Attila K HorvÃ¡th

List of Publications by Year
in descending order

75 papers	1,331 citations	361413 20 h-index	434195 31 g-index
78 all docs	78 docs citations	78 times ranked	831 citing authors

#	Article	IF	Citations
1	Correct classification and identification of autocatalysis. Physical Chemistry Chemical Physics, 2021, 23, 7178-7189.	2.8	12
2	Some physical parameters influencing the comprehensive evaluation of kinetic data in photochemical reactions and its application in the periodate-chemistry. Journal of Photochemistry and Photobiology A: Chemistry, 2020, 388, 112021.	3.9	3
3	Law of Mass Action Type Chemical Mechanisms for Modeling Autocatalysis and Hypercycles: Their Role in the Evolutionary Race. ChemPhysChem, 2020, 21, 1703-1710.	2.1	6
4	Autoinhibition by Iodide Ion in the Methionineâ€"Iodine Reaction. Journal of Physical Chemistry A, 2020, 124, 6029-6038.	2.5	6
5	Homogeneous Pd-Catalyzed Heck Coupling in Î³-Valerolactone as a Green Reaction Medium: A Catalytic, Kinetic, and Computational Study. ACS Sustainable Chemistry and Engineering, 2020, 8, 9926-9936.	6.7	22
6	On the Kinetics and Mechanism of the Thiourea Dioxideâ€"Periodate Autocatalysis-Driven Iodine-Clock Reaction. Journal of Physical Chemistry A, 2019, 123, 7582-7589.	2.5	7
7	Reactivity of Small Oxoacids of Sulfur. Molecules, 2019, 24, 2768.	3.8	15
8	Kinetics and Mechanism of the Concurrent Reactions of Hexathionate with S(IV) and Thiosulfate in a Slightly Acidic Medium. Journal of Physical Chemistry A, 2019, 123, 5418-5427.	2.5	6
9	Exact Concentration Dependence of the Landolt Time in the Thiourea Dioxideâ€"Bromate Substrate-Depletive Clock Reaction. Journal of Physical Chemistry A, 2019, 123, 3959-3968.	2.5	10
10	Autocatalysis-Driven Clock Reaction III: Clarifying the Kinetics and Mechanism of the Thiourea Dioxideâ€"Iodate Reaction in an Acidic Medium. Journal of Physical Chemistry A, 2019, 123, 1740-1748.	2.5	9
11	Transition from Low to High Iodide and Iodine Concentration States in the Briggsâ€"Rauscher Reaction: Evidence on Crazy Clock Behavior. Journal of Physical Chemistry A, 2018, 122, 482-491.	2.5	8
12	Kinetics of the Two-Stage Oxidation of Sulfide by Chlorine Dioxide. Inorganic Chemistry, 2018, 57, 10189-10198.	4.0	10
13	Imperfect mixing as a dominant factor leading to stochastic behavior: a new system exhibiting crazy clock behavior. Physical Chemistry Chemical Physics, 2018, 20, 14145-14154.	2.8	4
14	Investigation of the Halogenateâ€"Hydrogen Peroxide Reactions Using the Electron Paramagnetic Resonance Spin Trapping Technique. Journal of Physical Chemistry A, 2017, 121, 3207-3212.	2.5	8
15	Stability of gamma-valerolactone under neutral, acidic, and basic conditions. Structural Chemistry, 2017, 28, 423-429.	2.0	57
16	Kinetics and Mechanism of the Oxidation of Thiourea Dioxide by Iodine in a Slightly Acidic Medium. Inorganic Chemistry, 2017, 56, 4679-4687.	4.0	12
17	Autocatalytic Oxidation of Trithionate by Iodate in a Strongly Acidic Medium. Journal of Physical Chemistry A, 2017, 121, 8189-8196.	2.5	1
18	Clarifying the Equilibrium Speciation of Periodate Ions in Aqueous Medium. Inorganic Chemistry, 2017, 56, 11417-11425.	4.0	33

