

Lakshmanan Rajendran

List of Publications by Year in descending order

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593
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#	ARTICLE	IF	CITATIONS
1	Theoretical and Numerical Analysis of Nonlinear Processes in Amperometric Enzyme Electrodes with Cyclic Substrate Conversion. <i>Electrochem</i> , 2022, 3, 70-88.	1.7	3
2	Transport and kinetics in an electroenzymatic process incurred in PPO-based rotating disk bioelectrodes. <i>Journal of Electroanalytical Chemistry</i> , 2022, , 116293.	1.9	1
3	Reaction-diffusion in a packed-bed reactors: Enzymatic isomerization with Michaelis-Menten Kinetics. <i>Journal of Electroanalytical Chemistry</i> , 2022, 910, 116184.	1.9	9
4	Amperometric biosensors and coupled enzyme nonlinear reactions processes: A complete theoretical and numerical approach. <i>Electrochimica Acta</i> , 2022, 415, 140236.	2.6	9
5	Semi-analytical expressions for the concentrations and effectiveness factor for the three general catalyst shapes. <i>Reaction Kinetics, Mechanisms and Catalysis</i> , 2022, 135, 1739-1754.	0.8	8
6	Cyclic voltammetric response of homogeneous catalysis of electrochemical reactions: Part 2. A theoretical and numerical approach for EC scheme. <i>Journal of Electroanalytical Chemistry</i> , 2022, 918, 116453.	1.9	4
7	Cyclic voltammetric response of homogeneous catalysis of electrochemical reactions: Part 1. A theoretical and numerical approach for EE TM C scheme. <i>Journal of Electroanalytical Chemistry</i> , 2022, 918, 116429.	1.9	7
8	Modelling of Biotrickling Filters for Treatment of NO _x Analytical Expressions for the NO _x Concentration in Both Gas and Biofilm Phases. <i>Electrochem</i> , 2022, 3, 361-378.	1.7	1
9	A kinetic model for amperometric immobilized enzymes at planar, cylindrical and spherical electrodes: The Akbari-Ganji method. <i>Journal of Electroanalytical Chemistry</i> , 2021, 880, 114921.	1.9	36
10	Theoretical Analysis of Single-Stage and Multi-Stage Monod Model of Landfill Degradation Through Mathematical Modelling. <i>Current Biochemical Engineering</i> , 2021, 7, 48-62.	1.3	0
11	Solving nonlinear reaction-diffusion problem in electrostatic interaction with reaction-generated pH change on the kinetics of immobilized enzyme systems using Taylor series method. <i>Journal of Mathematical Chemistry</i> , 2021, 59, 1332-1347.	0.7	28
12	Steady-state current in product inhibition kinetics in an amperometric biosensor: Adomian decomposition and Taylor series method. <i>Journal of Electroanalytical Chemistry</i> , 2021, 886, 115103.	1.9	15
13	Amperometric biosensors in an uncompetitive inhibition processes: a complete theoretical and numerical analysis. <i>Reaction Kinetics, Mechanisms and Catalysis</i> , 2021, 133, 655-668.	0.8	19
14	Sensitivity and resistance of amperometric biosensors in substrate inhibition processes. <i>Journal of Electroanalytical Chemistry</i> , 2021, 895, 115527.	1.9	14
15	Transient current, sensitivity and resistance of biosensors acting in a trigger mode: Theoretical study. <i>Journal of Electroanalytical Chemistry</i> , 2021, 895, 115421.	1.9	10
16	Mathematical modeling of immobilized enzyme in porous planar, cylindrical, and spherical particle: a reliable semi-analytical approach. <i>Reaction Kinetics, Mechanisms and Catalysis</i> , 2021, 134, 641-651.	0.8	20
17	Transient chronoamperometric current at rotating disc electrode for second-order ECE reactions. <i>Journal of Electroanalytical Chemistry</i> , 2021, 902, 115775.	1.9	14
