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	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
2	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
3	Application of modified wavelet and homotopy perturbation methods to nonlinear oscillation problems. Applied Mathematics and Nonlinear Sciences, 2019, 4, 351-364.	1.6	53
4	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
5	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
6	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
7	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
8	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
9	Mathematical modeling in amperometric oxidase enzymeâ€“membrane electrodes. Journal of Membrane Science, 2011, 373, 20-28.	8.2	32
10	Mathematical modeling of diffusion and kinetics in amperometric immobilized enzyme electrodes. Electrochimica Acta, 2010, 55, 5230-5238.	5.2	31
11	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
12	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
13	Analytical solution of steady state current at a microdisk biosensor. Journal of Electroanalytical Chemistry, 2010, 641, 35-44.	3.8	26
14	Analytical solution of amperometric enzymatic reactions based on Homotopy perturbation method. Electrochimica Acta, 2011, 56, 3345-3352.	5.2	25
15	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
16	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
17	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
18	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

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19	Mathematical modeling of nonlinear reactionâ€“diffusion processes in enzymatic biofuel cells. Current Opinion in Electrochemistry, 2017, 1, 121-132.	4.8	22
20	Diffusion at Ultramicroelectrodes:Â Chronoamperometric Current Response Using PadÃ© Approximation. Journal of Physical Chemistry B, 1997, 101, 4583-4587.	2.6	21
21	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
22	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
23	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
24	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
25	Analytical solution of steady-state current an enzyme-modified microcylinder electrodes. Journal of Electroanalytical Chemistry, 2010, 648, 36-46.	3.8	19
26	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
27	Analytical expression of transient current-potential for redox enzymatic homogenous system. Sensors and Actuators B: Chemical, 2015, 208, 128-136.	7.8	19
28	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
29	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
30	Analysis of positive feedback currents at the scanning electrochemical microscope. Journal of Electroanalytical Chemistry, 2004, 561, 113-118.	3.8	18
31	A comparison of diffusion-limited currents at microelectrodes of various geometries for ECâ€² reactions. Electrochimica Acta, 2008, 53, 3566-3578.	5.2	18
32	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
33	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
34	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
35	System of coupled non-linear reaction diffusion processes at conducting polymer-modified ultramicroelectrodes. Electrochimica Acta, 2010, 55, 3223-3235.	5.2	17
36	Analytical expression for concentration and sensitivity of a thin film semiconductor gas sensor. Ain Shams Engineering Journal, 2014, 5, 885-893.	6.1	17

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37	Modelling of reactionâ€“diffusion processes: the theory of catalytic electrode processes at hemispheroidal ultramicroelectrodes. Electrochemistry Communications, 2000, 2, 679-684.	4.7	16
38	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
39	PadÃ© approximation of ECE and DISP processes at channel electrodes. Electrochemistry Communications, 2000, 2, 186-189.	4.7	14
40	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
41	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
42	Non-linear Differential Equations and Rotating Disc Electrodes: PadÃ© approximationTechnique. Electrochimica Acta, 2017, 243, 1-6.	5.2	14
43	Sensitivity and resistance of amperometric biosensors in substrate inhibition processes. Journal of Electroanalytical Chemistry, 2021, 895, 115527.	3.8	14
44	Transient chronoamperometric current at rotating disc electrode for second-order ECE reactions. Journal of Electroanalytical Chemistry, 2021, 902, 115775.	3.8	14
45	Analytical solution of non-linear enzyme reaction equations arising in mathematical chemistry. Journal of Mathematical Chemistry, 2011, 49, 1713-1726.	1.5	13
46	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
47	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
48	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
49	Chronoamperometric Current at Ultramicroelectrodes: PadÃ© Approximation for a Reversible Electron Transfer Scheme. Electroanalysis, 1998, 10, 506-511.	2.9	10
50	MODELING OF NONLINEAR REACTIONâ€“DIFFUSION PROCESSES OF AMPEROMETRIC POLYMER-MODIFIED ELECTRODES. Journal of Theoretical and Computational Chemistry, 2008, 07, 113-138.	1.8	10
51	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
52	Mathematical Modeling of a Carrier-Mediated Transport Process in a Liquid Membrane. Journal of Membrane Biology, 2013, 246, 435-442.	2.1	10
53	Mathematical modeling of gas phase and biofilm phase biofilter performance. Egyptian Journal of Basic and Applied Sciences, 2016, 3, 94-105.	0.6	10
54	Transient current, sensitivity and resistance of biosensors acting in a trigger mode: Theoretical study. Journal of Electroanalytical Chemistry, 2021, 895, 115421.	3.8	10

