Sergey Vyazovkin

List of Publications by Year
in descending order

218	23,448	22548 61	9346 148
papers	citations	h-index	g-index

229	229	229	11248
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	ICTAC Kinetics Committee recommendations for performing kinetic computations on thermal analysis data. Thermochimica Acta, 2011, 520, 1-19.	1.2	4,299
2	Model-free and model-fitting approaches to kinetic analysis of isothermal and nonisothermal data. Thermochimica Acta, 1999, 340-341, 53-68.	1.2	1,111
3	Modification of the integral isoconversional method to account for variation in the activation energy. Journal of Computational Chemistry, 2001, 22, 178-183.	1.5	1,000
4	Isoconversional Kinetic Analysis of Thermally Stimulated Processes in Polymers. Macromolecular Rapid Communications, 2006, 27, 1515-1532.	2.0	940
5	ICTAC Kinetics Committee recommendations for collecting experimental thermal analysis data for kinetic computations. Thermochimica Acta, 2014, 590, 1-23.	1.2	929
6	Computational aspects of kinetic analysis. Thermochimica Acta, 2000, 355, 125-143.	1.2	746
7	Evaluation of activation energy of thermally stimulated solid-state reactions under arbitrary variation of temperature. Journal of Computational Chemistry, 1997, 18, 393-402.	1.5	685
8	Kinetics of the Thermal and Thermo-Oxidative Degradation of Polystyrene, Polyethylene and Poly(propylene). Macromolecular Chemistry and Physics, 2001, 202, 775-784.	1.1	617
9	Linear and Nonlinear Procedures in Isoconversional Computations of the Activation Energy of Nonisothermal Reactions in Solids. Journal of Chemical Information and Computer Sciences, 1996, 36, 42-45.	2.8	520
10	A unified approach to kinetic processing of nonisothermal data. International Journal of Chemical Kinetics, 1996, 28, 95-101.	1.0	496
11	KINETICS IN SOLIDS. Annual Review of Physical Chemistry, 1997, 48, 125-149.	4.8	490
12	Computational aspects of kinetic analysis.. Thermochimica Acta, 2000, 355, 155-163.	1.2	490
13	ICTAC Kinetics Committee recommendations for analysis of multi-step kinetics. Thermochimica Acta, 2020, 689, 178597.	1.2	482
14	Isothermal and non-isothermal kinetics of thermally stimulated reactions of solids. International Reviews in Physical Chemistry, 1998, 17, 407-433.	0.9	460
15	Mechanism and Kinetics of Epoxyâ"Amine Cure Studied by Differential Scanning Calorimetry. Macromolecules, 1996, 29, 1867-1873.	2.2	414
16	Model-free kinetics. Journal of Thermal Analysis and Calorimetry, 2006, 83, 45-51.	2.0	395
17	Kinetic concepts of thermally stimulated reactions in solids: A view from a historical perspective. International Reviews in Physical Chemistry, 2000, 19, 45-60.	0.9	346
18	Kinetics of Thermal Decomposition of Cubic Ammonium Perchlorate. Chemistry of Materials, 1999, 11, 3386-3393.	3.2	246

#	Article	IF	Citations
19	Improvement of Quality in Publication of Experimental Thermophysical Property Data: Challenges, Assessment Tools, Global Implementation, and Online Support. Journal of Chemical & Engineering Data, 2013, 58, 2699-2716.	1.0	236
20	An approach to the solution of the inverse kinetic problem in the case of complex processes. Thermochimica Acta, 1990, 165, 273-280.	1.2	228
21	Isothermal and Nonisothermal Reaction Kinetics in Solids:Â In Search of Ways toward Consensus. Journal of Physical Chemistry A, 1997, 101, 8279-8284.	1.1	227