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19	Reactions of aquacobalamin and cob(II)alamin with chlorite and chlorine dioxide. Journal of Biological Inorganic Chemistry, 2017, 22, 453-459.	2.6	8
20	Convection-Induced Fingering Fronts in the Chloriteâ€“Trithionate Reaction. Journal of Physical Chemistry A, 2016, 120, 2514-2520.	2.5	11
21	Compatible Mechanism for a Simultaneous Description of the Roebuck, Dushman, and Iodateâ€“Arsenous Acid Reactions in an Acidic Medium. Inorganic Chemistry, 2016, 55, 1595-1603.	4.0	18
22	Kinetics and Mechanism of the Chloriteâ€“Periodate System: Formation of a Short-Lived Key Intermediate OClOIO3and Its Subsequent Reactions. Inorganic Chemistry, 2016, 55, 2436-2440.	4.0	4
23	Mechanism Involving Hydrogen Sulfite Ions, Chlorite Ions, and Hypochlorous Acid as Key Intermediates of the Autocatalytic Chlorine Dioxideâ€“Thiourea Dioxide Reaction. European Journal of Inorganic Chemistry, 2015, 2015, 5011-5020.	2.0	8
24	Comprehensive Simultaneous Kinetic Study of Sulfitolysis and Thiosulfatolysis of Tetrathionate Ion: Unravelling the Unique pH Dependence of Thiosulfatolysis. Journal of Physical Chemistry A, 2015, 119, 1238-1245.	2.5	8
25	Initial inhomogeneity-induced crazy-clock behavior in the iodateâ€“arsenous acid reaction in a buffered medium under stirred batch conditions. Physical Chemistry Chemical Physics, 2015, 17, 22187-22194.	2.8	12
26	A Simple Kinetic Model for Description of the Iodateâ€“Arsenous Acid Reaction: Experimental Evidence of the Direct Reaction. Journal of Physical Chemistry A, 2015, 119, 11053-11058.	2.5	5
27	Compatible mechanism to characterize three independent but cross-coupled reactions of chlorite ion. Chaos, 2015, 25, 064604.	2.5	6
28	Classification of Clock Reactions. ChemPhysChem, 2015, 16, 588-594.	2.1	48
29	Combined capillary electrophoresis and high performance liquid chromatography studies on the kinetics and mechanism of the hydrogen peroxideâ€“thiocyanate reaction in a weakly alkaline solution. Talanta, 2014, 120, 10-16.	5.5	7
30	Recent Developments in the Chemistry of Thiourea Oxides. Chemistry - A European Journal, 2014, 20, 14164-14176.	3.3	44
31	Kinetics and Mechanism of the Oxidation of Bromide by Periodate in Aqueous Acidic Solution. Journal of Physical Chemistry A, 2014, 118, 10713-10719.	2.5	9
32	Kinetics and Mechanism of the Oxidation of Pentathionate Ion by Chlorine Dioxide in a Slightly Acidic Medium. Journal of Physical Chemistry A, 2014, 118, 1293-1299.	2.5	14
33	A New System for Studying Spatial Front Instabilities: The Supercatalytic Chloriteâ€“Trithionate Reaction. Journal of Physical Chemistry A, 2014, 118, 815-821.	2.5	5
34	Autocatalysis-Driven Clock Reaction II: Kinetics of the Pentathionateâ€“Periodate Reaction. Journal of Physical Chemistry A, 2014, 118, 9811-9819.	2.5	17
35	A Possible Candidate to Be Classified as an Autocatalysis-Driven Clock Reaction: Kinetics of the Pentathionateâ€“Iodate Reaction. Journal of Physical Chemistry A, 2014, 118, 6171-6180.	2.5	17
36	Kinetic Evidence of Tautomerism of Thiourea Dioxide in Aqueous Acidic Solutions. European Journal of Inorganic Chemistry, 2014, 2014, 1875-1879.	2.0	11

