GÃ¡bor Lente

List of Publications by Year
in descending order

98 papers	2,428 citations	172457 29 h-index	233421 45 g-index
101 all docs	101 docs citations	101 times ranked	2184 citing authors

#	Article	IF	Citations
1	The Second International Conference on Reaction Kinetics, Mechanisms and Catalysis. Reaction Kinetics, Mechanisms and Catalysis, 2022, 135, 1.	1.7	0
2	ErnÅ‘ Keszei: Reaction kinetics. An introduction. Reaction Kinetics, Mechanisms and Catalysis, 2022, 135, 571.	1.7	0
3	Use of the Taylor theorem to predict kinetic curves in an arbitrary mechanism. Chemical Engineering Journal, 2022, 445, 136676.	12.7	1
4	Deterministic approximation for the nucleation-growth type model of nanoparticle formation: A validation against stochastic simulations. Chemical Engineering Journal, 2022, 446, 137377.	12.7	3
5	A Comparison of the Stochastic and Deterministic Approaches in a Nucleationâ€“Growth Type Model of Nanoparticle Formation. Chemistry of Materials, 2021, 33, 5430-5436.	6.7	3
6	General nucleation-growth type kinetic models of nanoparticle formation: possibilities of finding analytical solutions. Journal of Mathematical Chemistry, 2021, 59, 1808-1821.	1.5	2
7	Fundamental concepts in chemical kinetics. ChemTexts, 2020, 6, 1.	1.9	14
8	Policy changes in Reaction Kinetics, Mechanisms and Catalysis. Reaction Kinetics, Mechanisms and Catalysis, 2020, 131, 1-3.	1.7	2
9	Editorial Book Review: JÃ¡nos TÃ³th, Attila LÃ¡szlÃ³ Nagy, DÃ¡vid Papp: Reaction kinetics: exercises, programs and theorems. Mathematica for deterministic and stochastic kinetics. Reaction Kinetics, Mechanisms and Catalysis, 2020, 130, 1-3.	1.7	3
10	Kinetic detection of osmium(VI) ester intermediates during the OsO 4 â€mediated aqueous dihydroxylation of chloroethylenes. Journal of Physical Organic Chemistry, 2020, 33, e4045.	1.9	3
11	Book review. PÃ©ter Ã‰rdi: Rankingâ€”the unwritten rules of the social game we all play. Reaction Kinetics, Mechanisms and Catalysis, 2020, 129, 3-5.	1.7	0
12	Barometric formulas: various derivations and comparisons to environmentally relevant observations. ChemTexts, 2020, 6, 1.	1.9	15
13	The First International Conference on Reaction Kinetics, Mechanisms and Catalysis. Reaction Kinetics, Mechanisms and Catalysis, 2019, 126, 575-576.	1.7	2
14	Where Mendeleev was wrong: predicted elements that have never been found. ChemTexts, 2019, 5, 1.	1.9	4
15	Welcome to the year of the periodic table. Reaction Kinetics, Mechanisms and Catalysis, 2019, 126, 1-2.	1.7	2
16	The Boreskov Institute of Catalysis and the 14th International Conference on Fundamental and Applied Aspects of Physical Chemistry. Reaction Kinetics, Mechanisms and Catalysis, 2019, 127, 1-2.	1.7	1
17	Full analytical solution of a nucleation-growth type kinetic model of nanoparticle formation. Journal of Mathematical Chemistry, 2019, 57, 616-631.	1.5	11
18	A novel method to compute the time dependence of state distributions in the stochastic kinetic description of an autocatalytic system. Computers and Chemical Engineering, 2019, 125, 587-593.	3.8	5

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19	Facts and alternative facts in chemical kinetics: remarks about the kinetic use of activities, termolecular processes, and linearization techniques. Current Opinion in Chemical Engineering, 2018, 21, 76-83.	7.8	132