22	Learning about epoxy cure mechanisms from isoconversional analysis of DSC data. Thermochimica Acta, 2002, 388, 289-298.	1.2	222
23	Isoconversional Kinetics of Thermally Stimulated Processes. , 2015, , .		209
24	A Study of Epoxy-Amine Cure Kinetics by Combining Isoconversional Analysis with Temperature Modulated DSC and Dynamic Rheometry. Macromolecular Chemistry and Physics, 2003, 204, 1815-1821.	1.1	200
25	Is the Kissinger Equation Applicable to the Processes that Occur on Cooling?. Macromolecular Rapid Communications, 2002, 23, 771-775.	2.0	198
26	Isoconversional Approach to Evaluating the Hoffmanâ€“Lauritzen Parameters(U* andKg) from the Overall Rates of Nonisothermal Crystallization. Macromolecular Rapid Communications, 2004, 25, 733-738.	2.0	195
27	Isoconversional Analysis of Calorimetric Data on Nonisothermal Crystallization of a Polymer Melt. Journal of Physical Chemistry B, 2003, 107, 882-888.	1.2	178
28	Kinetic methods to study isothermal and nonisothermal epoxy-anhydride cure. Macromolecular Chemistry and Physics, 1999, 200, 2294-2303.	1.1	176
29	A time to search: finding the meaning of variable activation energy. Physical Chemistry Chemical Physics, 2016, 18, 18643-18656.	1.3	158
30	Isoconversional Analysis of Combined Melt and Glass Crystallization Data. Macromolecular Chemistry and Physics, 2006, 207, 20-25.	1.1	157
31	Kinetic Study of Stabilizing Effect of Oxygen on Thermal Degradation of Poly(methyl methacrylate). Journal of Physical Chemistry B, 1999, 103, 8087-8092.	1.2	154
32	Kissinger Method in Kinetics of Materials: Things to Beware and Be Aware of. Molecules, 2020, 25, 2813.	1.7	149
33	On the phenomenon of variable activation energy for condensed phase reactions. New Journal of Chemistry, 2000, 24, 913-917.	1.4	145
34	Nanoconfinement Revealed in Degradation and Relaxation Studies of Two Structurally Different Polystyreneâ^'Clay Systems. Journal of Physical Chemistry B, 2007, 111, 12685-12692.	1.2	144
35	Kinetics of the Thermal and Thermo-Oxidative Degradation of a Polystyreneâ€“Clay Nanocomposite. Macromolecular Rapid Communications, 2004, 25, 498-503.	2.0	135
36	False isokinetic relationships found in the nonisothermal decomposition of solids. Chemical Physics, 1995, 193, 109-118.	0.9	133

#	Article	IF	Citations
37	Ammonium Dinitramide:Â Kinetics and Mechanism of Thermal Decomposition. Journal of Physical Chemistry A, 1997, 101, 5653-5658.	1.1	107
38	Estimation of the pre-exponential factor in the isoconversional calculation of effective kinetic parameters. Thermochimica Acta, 1988, 128, 297-300.	1.2	105
39	Thermal Dissociation Kinetics of Solid and Liquid Ammonium Nitrate. Chemistry of Materials, 2001, 13, 960-966.	3.2	96
40	Physical Stability and Relaxation of Amorphous Indomethacin. Journal of Physical Chemistry B, 2005, 109, 18637-18644.	1.2	95
41	Isoconversional Analysis of the Nonisothermal Crystallization of a Polymer Melt. Macromolecular Rapid Communications, 2002, 23, 766-770.	2.0	92
42	A DSC Study of Î±- and Î²-Relaxations in a PSâ^'Clay System. Journal of Physical Chemistry B, 2004, 108, 11981-11987.	1.2	92
43	Degradation and Relaxation Kinetics of Polystyreneâ^'Clay Nanocomposite Prepared by Surface Initiated Polymerization. Journal of Physical Chemistry B, 2004, 108, 11672-11679.	1.2	90
44	Kinetic analysis of reversible thermal decomposition of solids. International Journal of Chemical Kinetics, 1995, 27, 73-84.	1.0	89