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55	Mathematical modeling of cyclic voltammetry for EC reaction. Russian Journal of Electrochemistry, 2011, 47, 181-190.	0.9	9
56	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
57	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
58	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
59	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
60	Mathematical analysis of an enzyme-entrapped conducting polymer modified electrode. Applied Mathematical Modelling, 2015, 39, 7351-7363.	4.2	9
61	Theoretical Analysis of Reaction and Diffusion Processes in a Biofuel Cell Electrode. Fuel Cells, 2015, 15, 523-536.	2.4	9
62	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
63	Reaction-diffusion in a packed-bed reactors: Enzymatic isomerization with Michaelis-Menten Kinetics. Journal of Electroanalytical Chemistry, 2022, 910, 116184.	3.8	9
64	Amperometric biosensors and coupled enzyme nonlinear reactions processes: A complete theoretical and numerical approach. Electrochimica Acta, 2022, 415, 140236.	5.2	9
65	Analysis of non-steady-state current at hemispheroidal ultramicroelectrodes. Electrochemistry Communications, 2000, 2, 531-534.	4.7	8
66	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
67	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
68	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
69	Analytical expression of transient and steady-state catalytic current of mediated bioelectrocatalysis. Electrochimica Acta, 2014, 147, 678-687.	5.2	8
70	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
71	Transient Current for a Rotating Disk Electrodes Produced by a Potential Step. Russian Journal of Electrochemistry, 2018, 54, 1067-1072.	0.9	8
72	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

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73	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
74	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
75	Analysis of a pHâ€Based Potentiometric Biosensor Using the Homotopy Perturbation Method. Chemical Engineering and Technology, 2010, 33, 1999-2007.	1.5	7
76	Derivation of nonsteady-state analytical solution for surface enzyme kinetics. Journal of Electroanalytical Chemistry, 2010, 647, 87-92.	3.8	7
77	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
78	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
79	Approximate Analytical Solutions of Biofilm Reactor Problem in Applied Biotechnology. Theoretical Foundations of Chemical Engineering, 2021, 55, 851-861.	0.7	7
80	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
81	Transient chronoamperometric current response at hemispheroidal ultramicroelectrodes. Journal of Electroanalytical Chemistry, 2001, 501, 210-214.	3.8	6
82	Microring electrode: Transient and steady-state chronoamperometric current for first-order EC reactions. Electrochimica Acta, 2006, 51, 4439-4446.	5.2	6
83	Mathematical modeling of cyclic voltammetry for EC2 reaction. Russian Journal of Electrochemistry, 2011, 47, 191-199.	0.9	6
84	Modeling of nonlinear boundary value problems in enzyme-catalyzed reaction diffusion processes. Journal of Mathematical Chemistry, 2011, 49, 457-474.	1.5	6
85	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
86	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
87	A new mathematical model for effectiveness factors in biofilm under toxic conditions. AEJ - Alexandria Engineering Journal, 2014, 53, 917-928.	6.4	6
88	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
89	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
90	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

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91	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
92	Analytical expression for transient chronoamperometric current at ultramicroband electrode. Russian Journal of Electrochemistry, 2008, 44, 1156-1161.	0.9	5
93	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
94	Non-linear analysis of Haldane kinetic model in phenol degradation in batch operations. Kinetics and Catalysis, 2015, 56, 141-146.	1.0	5
95	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
96	Analytical Solution of Non-Isothermal Diffusion-Reaction Processes and Effectiveness Factors. , 2013, 2013, 1-14.		5
97	Mathematical Modeling and Analysis of Nonlinear Enzyme Catalyzed Reaction Processes. Journal of Theoretical Chemistry, 2013, 2013, 1-7.	1.5	5
98	Mathematical Modeling of Multienzyme Biosensor System. International Journal of Computational Mathematics, 2014, 2014, 1-15.	0.8	5
99	PadÃ© approximation of ECâ€² processes at channel electrodes. Journal of Electroanalytical Chemistry, 2000, 487, 72-74.	3.8	4
100	THE THEORY OF REACTION-DIFFUSION PROCESSES AT CYLINDRICAL ULTRAMICROELECTRODES. Journal of Theoretical and Computational Chemistry, 2007, 06, 301-307.	1.8	4
101	Solutions of the Coupled Reaction and Diffusion Equations within Polymer-Modified Ultramicroelectrodes. Journal of Physical Chemistry A, 2010, 114, 7030-7037.	2.5	4
102	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
103	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
104	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
105	Analysis of Mathematical Modelling on Potentiometric Biosensors. , 2014, 2014, 1-11.		4
106	Hydrogen Production by a Photosynthetic Bacterium: Some Analytical Solutions. Chemical Engineering and Technology, 2015, 38, 1235-1242.	1.5	4
107	Analytical study and parameter-sensitivity analysis of catalytic current at a rotating disk electrode. Journal of Physics Communications, 2020, 4, 105017.	1.2	4
108	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