20	Mathematics in (bio)chemical kinetics 2017. Reaction Kinetics, Mechanisms and Catalysis, 2018, 123, 287-288.	1.7	2
21	Equilibria and kinetics of chromium(VI) speciation in aqueous solution â€“ A comprehensive study from pH 2 to 11. Inorganica Chimica Acta, 2018, 472, 295-301.	2.4	55
22	Kinetic Model for Hydrolytic Nucleation and Growth of TiO₂ Nanoparticles. Journal of Physical Chemistry C, 2018, 122, 19161-19170.	3.1	19
23	Minimal Reactionâ€“Diffusion Model of Micromixing during Stopped-Flow Experiments. Journal of Physical Chemistry A, 2018, 122, 5503-5509.	2.5	1
24	Analytical solutions for the rate equations of irreversible two-step consecutive processes with mixed second order later steps. Journal of Mathematical Chemistry, 2017, 55, 832-848.	1.5	4
25	Modeling Studies of Inhomogeneity Effects during Laser Flash Photolysis Experiments: A Reactionâ€“Diffusion Approach. Journal of Physical Chemistry A, 2017, 121, 2740-2747.	2.5	7
26	Advanced data analysis and modelling in chemical engineering. Reaction Kinetics, Mechanisms and Catalysis, 2017, 120, 417-420.	1.7	6
27	Kinetics and Mechanism of the Autocatalytic Oxidation of Bis(terpyridine)iron(II) by Peroxomonosulfate Ion (Oxone) in Acidic Medium. Inorganic Chemistry, 2017, 56, 8270-8277.	4.0	12
28	Inactivation of urease by catechol: Kinetics and structure. Journal of Inorganic Biochemistry, 2017, 166, 182-189.	3.5	57
29	Farewell to MihÃ¡ly Beck. Reaction Kinetics, Mechanisms and Catalysis, 2017, 122, 1-2.	1.7	4
30	Formation of 1,10-Phenanthroline-N,Nâ€²-dioxide under Mild Conditions: The Kinetics and Mechanism of the Oxidation of 1,10-Phenanthroline by Peroxomonosulfate Ion (Oxone). Journal of Organic Chemistry, 2016, 81, 5345-5353.	3.2	14
31	A detailed kinetic study of the direct photooxidation of 2,4,6-trichlorophenol. Journal of Photochemistry and Photobiology A: Chemistry, 2016, 330, 71-78.	3.9	9
32	Kinetics and mechanism of the adsorption of methylene blue from aqueous solution on the surface of a quartz cuvette by on-line UVâ€“Vis spectrophotometry. Dyes and Pigments, 2016, 127, 170-178.	3.7	28
33	Construction of a multipurpose photochemical reactor with on-line spectrophotometric detection. Photochemical and Photobiological Sciences, 2016, 15, 589-594.	2.9	14
34	Reaction Schemes That Are Easily Confused with a Reversible First-Order Reaction. International Journal of Chemical Kinetics, 2015, 47, 773-782.	1.6	12
35	Analytical solutions for the rate equations of irreversible two-step consecutive processes with second order later steps. Journal of Mathematical Chemistry, 2015, 53, 1759-1771.	1.5	9
36	The pore network and the adsorption characteristics of mesoporous silica aerogel: adsorption kinetics on a timescale of seconds. RSC Advances, 2015, 5, 107237-107246.	3.6	24

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37	Kinetics of the oxidation of isoniazid with the hypochlorite ion. RSC Advances, 2015, 5, 67500-67508.	3.6	5
38	Kinetics of irreversible consecutive processes with first order second steps: analytical solutions. Journal of Mathematical Chemistry, 2015, 53, 1172-1183.	1.5	17
39	Deterministic Kinetics in Chemistry and Systems Biology. Springer Briefs in Molecular Science, 2015, , .	0.1	158
40	Temperature- and pressure-dependent kinetico-mechanistic studies on the formation of mixed-valence {(tetraamine)Co^{III}NCFe^{II}(CN)₅}^{â^'} units. Journal of Coordination Chemistry, 2015, 68, 3058-3068.	2.2	5