45	Estimating Realistic Confidence Intervals for the Activation Energy Determined from Thermoanalytical Measurements. Analytical Chemistry, 2000, 72, 3171-3175.	3.2	89
46	Isoconversional Kinetics of Polymers: The Decade Past. Macromolecular Rapid Communications, 2017, 38, 1600615.	2.0	89
47	Crystallization Kinetics of Amorphous Nifedipine Studied by Model-Fitting and Model-Free Approaches. Journal of Pharmaceutical Sciences, 2003, 92, 1779-1792.	1.6	83
48	Reply to â€œWhat is meant by the term â€˜variable activation energyâ€™ when applied in the kinetics analyses of solid state decompositions (crystolysis reactions)?â€• Thermochimica Acta, 2003, 397, 269-271.	1.2	80
49	Effect of Physical Aging on Nucleation of Amorphous Indomethacin. Journal of Physical Chemistry B, 2007, 111, 7283-7287.	1.2	79
50	Variation of the Effective Activation Energy Throughout the Glass Transition. Macromolecular Rapid Communications, 2004, 25, 1708-1713.	2.0	75
51	Effect of pressure and sample type on decomposition of ammonium perchlorate. Combustion and Flame, 2006, 145, 779-790.	2.8	74
52	Thermally induced reactions of solids: Isokinetic relationships of non-isothermal systems. International Reviews in Physical Chemistry, 1995, 14, 355-369.	0.9	73
53	Kinetics of Epoxyâ€“Amine Curing Accompanied by the Formation of Liquid Crystalline Structure. Macromolecular Rapid Communications, 2003, 24, 1060-1065.	2.0	73
54	Modern Isoconversional Kinetics: From Misconceptions to Advances. Handbook of Thermal Analysis and Calorimetry, 2018, 6, 131-172.	1.6	71

#	Article	IF	Citations
55	Practical application of isoconversional methods. Thermochimica Acta, 1992, 203, 177-185.	1.2	69
56	The Next 100 Years of Polymer Science. Macromolecular Chemistry and Physics, 2020, 221, 2000216.	1.1	69
57	Conversion dependence of activation energy for model DSC curves of consecutive reactions. Thermochimica Acta, 1994, 236, 1-13.	1.2	67
58	Estimating the activation energy for non-isothermal crystallization of polymer melts. Journal of Thermal Analysis and Calorimetry, 2003, 72, 681-686.	2.0	67
59	Thermal Denaturation of Collagen Analyzed by Isoconversional Method. Macromolecular Bioscience, 2007, 7, 1181-1186.	2.1	65
60	Variation in Activation Energy of the Glass Transition for Polymers of Different Dynamic Fragility. Macromolecular Chemistry and Physics, 2006, 207, 1126-1130.	1.1	64
61	Isoconversional method to explore the mechanism and kinetics of multi-step epoxy cures. Macromolecular Rapid Communications, 1999, 20, 387-389.	2.0	63
62	Isoconversional Kinetics. Handbook of Thermal Analysis and Calorimetry, 2008, 5, 503-538.	1.6	63
63	Competitive Vaporization and Decomposition of Liquid RDX. Journal of Physical Chemistry B, 2000, 104, 2570-2574.	1.2	62
64	Potentialities of software for kinetic processing of thermoanalytical data by the isoconversion method. Thermochimica Acta, 1992, 194, 221-230.	1.2	61
65	Alternative description of process kinetics. Thermochimica Acta, 1992, 211, 181-187.	1.2	61
66	The Application of Isoconversional Methods for Analyzing Isokinetic Relationships Occurring at Thermal Decomposition of Solids. Journal of Solid State Chemistry, 1995, 114, 392-398.	1.4	60
67	An approach to the solution of the inverse kinetic problem in the case of complex processes. Part III. Parallel independent reactions. Thermochimica Acta, 1992, 197, 41-51.	1.2	57
