perturbation approach. Journal of Electroanalytical Chemistry, 2011, 651, 173-184.	3.8	8
100	Analytical expression of the concentration of substrates and product in phenolâ€“polyphenol oxidase system immobilized in laponiteÂ® hydrogels. Michaelisâ€“Menten formalism in homogeneous medium. Electrochimica Acta, 2011, 56, 6411-6419.	5.2	11
101	Analytical solution of amperometric enzymatic reactions based on Homotopy perturbation method. Electrochimica Acta, 2011, 56, 3345-3352.	5.2	25
102	Mathematical modeling in amperometric oxidase enzymeâ€“membrane electrodes. Journal of Membrane Science, 2011, 373, 20-28.	8.2	32
103	Analytical expressions pertaining to the concentration of catechol, o-quinone and current at PPO-modified microcylinder biosensor for diffusion-kinetic model. Journal of Electroanalytical Chemistry, 2011, 660, 200-208.	3.8	9
104	Mathematical model for steady state current at ppo-modified micro-cylinder biosensors. Journal of Biomedical Science and Engineering, 2011, 04, 631-641.	0.4	6
105	Analytical solution of steady state current at a microdisk biosensor. Journal of Electroanalytical Chemistry, 2010, 641, 35-44.	3.8	26
106	Analytical solution of steady-state current an enzyme-modified microcylinder electrodes. Journal of Electroanalytical Chemistry, 2010, 648, 36-46.	3.8	19
107	Mathematical modelling of enzyme kinetics reaction mechanisms and analytical solutions of non-linear reaction equations. Journal of Mathematical Chemistry, 2010, 48, 179-186.	1.5	22
108	Analysis of a pHâ€Based Potentiometric Biosensor Using the Homotopy Perturbation Method. Chemical Engineering and Technology, 2010, 33, 1999-2007.	1.5	7

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109	Mathematical modeling of amperometric and potentiometric biosensors and system of non-linear equations â€“ Homotopy perturbation approach. Journal of Electroanalytical Chemistry, 2010, 644, 50-59.	3.8	64
110	Derivation of nonsteady-state analytical solution for surface enzyme kinetics. Journal of Electroanalytical Chemistry, 2010, 647, 87-92.	3.8	7
111	Analytical solution of system of coupled non-linear reaction diffusion equations. Part I: Mediated electron transfer at conducting polymer ultramicroelectrodes. Journal of Electroanalytical Chemistry, 2010, 647, 103-116.	3.8	8
112	Analytical solution of system of coupled non-linear reaction diffusion equations. Part II: Direct reaction of substrate at underlying microdisc surface. Journal of Electroanalytical Chemistry, 2010, 650, 143-151.	3.8	7
113	System of coupled non-linear reaction diffusion processes at conducting polymer-modified ultramicroelectrodes. Electrochimica Acta, 2010, 55, 3223-3235.	5.2	17
114	Solution of steady-state substrate concentration in the action of biosensor response at mixed enzyme kinetics. Sensors and Actuators B: Chemical, 2010, 147, 290-297.	7.8	33
115	Mathematical modeling of diffusion and kinetics in amperometric immobilized enzyme electrodes. Electrochimica Acta, 2010, 55, 5230-5238.	5.2	31
116	Solutions of the Coupled Reaction and Diffusion Equations within Polymer-Modified Ultramicroelectrodes. Journal of Physical Chemistry A, 2010, 114, 7030-7037.	2.5	4
117	Traveling-wave solution of non-linear coupled reaction diffusion equation arising in mathematical chemistry. Journal of Mathematical Chemistry, 2009, 46, 550-561.	1.5	10
118	A comparison of diffusion-limited currents at microelectrodes of various geometries for ECâ€² reactions. Electrochimica Acta, 2008, 53, 3566-3578.	5.2	18
119	Application of Heâ€™s variational iteration method in nonlinear boundary value problems in enzymeâ€“ substrate reaction diffusion processes: part 1. The steady-state amperometric response. Journal of Mathematical Chemistry, 2008, 44, 849-861.	1.5	34
120	Analytical expression for transient chronoamperometric current at ultramicroband electrode. Russian Journal of Electrochemistry, 2008, 44, 1156-1161.	0.9	5
