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	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
2	A common misconception about the Eyring equation. New Journal of Chemistry, 2005, 29, 759.	2.8	162
3	Deterministic Kinetics in Chemistry and Systems Biology. Springer Briefs in Molecular Science, 2015, , .	0.1	158
4	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
5	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
6	Inactivation of urease by catechol: Kinetics and structure. Journal of Inorganic Biochemistry, 2017, 166, 182-189.	3.5	57
7	Photoreduction of 2,6-dichloroquinone in aqueous solution. Journal of Photochemistry and Photobiology A: Chemistry, 2004, 163, 249-258.	3.9	56
8	Homogeneous Chiral Autocatalysis:â€‰ A Simple, Purely Stochastic Kinetic Model. Journal of Physical Chemistry A, 2004, 108, 9475-9478.	2.5	55
9	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
10	The Role of Stochastic Models in Interpreting the Origins of Biological Chirality. Symmetry, 2010, 2, 767-798.	2.2	54
11	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
12	Comment on â€œâ€˜Turning Overâ€™ Definitions in Catalytic Cyclesâ€• ACS Catalysis, 2013, 3, 381-382.	11.2	53
13	Kinetics and mechanism of the oxidation of sulfur(iv) by iron(iii) at metal ion excess. Dalton Transactions RSC, 2002, , 778.	2.3	49
14	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
15	Thermodynamic, Electrochemical, High-Pressure Kinetic, and Mechanistic Studies of the Formation of Oxo FeIVâ^'TAML Species in Water. Inorganic Chemistry, 2010, 49, 11439-11448.	4.0	44
16	What is and what isnâ€™t a clock reaction?. New Journal of Chemistry, 2007, 31, 1707.	2.8	42
17	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
18	Oxidation of 2,4,6-trichlorophenol by hydrogen peroxide. Comparison of different iron-based catalysts. Green Chemistry, 2005, 7, 28.	9.0	41

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19	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
20	Light-induced multistep redox reactions: The diode-array spectrophotometer as a photoreactor. Pure and Applied Chemistry, 2010, 82, 1957-1973.	1.9	37
21	Effect of Dissolved Oxygen on the Oxidation of Dithionate Ion. Extremely Unusual Kinetic Traces. Inorganic Chemistry, 2004, 43, 4019-4025.	4.0	36
22	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
23	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
24	Ligand Substitution Kinetics of the Iron(III) Hydroxo Dimer with Simple Inorganic Ligands. Inorganic Chemistry, 2002, 41, 1306-1314.	4.0	32
25	New Reaction Path in the Dissociation of the Fe2(Î¼-OH)2(H2O)84+ Complex. Inorganic Chemistry, 1999, 38, 603-605.	4.0	30
26	Photoaccelerated oxidation of chlorinated phenols. Chemical Communications, 2003, , 1162.	4.1	30
27	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
28	Photochemically Induced Autocatalysis in the Chlorate Ionâ^'Iodine System. Journal of the American Chemical Society, 2007, 129, 7738-7739.	13.7	30
29	The effect of parity violation on kinetic models of enantioselective autocatalysis. Physical Chemistry Chemical Physics, 2007, 9, 6134.	2.8	30
30	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
31	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
32	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
33	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
34	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
35	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
36	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

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37	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
38	Kinetic Model for Hydrolytic Nucleation and Growth of TiO₂ Nanoparticles. Journal of Physical Chemistry C, 2018, 122, 19161-19170.	3.1	19
39	Monomerization of a Rhenium(V) Dimer by Ligation. Inorganic Chemistry, 1999, 38, 3762-3763.	4.0	17
40	Kinetics of irreversible consecutive processes with first order second steps: analytical solutions. Journal of Mathematical Chemistry, 2015, 53, 1172-1183.	1.5	17
41	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
42	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
43	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
44	Kinetics and Mechanism of Oxygen Transfer to Methyloxo(dithiolato)rhenium(V) Complexes. Inorganic Chemistry, 2000, 39, 4809-4814.	4.0	15
45	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
46	Stochastic mapping of the Michaelis-Menten mechanism. Journal of Chemical Physics, 2012, 136, 054111.	3.0	15
47	Barometric formulas: various derivations and comparisons to environmentally relevant observations. ChemTexts, 2020, 6, 1.	1.9	15
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	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
50	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
51	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
52	Construction of a multipurpose photochemical reactor with on-line spectrophotometric detection. Photochemical and Photobiological Sciences, 2016, 15, 589-594.	2.9	14
53	Fundamental concepts in chemical kinetics. ChemTexts, 2020, 6, 1.	1.9	14
54	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