18	Approximate Analytical Solutions of Biofilm Reactor Problem in Applied Biotechnology. <i>Theoretical Foundations of Chemical Engineering</i> , 2021, 55, 851-861.	0.2	7

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19	Theoretical Analysis of Voltammetry at a Rotating Disk Electrode in the Absence of Supporting Electrolyte. <i>Journal of Physical Chemistry B</i> , 2020, 124, 443-450.	1.2	21
20	Electric potential and surface oxygen ion density for planar, spherical and cylindrical metal oxide grains. <i>Sensors and Actuators B: Chemical</i> , 2020, 321, 128576.	4.0	18
21	Approximate analytical solution of nonlinear equations in cubic auto-catalytic reaction-diffusion process. <i>AIP Conference Proceedings</i> , 2020, , .	0.3	2
22	Mathematical models for ECE reactions at rotating disk electrodes using homotopy analysis method. <i>AIP Conference Proceedings</i> , 2020, , .	0.3	0
23	Mathematical modeling of hydrogen evolution at a rotating disk electrode. <i>AIP Conference Proceedings</i> , 2020, , .	0.3	2
24	Taylor's series method for solving the nonlinear reaction-diffusion equation in the electroactive polymer film. <i>Chemical Physics Letters</i> , 2020, 754, 137573.	1.2	34
25	New analytical method for solving nonlinear equation in rotating disk electrodes for second-order ECE reactions. <i>Journal of Electroanalytical Chemistry</i> , 2020, 869, 114106.	1.9	31
26	Steady-state concentrations of carbon dioxide absorbed into phenyl glycidyl ether solutions by residual method. <i>Journal of Mathematical Chemistry</i> , 2020, 58, 1230-1246.	0.7	25
27	Analysis of the steady-state behavior of pseudo-first-order EC-catalytic mechanism at a rotating disk electrode. <i>Electrochimica Acta</i> , 2020, 345, 136175.	2.6	21
28	Analytical study and parameter-sensitivity analysis of catalytic current at a rotating disk electrode. <i>Journal of Physics Communications</i> , 2020, 4, 105017.	0.5	4
29	The theory of steady state current for chronoamperometric and cyclic voltammetry on rotating disk electrodes for EC TM and ECE reactions. <i>Electrochimica Acta</i> , 2019, 313, 441-456.	2.6	23
30	Modelling of reaction-diffusion process at carbon nanotube Redox enzyme composite modified electrode biosensor. <i>Chemical Physics Letters</i> , 2019, 715, 20-28.	1.2	8
31	Application of modified wavelet and homotopy perturbation methods to nonlinear oscillation problems. <i>Applied Mathematics and Nonlinear Sciences</i> , 2019, 4, 351-364.	0.9	53
32	Theoretical analysis of concentration of lactose hydrolysis in a packed bed reactor using immobilized β -galactosidase. <i>Ain Shams Engineering Journal</i> , 2018, 9, 1507-1512.	3.5	2
33	Unprecedented homotopy perturbation method for solving nonlinear equations in the enzymatic reaction of glucose in a spherical matrix. <i>Bioprocess and Biosystems Engineering</i> , 2018, 41, 281-294.	1.7	8
34	Kinetic Mechanism for Modelling of Electrochemical Mediated enzyme Reactions and Determination of Enzyme Kinetics Parameters. <i>Russian Journal of Electrochemistry</i> , 2018, 54, 783-795.	0.3	0
35	Transient Current for a Rotating Disk Electrodes Produced by a Potential Step. <i>Russian Journal of Electrochemistry</i> , 2018, 54, 1067-1072.	0.3	8
36	A New Approach of Solving the Nonlinear Equations in Biofiltration of Methane in a Closed Biofilter. <i>Journal of Analytical & Bioanalytical Techniques</i> , 2018, 09, .	0.6	0