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37	Kinetics and Mechanism of the Hypochlorous Acidâ€“Trithionate Reaction. Journal of Physical Chemistry A, 2013, 117, 8836-8842.	2.5	3
38	Kinetics and Mechanism of the Alkaline Decomposition of Hexathionate Ion. Journal of Physical Chemistry A, 2013, 117, 2924-2931.	2.5	10
39	A rate law model for the explanation of complex pH oscillations in the thioureaâ€“iodateâ€“sulfite flow system. Physical Chemistry Chemical Physics, 2012, 14, 1502-1506.	2.8	6
40	Pattern formation in the iodateâ€“sulfiteâ€“thiosulfate reactionâ€“diffusion system. Physical Chemistry Chemical Physics, 2012, 14, 131-137.	2.8	33
41	Bisulfite-Driven Autocatalysis in the Bromateâ€“Thiosulfate Reaction in a Slightly Acidic Medium. Inorganic Chemistry, 2012, 51, 12062-12064.	4.0	16
42	General Pathway of Sulfur-Chain Breakage of Polythionates by Iodine Confirmed by the Kinetics and Mechanism of the Pentathionateâ€“Iodine Reaction. Inorganic Chemistry, 2012, 51, 7837-7843.	4.0	16
43	Kinetics and Mechanism of the Chlorine Dioxideâ€“Trithionate Reaction. Journal of Physical Chemistry A, 2012, 116, 2911-2919.	2.5	17
44	On the Complexity of Kinetics and the Mechanism of the Thiosulfateâ€“Periodate Reaction. Inorganic Chemistry, 2011, 50, 5793-5802.	4.0	15
45	Kinetics and Mechanism of Alkaline Decomposition of the Pentathionate Ion by the Simultaneous Tracking of Different Sulfur Species by High-Performance Liquid Chromatography. Inorganic Chemistry, 2011, 50, 9670-9677.	4.0	16
46	High Performance Liquid Chromatography Study on the Kinetics and Mechanism of Chloriteâ^'Thiosulfate Reaction in Slightly Alkaline Medium. Journal of Physical Chemistry A, 2011, 115, 1853-1860.	2.5	14
47	An improved chemical model for the quantitative description of the front propagation in the tetrathionateâ€“chlorite reaction. Physical Chemistry Chemical Physics, 2010, 12, 2356.	2.8	8
48	Non-Triiodide Based Autoinhibition by Iodide Ion in the Trithionateâ^'Iodine Reaction. Journal of Physical Chemistry A, 2010, 114, 6521-6526.	2.5	16
49	Complex Kinetics of a Landolt-Type Reaction: The Later Phase of the Thiosulfateâ^'Iodate Reaction. Journal of Physical Chemistry A, 2010, 114, 5752-5758.	2.5	10
50	Photochemically induced catalysis of iodide ion and iodine in the tetrathionateâ€“periodate reaction. Physical Chemistry Chemical Physics, 2010, 12, 6742.	2.8	12
51	Revisiting the Kinetics and Mechanism of the Tetrathionateâ^'Hypochlorous Acid Reaction in Nearly Neutral Medium. Journal of Physical Chemistry A, 2009, 113, 13907-13912.	2.5	5
52	Simultaneous Evaluation of Different Types of Kinetic Traces of a Complex System: Kinetics and Mechanism of the Tetrathionateâ^'Bromine Reaction. Journal of Physical Chemistry A, 2009, 113, 9988-9996.	2.5	9
53	Simultaneous Investigation of the Landolt and Dushman Reactions. Journal of Physical Chemistry A, 2008, 112, 5954-5959.	2.5	16
54	Effect of Chloride Ion on the Kinetics and Mechanism of the Reaction between Chlorite Ion and Hypochlorous Acid. Inorganic Chemistry, 2008, 47, 7914-7920.	4.0	33