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55	Reaction Schemes That Are Easily Confused with a Reversible First-Order Reaction. International Journal of Chemical Kinetics, 2015, 47, 773-782.	1.6	12
56	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
57	Syntheses and Structures of Rhenium(IV) and Rhenium(V) Complexes with Ethanedithiolato Ligands. Inorganic Chemistry, 2000, 39, 3572-3576.	4.0	11
58	Thermodynamic unfeasibilty of recycling in chiral autocatalytic kinetic models. Reaction Kinetics and Catalysis Letters, 2008, 95, 13-19.	0.6	11
59	Full analytical solution of a nucleation-growth type kinetic model of nanoparticle formation. Journal of Mathematical Chemistry, 2019, 57, 616-631.	1.5	11
60	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
61	Base hydrolysis of mer-trispicolinatoruthenium(III): kinetics and mechanism. Transition Metal Chemistry, 2011, 36, 761-766.	1.4	10
62	Open system approaches in deterministic models of the emergence of homochirality. Chirality, 2010, 22, 907-913.	2.6	9
63	Stochastic interpretation of the asymmetry of enantiomeric distribution observed in the absolute asymmetric Soai reaction. Tetrahedron: Asymmetry, 2011, 22, 1595-1599.	1.8	9
64	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
65	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
66	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
67	Solving Rate Equations. Springer Briefs in Molecular Science, 2015, , 21-59.	0.1	9
68	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
69	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
70	Kinetics of the autoxidation of sulfur(iv) co-catalyzed by peroxodisulfate and silver(i) ions. Dalton Transactions, 2014, 43, 9596.	3.3	7
71	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
72	A binomial stochastic kinetic approach to the Michaelisâ€“Menten mechanism. Chemical Physics Letters, 2013, 568-569, 167-169.	2.6	6

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73	Advanced data analysis and modelling in chemical engineering. Reaction Kinetics, Mechanisms and Catalysis, 2017, 120, 417-420.	1.7	6
74	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
75	Kinetics of the oxidation of isoniazid with the hypochlorite ion. RSC Advances, 2015, 5, 67500-67508.	3.6	5
76	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
77	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
78	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
79	Farewell to MihÃ¡ly Beck. Reaction Kinetics, Mechanisms and Catalysis, 2017, 122, 1-2.	1.7	4
80	Where Mendeleev was wrong: predicted elements that have never been found. ChemTexts, 2019, 5, 1.	1.9	4
81	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
82	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
83	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
84	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
85	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
86	Mathematics in (bio)chemical kinetics 2017. Reaction Kinetics, Mechanisms and Catalysis, 2018, 123, 287-288.	1.7	2
87	The First International Conference on Reaction Kinetics, Mechanisms and Catalysis. Reaction Kinetics, Mechanisms and Catalysis, 2019, 126, 575-576.	1.7	2
88	Welcome to the year of the periodic table. Reaction Kinetics, Mechanisms and Catalysis, 2019, 126, 1-2.	1.7	2
89	Policy changes in Reaction Kinetics, Mechanisms and Catalysis. Reaction Kinetics, Mechanisms and Catalysis, 2020, 131, 1-3.	1.7	2
90	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

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91	The centenary of the first scientific paper published on oscillatory reactions. Reaction Kinetics, Mechanisms and Catalysis, 0, , .	1.7	2
92	Minimal Reactionâ€“Diffusion Model of Micromixing during Stopped-Flow Experiments. Journal of Physical Chemistry A, 2018, 122, 5503-5509.	2.5	1
93	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
94	Use of the Taylor theorem to predict kinetic curves in an arbitrary mechanism. Chemical Engineering Journal, 2022, 445, 136676.	12.7	1
95	EURYI: present procedure risks conflicts of interest. Nature, 2005, 437, 192-192.	27.8	0
96	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
97	The Second International Conference on Reaction Kinetics, Mechanisms and Catalysis. Reaction Kinetics, Mechanisms and Catalysis, 2022, 135, 1.	1.7	0
98	ErnÅ‘ Keszei: Reaction kinetics. An introduction. Reaction Kinetics, Mechanisms and Catalysis, 2022, 135, 571.	1.7	0