68	Effect of viscosity on the kinetics of initial cure stages. Macromolecular Chemistry and Physics, 2000, 201, 199-203.	1.1	57
69	Thermal Analysis. Analytical Chemistry, 2002, 74, 2749-2762.	3.2	55
70	Two Types of Uncertainty in the Values of Activation Energy. Magyar AprÃ³vad KÃ¶zlemÃ©nyek, 2001, 64, 829-835.	1.4	54
71	Effect of the Brush Structure on the Degradation Mechanism of Polystyrene-Clay Nanocomposites. Macromolecular Rapid Communications, 2005, 26, 690-695.	2.0	54
72	Hoffman-Lauritzen parameters for non-isothermal crystallization of poly(ethylene terephthalate) and poly(ethylene oxide) melts. Journal of Thermal Analysis and Calorimetry, 2005, 80, 177-180.	2.0	53

#	Article	IF	Citations
73	An approach to the solution of the inverse kinetic problem in the case of complex processes. Thermochimica Acta, 1993, 223, 201-206.	1.2	52
74	Comparison of several computational procedures for evaluating the kinetics of thermally stimulated condensed phase reactions. Chemometrics and Intelligent Laboratory Systems, 2000, 54, 53-60.	1.8	52
75	Probing Beta Relaxation in Pharmaceutically Relevant Glasses by Using DSC. Pharmaceutical Research, 2006, 23, 422-428.	1.7	52
76	Tacticity as a Factor Contributing to the Thermal Stability of Polystyrene. Macromolecular Chemistry and Physics, 2007, 208, 2525-2532.	1.1	52
77	Activation Energies and Temperature Dependencies of the Rates of Crystallization and Melting of Polymers. Polymers, 2020, 12, 1070.	2.0	51
78	Determining Preexponential Factor in Model-Free Kinetic Methods: How and Why?. Molecules, 2021, 26, 3077.	1.7	51
79	Temperature Dependence of Solâ€Gel Conversion Kinetics in Gelatinâ€Water System. Macromolecular Bioscience, 2009, 9, 383-392.	2.1	49
80	Kinetic effects of pressure on decomposition of solids. International Reviews in Physical Chemistry, 2020, 39, 35-66.	0.9	49
81	Confidence intervals for the activation energy estimated by few experiments. Analytica Chimica Acta, 1997, 355, 175-180.	2.6	48
82	Thermal decomposition kinetics of PBAN-binder and composite solid rocket propellants. Combustion and Flame, 1999, 119, 174-181.	2.8	48
83	Model-free treatment of the dehydration kinetics of nedocromil sodium trihydrate. Journal of Pharmaceutical Sciences, 2003, 92, 1367-1376.	1.6	48
84	Error in determining activation energy caused by the wrong choice of process model. Thermochimica Acta, 1990, 165, 11-15.	1.2	47
85	Kinetic analysis of isothermal cures performed below the limiting glass transition temperature. Macromolecular Rapid Communications, 2000, 21, 85-90.	2.0	47
86	Mechanistic Differences in Degradation of Polystyrene and Polystyrene-Clay Nanocomposite: Thermal and Thermo-Oxidative Degradation. Macromolecular Chemistry and Physics, 2006, 207, 587-595.	1.1	47
87	Thermal Decomposition of Ammonium Dinitramide at Moderate and High Temperatures. Journal of Physical Chemistry A, 1997, 101, 7217-7221.	1.1	46
88	ICTAC Kinetics Committee recommendations for analysis of thermal polymerization kinetics. Thermochimica Acta, 2022, 714, 179243.	1.2	44
89	Stabilizing effect of oxygen on thermal degradation of poly(methyl methacrylate). Macromolecular Rapid Communications, 1999, 20, 480-483.	2.0	42
90	Thermal Analysis. Analytical Chemistry, 2008, 80, 4301-4316.	3.2	41

#	Article	IF	Citations
91	Polyvinylpyrrolidone affects thermal stability of drugs in solid dispersions. International Journal of Pharmaceutics, 2018, 551, 111-120.	2.6	41