41	Solving Rate Equations. Springer Briefs in Molecular Science, 2015, , 21-59.	0.1	9
42	Hydrogen Isotope Exchange of Chlorinated Ethylenes in Aqueous Solution: Possibly a Termolecular Liquid Phase Reaction. Journal of Physical Chemistry A, 2015, 119, 12627-12634.	2.5	8
43	Aqueous photochemical reactions of chloride, bromide, and iodide ions in a diode-array spectrophotometer. Autoinhibition in the photolysis of iodide ions. Dalton Transactions, 2014, 43, 4862.	3.3	14
44	Kinetics of the autoxidation of sulfur(iv) co-catalyzed by peroxodisulfate and silver(i) ions. Dalton Transactions, 2014, 43, 9596.	3.3	7
45	Comment on â€œâ€˜Turning Overâ€™ Definitions in Catalytic Cyclesâ€. ACS Catalysis, 2013, 3, 381-382.	11.2	53
46	A binomial stochastic kinetic approach to the Michaelisâ€“Menten mechanism. Chemical Physics Letters, 2013, 568-569, 167-169.	2.6	6
47	Detailed Kinetics and Mechanism of the Oxidation of Thiocyanate Ion (SCN^{â€“}) by Peroxomonosulfate Ion (HSO₅^{â€“}). Formation and Subsequent Oxidation of Hypothiocyanite Ion (OSCN^{â€“}). Inorganic Chemistry, 2013, 52, 2150-2156.	4.0	14
48	Stochastic mapping of first order reaction networks: A systematic comparison of the stochastic and deterministic kinetic approaches. Journal of Chemical Physics, 2012, 137, 164101.	3.0	14
49	Stochastic mapping of the Michaelis-Menten mechanism. Journal of Chemical Physics, 2012, 136, 054111.	3.0	15
50	Detailed mechanism of the autoxidation of N-hydroxyurea catalyzed by a superoxide dismutase mimic Mn(iii) porphyrin: formation of the nitrosylated Mn(ii) porphyrin as an intermediate. Dalton Transactions, 2012, 41, 11875.	3.3	9
51	Structureâ€“reactivity relationships and substituent effect additivity in the aqueous oxidation of chlorophenols by cerium(<scp>iv</scp>). New Journal of Chemistry, 2011, 35, 235-241.	2.8	24
52	Mechanism-Based Chemical Understanding of Chiral Symmetry Breaking in the Soai Reaction. A Combined Probabilistic and Deterministic Description of Chemical Reactions. Journal of the American Chemical Society, 2011, 133, 17878-17881.	13.7	53
53	Stochastic interpretation of the asymmetry of enantiomeric distribution observed in the absolute asymmetric Soai reaction. Tetrahedron: Asymmetry, 2011, 22, 1595-1599.	1.8	9
54	Base hydrolysis of mer-trispicolinatoruthenium(III): kinetics and mechanism. Transition Metal Chemistry, 2011, 36, 761-766.	1.4	10

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55	The connection between the second law of thermodynamics and the principle of microscopic reversibility. Journal of Mathematical Chemistry, 2010, 47, 1106-1111.	1.5	10
56	Open system approaches in deterministic models of the emergence of homochirality. Chirality, 2010, 22, 907-913.	2.6	9
57	The Role of Stochastic Models in Interpreting the Origins of Biological Chirality. Symmetry, 2010, 2, 767-798.	2.2	54
58	Light-induced multistep redox reactions: The diode-array spectrophotometer as a photoreactor. Pure and Applied Chemistry, 2010, 82, 1957-1973.	1.9	37
59	Thermodynamic, Electrochemical, High-Pressure Kinetic, and Mechanistic Studies of the Formation of Oxo FeIVâˆ’TAML Species in Water. Inorganic Chemistry, 2010, 49, 11439-11448.	4.0	44