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37	Mathematical modeling of nonlinear reaction-diffusion processes in enzymatic biofuel cells. <i>Current Opinion in Electrochemistry</i> , 2017, 1, 121-132.	2.5	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. <i>International Journal of Precision Engineering and Manufacturing</i> , 2017, 18, 93-98.	1.1	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. <i>Electrochimica Acta</i> , 2017, 230, 89-97.	2.6	13
40	Non-linear Differential Equations and Rotating Disc Electrodes: Padé approximation Technique. <i>Electrochimica Acta</i> , 2017, 243, 1-6.	2.6	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. <i>Journal of Membrane Biology</i> , 2017, 250, 89-101.	1.0	1
42	Empirical and Analytical Correlation of the Reaction Kinetics Parameters of Cuttle Bone Powder Immobilized Lipase Catalyzed Ethyl Ferulate Synthesis. <i>Catalysis Letters</i> , 2017, 147, 2232-2245.	1.4	6
43	Analytical solution of the convection-diffusion equation for uniformly accessible rotating disk electrodes via the homotopy perturbation method. <i>Journal of Electroanalytical Chemistry</i> , 2017, 799, 175-180.	1.9	19
44	Mathematical modeling and analysis of the molar concentrations of ethanol, acetaldehyde and ethyl acetate inside the catalyst particle. <i>Kinetics and Catalysis</i> , 2016, 57, 125-134.	0.3	6
45	A new mathematical modelling using Homotopy perturbation method to solve nonlinear equations in enzymatic glucose fuel cells. <i>Chemical Physics Letters</i> , 2016, 662, 317-326.	1.2	14
46	Theoretical analysis of the enzyme reaction processes within the multiscale porous biocatalytic electrodes. <i>Russian Journal of Electrochemistry</i> , 2016, 52, 143-153.	0.3	2
47	Mathematical modeling of gas phase and biofilm phase biofilter performance. <i>Egyptian Journal of Basic and Applied Sciences</i> , 2016, 3, 94-105.	0.2	10
48	Hydrogen Production by a Photosynthetic Bacterium: Some Analytical Solutions. <i>Chemical Engineering and Technology</i> , 2015, 38, 1235-1242.	0.9	4
49	Mathematical analysis of an enzyme-entrapped conducting polymer modified electrode. <i>Applied Mathematical Modelling</i> , 2015, 39, 7351-7363.	2.2	9
50	Current-potential response and concentration profiles of redox polymer-mediated enzyme catalysis in biofuel cells - Estimation of Michaelis-Menten constants. <i>Chemical Physics Letters</i> , 2015, 621, 117-123.	1.2	14
51	Approximate analytical solution for non-linear reaction diffusion equations in a mono-enzymatic biosensor involving Michaelis-Menten kinetics. <i>Journal of Electroanalytical Chemistry</i> , 2015, 751, 119-127.	1.9	21
52	Theoretical Analysis of Reaction and Diffusion Processes in a Biofuel Cell Electrode. <i>Fuel Cells</i> , 2015, 15, 523-536.	1.5	9
53	Non-linear analysis of Haldane kinetic model in phenol degradation in batch operations. <i>Kinetics and Catalysis</i> , 2015, 56, 141-146.	0.3	5
54	Theoretical analysis through mathematical modeling of two-phase flow transport in an immobilized-cell photobioreactor. <i>Chemical Physics Letters</i> , 2015, 625, 193-201.	1.2	5

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55	The Mathematical Theory of Diffusion and Reaction in Enzymes Immobilized Artificial Membrane. The Theory of the Non-Steady State. <i>Journal of Membrane Biology</i> , 2015, 248, 1127-1135.	1.0	1
56	Enzyme-Catalyzed Oxygen Reduction Reaction in Biofuel Cells: Analytical Expressions for Chronoamperometric Current Densities. <i>Journal of the Electrochemical Society</i> , 2015, 162, H671-H680.	1.3	18