92	Isoconversional kinetics of degradation of polyvinylpyrrolidone used as a matrix for ammonium nitrate stabilization. Thermochimica Acta, 2008, 474, 78-80.	1.2	40
93	Thermal stability of gelatin gels: Effect of preparation conditions on the activation energy barrier to melting. Polymer, 2009, 50, 4859-4867.	1.8	40
94	Discovering the kinetics of thermal decomposition during continuous cooling. Physical Chemistry Chemical Physics, 2016, 18, 32021-32030.	1.3	37
95	Thermal Analysis. Analytical Chemistry, 2006, 78, 3875-3886.	3.2	36
96	Activation energies of water vaporization from the bulk and from laponite, montmorillonite, and chitosan powders. Thermochimica Acta, 2011, 524, 197-197.	1.2	36
97	Thermal decomposition of tetrazole. Thermochimica Acta, 1990, 165, 17-22.	1.2	35
98	Reliability of conversion-time dependencies as predicted from thermal analysis data. Analytica Chimica Acta, 1994, 295, 101-107.	2.6	35
99	Dehydration kinetics of neotame monohydrate. Journal of Pharmaceutical Sciences, 2002, 91, 1423-1431.	1.6	35
100	Isoconversional Kinetics of Glass Aging. Journal of Physical Chemistry B, 2009, 113, 4631-4635.	1.2	33
101	Delving into the Kinetics of Reversible Thermal Decomposition of Solids Measured on Heating and Cooling. Journal of Physical Chemistry C, 2017, 121, 15392-15401.	1.5	33
102	On the methods of solving the inverse problem of solid-phase reaction kinetics. Journal of Thermal Analysis, 1989, 35, 2169-2188.	0.7	30
103	Hard to swallow dry: Kinetics and mechanism of the anhydrous thermal decomposition of acetylsalicylic acid. Journal of Pharmaceutical Sciences, 2002, 91, 800-809.	1.6	30
104	Artificial Neural Networks for Pyrolysis, Thermal Analysis, and Thermokinetic Studies: The Status Quo. Molecules, 2021, 26, 3727.	1.7	30
105	Atypical gelation in gelatin solutions probed by ultra-fast calorimetry. Soft Matter, 2012, 8, 7116.	1.2	28
106	Thermal Analysis. Analytical Chemistry, 2004, 76, 3299-3312.	3.2	27
107	Effect of Substituents in Aromatic Amines on the Activation Energy of Epoxyâ"Amine Reaction. Journal of Physical Chemistry B, 2007, 111, 7098-7104.	1.2	27
108	Thermal Analysis. Analytical Chemistry, 2010, 82, 4936-4949.	3.2	26

#	Article	IF	Citations
109	High Temperature Solidâ€“Solid Transition in Ammonium Chloride Confined to Nanopores. Journal of Physical Chemistry C, 2013, 117, 13713-13721.	1.5	26
110	How much is the accuracy of activation energy affected by ignoring thermal inertia?. International Journal of Chemical Kinetics, 2020, 52, 23-28.	1.0	26
111	Some confusion concerning integral isoconversional methods that may result from the paper by Budrugeac and Segal ?Some Methodological Problems Concerning Nonisothermal Kinetic Analysis of Heterogeneous Solid-Gas Reactions?. International Journal of Chemical Kinetics, 2002, 34, 418-420.	1.0	25
112	Comparative cure behavior of DGEBA and DGEBP with 4-nitro-1,2-phenylenediamine. Polymer, 2006, 47, 6659-6663.	1.8	25
113	Further insights into the kinetics of thermal decomposition during continuous cooling. Physical Chemistry Chemical Physics, 2017, 19, 18836-18844.	1.3	25
114	Kinetic and Mechanistic Insights into Thermally Initiated Polymerization of Cyanate Esters with Different Bridging Groups. Macromolecular Chemistry and Physics, 2019, 220, 1900141.	1.1	25