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109	A COMPARISON OF DIFFUSION-LIMITED CURRENT AT MICROELECTRODES OF VARIOUS GEOMETRIES. Journal of Theoretical and Computational Chemistry, 2008, 07, 205-219.	1.8	3
110	Analytical solution of nonlinear diffusion processes in modified electrode. Russian Journal of Electrochemistry, 2011, 47, 147-155.	0.9	3
111	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
112	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
113	Mathematical Modeling and Simulation of Nonlinear Process in Enzyme Kinetics. , 0, , .		3
114	Approximate Analytical Solution of Nonlinear Reactionâ€™s Diffusion Equation at Conducting Polymer Ultramicroelectrodes. , 2012, 2012, 1-12.		3
115	Theoretical and Numerical Analysis of Nonlinear Processes in Amperometric Enzyme Electrodes with Cyclic Substrate Conversion. Electrochem, 2022, 3, 70-88.	3.3	3
116	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
117	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
118	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
119	Theoretical analysis of the enzyme reaction processes within the multiscale porous biocatalytic electrodes. Russian Journal of Electrochemistry, 2016, 52, 143-153.	0.9	2
120	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
121	Approximate analytical solution of nonlinear equations in cubic auto-catalytic reaction-diffusion process. AIP Conference Proceedings, 2020, , .	0.4	2
122	Mathematical modeling of hydrogen evolution at a rotating disk electrode. AIP Conference Proceedings, 2020, , .	0.4	2
123	Mathematical modeling of a tubular spectrochemical cell using the finite Hankel transformation. Russian Journal of Electrochemistry, 2011, 47, 883-889.	0.9	1
124	An Approximate Analytical Method for the Evaluation of the Concentrations and Current for Hybrid Enzyme Biosensor. , 2013, 2013, 1-12.		1
125	Theoretical Analysis of an Amperometric Biosensor Based on Parallel Substrates Conversion. ISRN Electrochemistry, 2014, 2014, 1-12.	0.9	1
126	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

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127	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
128	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
129	Analytical expressions of the concentrations of substrate and product in enzyme inhibition process. Natural Science, 2013, 05, 1047-1055.	0.4	1
130	Transport and kinetics in an electroenzymatic process incurred in PPO-based rotating disk bioelectrodes. Journal of Electroanalytical Chemistry, 2022, , 116293.	3.8	1
131	Transport and Reaction Kinetics in Enzymatic Reaction Process in Multiscale Porous Biocatalytic Electrodes. Chemistry Africa, 0, , .	2.4	1
132	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
133	THEORIES OF DIFFUSION AT A MICRORING ELECTRODES: A REVIEW. Journal of Theoretical and Computational Chemistry, 2007, 06, 699-713.	1.8	0
134	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
135	Analytical expression of concentrations of adsorbed CO molecules, O atoms and oxide oxygen. Natural Science, 2013, 05, 326-332.	0.4	0
136	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
137	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
138	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
139	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
140	Mathematical models for ECE reactions at rotating disk electrodes using homotopy analysis method. AIP Conference Proceedings, 2020, , .	0.4	0
141	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
142	Mathematical Model of Cell Growth for Biofuel Production under Synthetic Feedback. Natural Science, 2014, 06, 262-277.	0.4	0
143	Analytical Solution of Cubic Autocatalytic Reaction-Diffusion Equations. , 0, , 199-218.		0