57	Analytical expression of transient current-potential for redox enzymatic homogenous system. <i>Sensors and Actuators B: Chemical</i> , 2015, 208, 128-136.	4.0	19
58	Analytical expressions for the concentration of nitric oxide removal in the gas and biofilm phase in a biotrickling filter. <i>Journal of the Association of Arab Universities for Basic and Applied Sciences</i> , 2015, 18, 19-28.	1.0	1
59	A new mathematical model for effectiveness factors in biofilm under toxic conditions. <i>AEJ - Alexandria Engineering Journal</i> , 2014, 53, 917-928.	3.4	6
60	Analytical Solution of Nonlinear Dynamics of a Self-Igniting Reaction-Diffusion System Using Modified Adomian Decomposition Method. <i>International Journal of Chemical Engineering</i> , 2014, 2014, 1-8.	1.4	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. <i>ISRN Electrochemistry</i> , 2014, 2014, 1-12.	0.9	1
63	Analytical model for Binding Refresh Request to reduce storage and communication overhead in MIPv6 network. <i>International Journal of Network Management</i> , 2014, 24, 402-414.	1.4	0
64	Analytical expression for concentration and sensitivity of a thin film semiconductor gas sensor. <i>Ain Shams Engineering Journal</i> , 2014, 5, 885-893.	3.5	17
65	Analytical expression of transient and steady-state catalytic current of mediated bioelectrocatalysis. <i>Electrochimica Acta</i> , 2014, 147, 678-687.	2.6	8
66	Theoretical analysis of intrinsic reaction kinetics and the behavior of immobilized enzymes system for steady-state conditions. <i>Biochemical Engineering Journal</i> , 2014, 91, 129-139.	1.8	19
67	Analytical Expressions of the Concentrations of Substrate, Biomass, and Ethanol for Solid-State Fermentation in Biofuel Production. <i>Energy Technology</i> , 2014, 2, 574-578.	1.8	2
68	Mathematical Modeling of Multienzyme Biosensor System. <i>International Journal of Computational Mathematics</i> , 2014, 2014, 1-15.	0.8	5
69	Mathematical Model of Cell Growth for Biofuel Production under Synthetic Feedback. <i>Natural Science</i> , 2014, 06, 262-277.	0.2	0
70	Analytical expression of the concentration of species and effectiveness factors in porous catalysts using the Adomian decomposition method. <i>Kinetics and Catalysis</i> , 2013, 54, 95-105.	0.3	9
71	Mathematical Modeling of a Carrier-Mediated Transport Process in a Liquid Membrane. <i>Journal of Membrane Biology</i> , 2013, 246, 435-442.	1.0	10
72	Analytical Expressions for the Steady-State Concentrations of Glucose, Oxygen and Gluconic Acid in a Composite Membrane for Closed-Loop Insulin Delivery. <i>Journal of Membrane Biology</i> , 2013, 246, 121-129.	1.0	9

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73	Theoretical Analysis of the Chemical Absorption of Carbon Dioxide using an Aqueous Elastic Xanthan-Gum Solution Containing NaOH. <i>Energy Technology</i> , 2013, 1, 405-411.	1.8	0
74	Analytical expressions for the concentrations of substrate, oxygen and mediator in an amperometric enzyme electrode. <i>Applied Mathematical Modelling</i> , 2013, 37, 5343-5358.	2.2	4
75	Approximate Analytical Expressions for the Steady-State Concentration of Substrate and Cosubstrate over Amperometric Biosensors for Different Enzyme Kinetics. <i>International Journal of Chemical Kinetics</i> , 2013, 45, 322-336.	1.0	6
76	Reply to "Comments on analytical solution of amperometric enzymatic reactions based on Homotopy perturbation method," by Ji-Huan He, Lu-Feng Mo [<i>Electrochim. Acta</i> (2013)]. <i>Electrochimica Acta</i> , 2013, 102, 474-476.	2.6	33