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55	Theoretical Investigation on the Concentration Dependence of the Landolt Time. Journal of Physical Chemistry A, 2008, 112, 7868-7872.	2.5	10
56	Revised Explanation of the pH Oscillations in the Iodateâˆ'Thiosulfateâˆ'Sulfite System. Journal of Physical Chemistry A, 2008, 112, 3935-3942.	2.5	11
57	Kinetics and Mechanism of the Decomposition of Tetrathionate Ion in Alkaline Medium. Inorganic Chemistry, 2007, 46, 7654-7661.	4.0	37
58	Pitfall of an Initial Rate Study:â€‰ On the Kinetics and Mechanism of the Reaction of Periodate with Iodide Ions in a Slightly Acidic Medium. Journal of Physical Chemistry A, 2007, 111, 890-896.	2.5	13
59	Inherent Pitfalls in the Simplified Evaluation of Kinetic Curves. Journal of Physical Chemistry A, 2007, 111, 8104-8109.	2.5	16
60	Kinetics and Mechanism of the Oxidation of Tetrathionate by Iodine in a Slightly Acidic Medium. Journal of Physical Chemistry A, 2007, 111, 4235-4241.	2.5	19
61	Three Autocatalysts and Self-Inhibition in a Single Reaction:Â A Detailed Mechanism of the Chloriteâˆ'Tetrathionate Reaction. Inorganic Chemistry, 2006, 45, 9877-9883.	4.0	44
62	Unexpected Formation of Higher Polythionates in the Oxidation of Thiosulfate by Hypochlorous Acid in a Slightly Acidic Medium. Journal of Physical Chemistry B, 2006, 110, 2467-2470.	2.6	21
63	Kinetics and Mechanism of the Oxidation of Sulfite by Chlorine Dioxide in a Slightly Acidic Medium. Journal of Physical Chemistry A, 2006, 110, 4753-4758.	2.5	29
64	A Three-Variable Model for the Explanation of the â€œSupercatalyticâ€• Effect of Hydrogen Ion in the Chloriteâˆ'Tetrathionate Reaction. Journal of Physical Chemistry A, 2005, 109, 5124-5128.	2.5	20
65	Autocatalysis and Self-Inhibition:Â Coupled Kinetic Phenomena in the Chloriteâˆ'Tetrathionate Reaction. Journal of the American Chemical Society, 2004, 126, 6246-6247.	13.7	38
66	Kinetics and Mechanism of the Decomposition of Chlorous Acid. Journal of Physical Chemistry A, 2003, 107, 6966-6973.	2.5	56
67	Kinetics and Mechanism of the Chlorine Dioxide-Tetrathionate Reaction. Journal of Physical Chemistry A, 2003, 107, 10063-10068.	2.5	29
68	Oscillatory Photochemical Decomposition of Tetrathionate Ion. Journal of the American Chemical Society, 2002, 124, 10956-10957.	13.7	34
69	Kinetics and mechanism of the reaction between hypochlorous acid and tetrathionate ion. International Journal of Chemical Kinetics, 2000, 32, 395-402.	1.6	23
70	Improved calibration and use of stopped-flow instruments. Physical Chemistry Chemical Physics, 2000, 2, 2575-2586.	2.8	20
71	Kinetics of Photoresponse of the Chlorine Dioxide-Iodine-Malonic Acid Reaction. Journal of Physical Chemistry A, 2000, 104, 5766-5769.	2.5	23
72	Kinetics and mechanism of the reaction between hypochlorous acid and tetrathionate ion. International Journal of Chemical Kinetics, 2000, 32, 395-402.	1.6	1

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73	Control of Turing Structures by Periodic Illumination. Physical Review Letters, 1999, 83, 2950-2952.	7.8	92
74	Kinetics and Mechanism of the Reaction between Thiosulfate and Chlorine Dioxide. Journal of Physical Chemistry A, 1998, 102, 7267-7272.	2.5	35
75	Bistability in the nitric acid-hydroxylamine CSTR system. International Journal of Chemical Kinetics, 1994, 26, 991-996.	1.6	5