115	Concentration Effect on Temperature Dependence of Gelation Rate in Aqueous Solutions of Methylcellulose. Macromolecular Chemistry and Physics, 2009, 210, 211-216.	1.1	24
116	Isoconversional Kinetics of Nonisothermal Crystallization of Salts from Solutions. Journal of Physical Chemistry B, 2016, 120, 5703-5709.	1.2	24
117	Nonisothermal crystallization of polymers: Getting more out of kinetic analysis of differential scanning calorimetry data. Polymer Crystallization, 2018, 1, e10003.	0.5	24
118	Implications of Global and Local Mobility in Amorphous Sucrose and Trehalose as Determined by Differential Scanning Calorimetry. Pharmaceutical Research, 2009, 26, 1064-1072.	1.7	23
119	On the method of solving the inverse problem of solid-phase reaction kinetics. Journal of Thermal Analysis, 1990, 36, 599-615.	0.7	21
120	Invariant kinetic parameters of polymer thermolysis. III. The influence of a fire-retardant additive on polypropylene thermolysis. Journal of Applied Polymer Science, 1991, 42, 2095-2098.	1.3	21
121	Increase in effective activation energy during physical aging of a glass. Chemical Physics Letters, 2007, 448, 203-207.	1.2	21
122	Thermal Properties and Degradation Behavior of Linear and Branched Poly(<scp>L</scp>â€lactide)s and Poly(<scp>L</scp>â€lactideâ€coâ€glycolide)s. Macromolecular Chemistry and Physics, 2012, 213, 924-936.	1.1	21
123	Nucleationâ€Driven Kinetics of Poly(ethylene terephthalate) Melting. Macromolecular Chemistry and Physics, 2013, 214, 2562-2566.	1.1	21
124	Thermal Stability of Malonic Acid Dissolved in Poly(vinylpyrrolidone) and Other Polymeric Matrices. Industrial & Engineering Chemistry Research, 2018, 57, 5228-5233.	1.8	21
125	Thermal stability of indomethacin increases with the amount of polyvinylpyrrolidone in solid dispersion. Thermochimica Acta, 2019, 676, 172-176.	1.2	21
126	The influence of errors of Arrhenius parameter calculation on the exactness of the solution of the direct kinetic problem. Thermochimica Acta, 1991, 182, 133-142.	1.2	20

#	Article	IF	Citations
127	Detecting isokinetic relationships in non-isothermal systems by the isoconversional method. Thermochimica Acta, 1995, 269-270, 61-72.	1.2	20
128	Curing of Diglycidyl Ether of Bisphenol P with Nitro Derivatives of Amine Compounds, 2. Macromolecular Chemistry and Physics, 2005, 206, 1084-1089.	1.1	20
129	Polymer Melting Kinetics Appears to be Driven by Heterogeneous Nucleation. Macromolecular Chemistry and Physics, 2014, 215, 205-209.	1.1	20
130	Evaluation and Application of Isokinetic Relationships: The Thermal Decomposition of Solids under Nonisothermal Conditions. Journal of Chemical Information and Computer Sciences, 1994, 34, 1273-1278.	2.8	19
131	Phase and thermal stabilization of ammonium nitrate in the form of PVPâ€“AN glass. Materials Letters, 2008, 62, 1757-1760.	1.3	19
132	Nanoconfined Solidâ€“Solid Transitions: Attempt To Separate the Size and Surface Effects. Journal of Physical Chemistry C, 2015, 119, 9627-9636.	1.5	19
133	Effect of nanocrystalline cellulose addition on needleless alternating current electrospinning and properties of nanofibrous polyacrylonitrile meshes. Journal of Applied Polymer Science, 2018, 135, 45772.	1.3	19
134	Polymerization kinetics of adamantane-based dicyanate ester and thermal properties of resulting polymer. Reactive and Functional Polymers, 2021, 165, 104956.	2.0	19