77	Analytical expression of concentrations of adsorbed CO molecules, O atoms and oxide oxygen. <i>Natural Science</i> , 2013, 05, 326-332.	0.2	0
78	Analytical Expressions for Steady-State Concentrations of Substrate and Oxidized and Reduced Mediator in an Amperometric Biosensor. <i>International Journal of Electrochemistry</i> , 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. <i>Journal of Theoretical Chemistry</i> , 2013, 2013, 1-7.	1.5	5
82	Analytical expressions of the concentrations of substrate and product in enzyme inhibition process. <i>Natural Science</i> , 2013, 05, 1047-1055.	0.2	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. <i>Advances in Physical Chemistry</i> , 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. <i>Biochemical Engineering Journal</i> , 2012, 68, 42-53.	1.8	2
85	Analytical expression of non steady-state concentration for the CE mechanism at a planar electrode. <i>Journal of Mathematical Chemistry</i> , 2012, 50, 1277-1288.	0.7	4
86	Mathematical modelling of steady-state concentration in immobilized glucose isomerase of packed-bed reactors. <i>Journal of Mathematical Chemistry</i> , 2012, 50, 1333-1346.	0.7	8
87	Theoretical Analysis of Mass Transfer with Chemical Reaction Using Absorption of Carbon Dioxide into Phenyl Glycidyl Ether Solution. <i>Applied Mathematics</i> , 2012, 03, 1179-1186.	0.1	9
88	Approximate Analytical Solution of Nonlinear Reaction'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. <i>Journal of Physical Chemistry A</i> , 2011, 115, 10950-10961.	1.1	5
90	Analytical Expression of Non-Steady-State Concentrations and Current Pertaining to Compounds Present in the Enzyme Membrane of Biosensor. <i>Journal of Physical Chemistry A</i> , 2011, 115, 4299-4306.	1.1	4

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91	Analytical expressions of concentration of nitrate pertaining to the electrocatalytic reduction of nitrate ion. <i>Journal of Electroanalytical Chemistry</i> , 2011, 661, 137-143.	1.9	7
92	Mathematical modeling of cyclic voltammetry for EC reaction. <i>Russian Journal of Electrochemistry</i> , 2011, 47, 181-190.	0.3	9
93	Mathematical modeling of cyclic voltammetry for EC ₂ reaction. <i>Russian Journal of Electrochemistry</i> , 2011, 47, 191-199.	0.3	6
94	Analytical solution of nonlinear diffusion processes in modified electrode. <i>Russian Journal of Electrochemistry</i> , 2011, 47, 147-155.	0.3	3
95	Mathematical modeling of a tubular spectrochemical cell using the finite Hankel transformation. <i>Russian Journal of Electrochemistry</i> , 2011, 47, 883-889.	0.3	1
96	Modeling of nonlinear boundary value problems in enzyme-catalyzed reaction diffusion processes. <i>Journal of Mathematical Chemistry</i> , 2011, 49, 457-474.	0.7	6
97	Analytical solution of non-linear enzyme reaction equations arising in mathematical chemistry. <i>Journal of Mathematical Chemistry</i> , 2011, 49, 1713-1726.	0.7	13
98	Analytical expression of the steady-state catalytic current of mediated bioelectrocatalysis and the application of Heun's Homotopy perturbation method. <i>Journal of Mathematical Chemistry</i> , 2011, 49, 1727-1740.	0.7	9
99	Analytical expressions of concentration and current in homogeneous catalytic reactions at spherical microelectrodes: Homotopy perturbation approach. <i>Journal of Electroanalytical Chemistry</i> , 2011, 651, 173-184.	1.9	8
100	Analytical expression of the concentration of substrates and product in phenol-polyphenol oxidase system immobilized in laponite® hydrogels. Michaelis-Menten formalism in homogeneous medium. <i>Electrochimica Acta</i> , 2011, 56, 6411-6419.	2.6	11