121	MODELING OF NONLINEAR REACTIONâ€“DIFFUSION PROCESSES OF AMPEROMETRIC POLYMER-MODIFIED ELECTRODES. Journal of Theoretical and Computational Chemistry, 2008, 07, 113-138.	1.8	10
122	A COMPARISON OF DIFFUSION-LIMITED CURRENT AT MICROELECTRODES OF VARIOUS GEOMETRIES. Journal of Theoretical and Computational Chemistry, 2008, 07, 205-219.	1.8	3
123	THEORIES OF DIFFUSION AT A MICRORING ELECTRODES: A REVIEW. Journal of Theoretical and Computational Chemistry, 2007, 06, 699-713.	1.8	0
124	THE THEORY OF REACTION-DIFFUSION PROCESSES AT CYLINDRICAL ULTRAMICROELECTRODES. Journal of Theoretical and Computational Chemistry, 2007, 06, 301-307.	1.8	4
125	Two-point PadÃ© approximation of mass transfer rate at microdisc electrodes in a channel flow for all PÃ©clet numbers. Electrochimica Acta, 2006, 51, 5407-5411.	5.2	12
126	Microring electrode: Transient and steady-state chronoamperometric current for first-order EC reactions. Electrochimica Acta, 2006, 51, 4439-4446.	5.2	6

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127	ANALYTICAL SOLUTION FOR THE STEADY-STATE CHRONOAMPEROMETRIC CURRENT FOR AN ECâ€² REACTION AT SPHEROIDAL ULTRAMICROELECTRODES. Journal of Theoretical and Computational Chemistry, 2006, 05, 11-24.	1.8	7
128	Analysis of positive feedback currents at the scanning electrochemical microscope. Journal of Electroanalytical Chemistry, 2004, 561, 113-118.	3.8	18
129	EChem++ â€“ an object oriented problem solving environment for electrochemistry. Part 1. A C++ class collection for electrochemical excitation functions. Journal of Electroanalytical Chemistry, 2004, 568, 203-214.	3.8	17
130	A two-point PadÃ© approximation for the mass-transfer rate at rotating disc electrodes. Journal of Electroanalytical Chemistry, 2003, 547, 173-177.	3.8	5
131	Modeling of reactionâ€“diffusion processes: part (ii) the theory of catalytic electrode processes at hemi-oblate and prolate ultramicroelectrodes. Electrochemistry Communications, 2002, 4, 72-75.	4.7	2
132	Transient chronoamperometric current response at hemispheroidal ultramicroelectrodes. Journal of Electroanalytical Chemistry, 2001, 501, 210-214.	3.8	6
133	PadÃ© approximation of ECâ€² processes at channel electrodes. Journal of Electroanalytical Chemistry, 2000, 487, 72-74.	3.8	4
134	Analysis of non-steady-state current at hemispheroidal ultramicroelectrodes. Electrochemistry Communications, 2000, 2, 531-534.	4.7	8
135	Modelling of reactionâ€“diffusion processes: the theory of catalytic electrode processes at hemispheroidal ultramicroelectrodes. Electrochemistry Communications, 2000, 2, 679-684.	4.7	16
136	PadÃ© approximation of ECE and DISP processes at channel electrodes. Electrochemistry Communications, 2000, 2, 186-189.	4.7	14
137	Diffusion at Ultramicro Disk Electrodes: Chronoamperometric Current for Steady-State Ecâ€˜ Reaction Using Scattering Analogue Techniques. Journal of Physical Chemistry B, 1999, 103, 1518-1524.	2.6	54
138	Chronoamperometric Current at Ultramicroelectrodes: PadÃ© Approximation for a Reversible Electron Transfer Scheme. Electroanalysis, 1998, 10, 506-511.	2.9	10
139	Diffusion at Ultramicroelectrodes:Â Chronoamperometric Current Response Using PadÃ© Approximation. Journal of Physical Chemistry B, 1997, 101, 4583-4587.	2.6	21
140	A two-point PadÃ© approximation for the non-steady-state chronoamperometric current at ultramicrodisc electrodes. Journal of Electroanalytical Chemistry, 1995, 392, 75-78.	3.8	24
141	Mathematical Modeling and Simulation of Nonlinear Process in Enzyme Kinetics. , 0, , .		3
142	Analytical Solution of Cubic Autocatalytic Reaction-Diffusion Equations. , 0, , 199-218.		0
143	Transport and Reaction Kinetics in Enzymatic Reaction Process in Multiscale Porous Biocatalytic Electrodes. Chemistry Africa, 0, , .	2.4	1