60	Central Role of Phenanthroline Mono-N-oxide in the Decomposition Reactions of Tris(1,10-phenanthroline)iron(II) and -iron(III) Complexes. Inorganic Chemistry, 2010, 49, 3968-3970.	4.0	22
61	Unexpected adduct formation in the reaction of peroxomonosulfate ion with the tris-(2,2â€²-bipyridine)iron(II) and tris-(1,10-phenanthroline)iron(II) complexes. Journal of Coordination Chemistry, 2010, 63, 2586-2597.	2.2	8
62	Stochastic Kinetic Analysis of the Frank Model. Stochastic Approach to Flow-Through Reactors. Journal of Physical Chemistry B, 2009, 113, 7237-7242.	2.6	13
63	One- Versus Two-Electron Oxidation with Peroxomonosulfate Ion: Reactions with Iron(II), Vanadium(IV), Halide Ions, and Photoreaction with Cerium(III). Inorganic Chemistry, 2009, 48, 1763-1773.	4.0	194
64	Thermodynamic unfeasibilty of recycling in chiral autocatalytic kinetic models. Reaction Kinetics and Catalysis Letters, 2008, 95, 13-19.	0.6	11
65	Attaining Control by Design over the Hydrolytic Stability of Fe-TAML Oxidation Catalysts. Journal of the American Chemical Society, 2008, 130, 4497-4506.	13.7	45
66	Kinetics and mechanism of the oxidation of water soluble porphyrin FeIIITPPS with hydrogen peroxide and the peroxomonosulfate ion. Dalton Transactions, 2007, , 4268.	3.3	35
67	Kinetics and Mechanism of the Photoinitiated Autoxidation of Sulfur(IV) in the Presence of Iodide Ion. Inorganic Chemistry, 2007, 46, 4230-4238.	4.0	15
68	Photochemically Induced Autocatalysis in the Chlorate Ionâˆ’Iodine System. Journal of the American Chemical Society, 2007, 129, 7738-7739.	13.7	30
69	The effect of parity violation on kinetic models of enantioselective autocatalysis. Physical Chemistry Chemical Physics, 2007, 9, 6134.	2.8	30
70	What is and what isnâ€™t a clock reaction?. New Journal of Chemistry, 2007, 31, 1707.	2.8	42
71	Kinetics of the light-driven aqueous autoxidation of sulfur(iv) in the absence and presence of iron(ii). Dalton Transactions, 2006, , 955-960.	3.3	16
72	Stochastic Analysis of the Parity-Violating Energy Differences between Enantiomers and Its Implications for the Origin of Biological Chirality. Journal of Physical Chemistry A, 2006, 110, 12711-12713.	2.5	30

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73	EURYI: present procedure risks conflicts of interest. Nature, 2005, 437, 192-192.	27.8	0
74	A common misconception about the Eyring equation. New Journal of Chemistry, 2005, 29, 759.	2.8	162
75	New Protonation Microequilibrium Treatment in the Case of Some Amino Acid and Peptide Derivatives Containing a Bis(imidazolyl)methyl Group. Journal of Physical Chemistry B, 2005, 109, 1039-1047.	2.6	16
76	Oxidation of 2,4,6-trichlorophenol by hydrogen peroxide. Comparison of different iron-based catalysts. Green Chemistry, 2005, 7, 28.	9.0	41
77	Stochastic Kinetic Models of Chiral Autocatalysis:Â A General Tool for the Quantitative Interpretation of Total Asymmetric Synthesis. Journal of Physical Chemistry A, 2005, 109, 11058-11063.	2.5	74
78	Highly Efficient Photoinitiation in the Cerium(III)-Catalyzed Aqueous Autoxidation of Sulfur(IV). An Example of Comprehensive Evaluation of Photoinduced Chain Reacions. Journal of the American Chemical Society, 2005, 127, 4785-4793.	13.7	28
79	Unusual kinetic role of a water-soluble iron(III) porphyrin catalyst in the oxidation of 2,4,6-trichlorophenol by hydrogen peroxide. International Journal of Chemical Kinetics, 2004, 36, 449-455.	1.6	20