101	Analytical solution of amperometric enzymatic reactions based on Homotopy perturbation method. <i>Electrochimica Acta</i> , 2011, 56, 3345-3352.	2.6	25
102	Mathematical modeling in amperometric oxidase enzyme-membrane electrodes. <i>Journal of Membrane Science</i> , 2011, 373, 20-28.	4.1	32
103	Analytical expressions pertaining to the concentration of catechol, o-quinone and current at PPO-modified microcylinder biosensor for diffusion-kinetic model. <i>Journal of Electroanalytical Chemistry</i> , 2011, 660, 200-208.	1.9	9
104	Mathematical model for steady state current at ppo-modified micro-cylinder biosensors. <i>Journal of Biomedical Science and Engineering</i> , 2011, 04, 631-641.	0.2	6
105	Analytical solution of steady state current at a microdisk biosensor. <i>Journal of Electroanalytical Chemistry</i> , 2010, 641, 35-44.	1.9	26
106	Analytical solution of steady-state current an enzyme-modified microcylinder electrodes. <i>Journal of Electroanalytical Chemistry</i> , 2010, 648, 36-46.	1.9	19
107	Mathematical modelling of enzyme kinetics reaction mechanisms and analytical solutions of non-linear reaction equations. <i>Journal of Mathematical Chemistry</i> , 2010, 48, 179-186.	0.7	22
108	Analysis of a pH-Based Potentiometric Biosensor Using the Homotopy Perturbation Method. <i>Chemical Engineering and Technology</i> , 2010, 33, 1999-2007.	0.9	7

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109	Mathematical modeling of amperometric and potentiometric biosensors and system of non-linear equations – Homotopy perturbation approach. <i>Journal of Electroanalytical Chemistry</i> , 2010, 644, 50-59.	1.9	64
110	Derivation of nonsteady-state analytical solution for surface enzyme kinetics. <i>Journal of Electroanalytical Chemistry</i> , 2010, 647, 87-92.	1.9	7
111	Analytical solution of system of coupled non-linear reaction diffusion equations. Part I: Mediated electron transfer at conducting polymer ultramicroelectrodes. <i>Journal of Electroanalytical Chemistry</i> , 2010, 647, 103-116.	1.9	8
112	Analytical solution of system of coupled non-linear reaction diffusion equations. Part II: Direct reaction of substrate at underlying microdisc surface. <i>Journal of Electroanalytical Chemistry</i> , 2010, 650, 143-151.	1.9	7
113	System of coupled non-linear reaction diffusion processes at conducting polymer-modified ultramicroelectrodes. <i>Electrochimica Acta</i> , 2010, 55, 3223-3235.	2.6	17
114	Solution of steady-state substrate concentration in the action of biosensor response at mixed enzyme kinetics. <i>Sensors and Actuators B: Chemical</i> , 2010, 147, 290-297.	4.0	33
115	Mathematical modeling of diffusion and kinetics in amperometric immobilized enzyme electrodes. <i>Electrochimica Acta</i> , 2010, 55, 5230-5238.	2.6	31
116	Solutions of the Coupled Reaction and Diffusion Equations within Polymer-Modified Ultramicroelectrodes. <i>Journal of Physical Chemistry A</i> , 2010, 114, 7030-7037.	1.1	4
117	Traveling-wave solution of non-linear coupled reaction diffusion equation arising in mathematical chemistry. <i>Journal of Mathematical Chemistry</i> , 2009, 46, 550-561.	0.7	10
118	A comparison of diffusion-limited currents at microelectrodes of various geometries for EC ² reactions. <i>Electrochimica Acta</i> , 2008, 53, 3566-3578.	2.6	18
119	Application of Heun's variational iteration method in nonlinear boundary value problems in enzyme substrate reaction diffusion processes: part 1. The steady-state amperometric response. <i>Journal of Mathematical Chemistry</i> , 2008, 44, 849-861.	0.7	34
120	Analytical expression for transient chronoamperometric current at ultramicroband electrode. <i>Russian Journal of Electrochemistry</i> , 2008, 44, 1156-1161.	0.3	5
121	MODELING OF NONLINEAR REACTION-DIFFUSION PROCESSES OF AMPEROMETRIC POLYMER-MODIFIED ELECTRODES. <i>Journal of Theoretical and Computational Chemistry</i> , 2008, 07, 113-138.	1.8	10
122	A COMPARISON OF DIFFUSION-LIMITED CURRENT AT MICROELECTRODES OF VARIOUS GEOMETRIES. <i>Journal of Theoretical and Computational Chemistry</i> , 2008, 07, 205-219.	1.8	3
123	THEORIES OF DIFFUSION AT A MICRORING ELECTRODES: A REVIEW. <i>Journal of Theoretical and Computational Chemistry</i> , 2007, 06, 699-713.	1.8	0
124	THE THEORY OF REACTION-DIFFUSION PROCESSES AT CYLINDRICAL ULTRAMICROELECTRODES. <i>Journal of Theoretical and Computational Chemistry</i> , 2007, 06, 301-307.	1.8	4
125	Two-point Padé approximation of mass transfer rate at microdisc electrodes in a channel flow for all Péclet numbers. <i>Electrochimica Acta</i> , 2006, 51, 5407-5411.	2.6	12
126	Microring electrode: Transient and steady-state chronoamperometric current for first-order EC reactions. <i>Electrochimica Acta</i> , 2006, 51, 4439-4446.	2.6	6

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127	ANALYTICAL SOLUTION FOR THE STEADY-STATE CHRONOAMPEROMETRIC CURRENT FOR AN EC 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.	1.9	18
129	EChem++ – 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.	1.9	17
130	A two-point Pad ² approximation for the mass-transfer rate at rotating disc electrodes. Journal of Electroanalytical Chemistry, 2003, 547, 173-177.	1.9	5
131	Modeling of reaction-diffusion processes: part (ii) the theory of catalytic electrode processes at hemi-oblate and prolate ultramicroelectrodes. Electrochemistry Communications, 2002, 4, 72-75.	2.3	2
132	Transient chronoamperometric current response at hemispheroidal ultramicroelectrodes. Journal of Electroanalytical Chemistry, 2001, 501, 210-214.	1.9	6
133	Pad ² approximation of EC ² processes at channel electrodes. Journal of Electroanalytical Chemistry, 2000, 487, 72-74.	1.9	4
134	Analysis of non-steady-state current at hemispheroidal ultramicroelectrodes. Electrochemistry Communications, 2000, 2, 531-534.	2.3	8
135	Modelling of reaction-diffusion processes: the theory of catalytic electrode processes at hemispheroidal ultramicroelectrodes. Electrochemistry Communications, 2000, 2, 679-684.	2.3	16
136	Pad ² approximation of ECE and DISP processes at channel electrodes. Electrochemistry Communications, 2000, 2, 186-189.	2.3	14
137	Diffusion at Ultramicro Disk Electrodes: Chronoamperometric Current for Steady-State EC ² Reaction Using Scattering Analogue Techniques. Journal of Physical Chemistry B, 1999, 103, 1518-1524.	1.2	54
138	Chronoamperometric Current at Ultramicroelectrodes: Pad ² Approximation for a Reversible Electron Transfer Scheme. Electroanalysis, 1998, 10, 506-511.	1.5	10
139	Diffusion at Ultramicroelectrodes: Chronoamperometric Current Response Using Pad ² Approximation. Journal of Physical Chemistry B, 1997, 101, 4583-4587.	1.2	21
140	A two-point Pad ² approximation for the non-steady-state chronoamperometric current at ultramicrodisc electrodes. Journal of Electroanalytical Chemistry, 1995, 392, 75-78.	1.9	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, , .	1.2	1