80	Use of an electron equivalent relationship between bond length and bond order to study chemical bonding. Part II. A study of bond orders, bond lengths and aromaticity in polycyclic aromatic hydrocarbons. Computational and Theoretical Chemistry, 2004, 671, 211-219.	1.5	3
81	Photoreduction of 2,6-dichloroquinone in aqueous solution. Journal of Photochemistry and Photobiology A: Chemistry, 2004, 163, 249-258.	3.9	56
82	A kinetic study of the early steps in the oxidation of chlorophenols by hydrogen peroxide catalyzed by a water-soluble iron(iii) porphyrinElectronic supplementary information (ESI) available: figures providing additional data on the catalytic oxidation of TCP, as well as the calibration curve for the chloride ion selective electrode. See http://www.rsc.org/suppdata/nj/b4/b400482e/. New Journal of Chemistry, 2004, 28, 847.	2.8	37
83	Homogeneous Chiral Autocatalysis:â€‰ A Simple, Purely Stochastic Kinetic Model. Journal of Physical Chemistry A, 2004, 108, 9475-9478.	2.5	55
84	Don't Be Tricked by Your Integrated Rate Plot: Pitfalls of Using Integrated Rate Plots. Journal of Chemical Education, 2004, 81, 32.	2.3	5
85	Effect of Dissolved Oxygen on the Oxidation of Dithionate Ion. Extremely Unusual Kinetic Traces. Inorganic Chemistry, 2004, 43, 4019-4025.	4.0	36
86	Photoaccelerated oxidation of chlorinated phenols. Chemical Communications, 2003, , 1162.	4.1	30
87	Oxorhenium(V) Dithiolates Catalyze the Oxidation bytert-Butyl Hydroperoxide of Sulfoxides and Sulfides, Including 4,6-Dimethyldibenzothiophene. Inorganic Chemistry, 2002, 41, 1272-1280.	4.0	41
88	Synthesis and Characterization of Dimetallic Oxorhenium(V) and Dioxorhenium(VII) Compounds, and a Study of Stoichiometric and Catalytic Reactions. Inorganic Chemistry, 2002, 41, 2583-2591.	4.0	34
89	Kinetics and mechanism of the oxidation of sulfur(iv) by iron(iii) at metal ion excess. Dalton Transactions RSC, 2002, , 778.	2.3	49
90	Ligand Substitution Kinetics of the Iron(III) Hydroxo Dimer with Simple Inorganic Ligands. Inorganic Chemistry, 2002, 41, 1306-1314.	4.0	32

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91	Kinetics and Mechanism of the Monomerization of a Re(V) Dithiolato Dimer with Monodentate Ligands. Electronic and Steric Effects. Inorganic Chemistry, 2000, 39, 1311-1319.	4.0	16
92	Kinetics and Mechanism of Oxygen Transfer to Methyloxo(dithiolato)rhenium(V) Complexes. Inorganic Chemistry, 2000, 39, 4809-4814.	4.0	15
93	Syntheses and Structures of Rhenium(IV) and Rhenium(V) Complexes with Ethanedithiolato Ligands. Inorganic Chemistry, 2000, 39, 3572-3576.	4.0	11
94	Kinetics and Mechanism of Complex Formation Reactions in the Iron(III)â^'Phosphate Ion System at Large Iron(III) Excess. Formation of a Tetranuclear Complex. Inorganic Chemistry, 2000, 39, 1950-1954.	4.0	28
95	Monomerization of a Rhenium(V) Dimer by Ligation. Inorganic Chemistry, 1999, 38, 3762-3763.	4.0	17
96	New Reaction Path in the Dissociation of the Fe2(Î¼-OH)2(H2O)84+ Complex. Inorganic Chemistry, 1999, 38, 603-605.	4.0	30
97	The Early Phase of the Iron(III)â^'Sulfite Ion Reaction. Formation of a Novel Iron(III)â^'Sulfito Complex. Inorganic Chemistry, 1998, 37, 4204-4209.	4.0	29
98	The centenary of the first scientific paper published on oscillatory reactions. Reaction Kinetics, Mechanisms and Catalysis, 0, , .	1.7	2