135	Curing of Diglycidyl Ether of 4,4â€²-Bisphenol P with Nitro Derivatives of Amine Compounds, 3. Macromolecular Chemistry and Physics, 2005, 206, 1840-1846.	1.1	18
136	Joint Statement of Editors of Journals Publishing Thermophysical Property Data. Journal of Chemical & Engineering Data, 2009, 54, 2-3.	1.0	18
137	Melting kinetics of superheated crystals of glucose and fructose. Physical Chemistry Chemical Physics, 2017, 19, 26056-26064.	1.3	18
138	Activation energies derived from the pre-glass transition annealing peaks. Thermochimica Acta, 2006, 446, 140-146.	1.2	17
139	Coilâ€toâ€Globule Transition of Poly(Nâ€isopropylacrylamide) in Aqueous Solution: Kinetics in Bulk and Nanopores. Macromolecular Chemistry and Physics, 2014, 215, 2112-2118.	1.1	17
140	Effect of pressure on TATB and LX-17 thermal decomposition. Thermochimica Acta, 2021, 699, 178908.	1.2	17
141	Some aspects of mathematical statistics as applied to nonisothermal kinetics. Journal of Thermal Analysis, 1987, 32, 909-918.	0.7	16
142	Complementarity methodology as applied for solution of the inverse problem for solid-phase reaction kinetics III. Journal of Thermal Analysis, 1988, 34, 609-618.	0.7	16
143	Thermolysis kinetics of polypropylene on rapid heating. Thermochimica Acta, 1993, 215, 325-328.	1.2	16
144	Comparative Relaxation Dynamics of Glucose and Maltitol. Pharmaceutical Research, 2006, 23, 2158-2164.	1.7	16

#	Article	IF	Citations
145	Ammonium Nitrateâ^'Polymer Glasses: A New Concept for Phase and Thermal Stabilization of Ammonium Nitrate. Journal of Physical Chemistry B, 2008, 112, 11236-11243.	1.2	16
146	Venturing into kinetics and mechanism of nanoconfined solid-state reactions: trimerization of sodium dicyanamide in nanopores. Physical Chemistry Chemical Physics, 2014, 16, 11409.	1.3	16
147	Thermal Decomposition Kinetics of Malonic Acid in the Condensed Phase. Industrial & Engineering Chemistry Research, 2017, 56, 7964-7970.	1.8	16
148	Solid-state polymerization of a novel cyanate ester based on 4-tert-butylcalix[6]arene. Polymer Chemistry, 2020, 11, 4115-4123.	1.9	16
149	Some aspects of mathematical statistics as applied to nonisothermal kinetics. Journal of Thermal Analysis, 1987, 32, 249-258.	0.7	15
150	Curing of Diglycidyl Ether of Bisphenol P with Nitro Derivatives of Amine Compounds, 1. Macromolecular Chemistry and Physics, 2005, 206, 342-348.	1.1	15
151	Gelation on Heating of Supercooled Gelatin Solutions. Macromolecular Rapid Communications, 2012, 33, 698-702.	2.0	15
152	Thermal Reduction of NO_x with Recycled Plastics. Environmental Science & Technology, 2017, 51, 7714-7722.	4.6	15
153	â€œNothing Can Hide Itself from Thy Heatâ€• Understanding Polymers via Unconventional Applications of Thermal Analysis. Macromolecular Rapid Communications, 2019, 40, e1800334.	2.0	15
154	Effect of Inert Gas Pressure on Reversible Solid-State Decomposition. Journal of Physical Chemistry C, 2019, 123, 21059-21065.	1.5	15
155	On the dependence of kinetic parameters and functions in non-isothermal kinetics. Thermochimica Acta, 1987, 122, 413-418.	1.2	14
156	Formation and Thermal Behavior of Polystyrene and Polystyrene/Clay Gels. Macromolecular Chemistry and Physics, 2008, 209, 2367-2373.	1.1	14
157	Synthesis and Polymerization Kinetics of Rigid Tricyanate Ester. Polymers, 2021, 13, 1686.	2.0	14
158	Illustration of the ambiguity in solving inverse kinetic problems. Thermochimica Acta, 1988, 130, 269-279.	1.2	13
159	Nanocrystalline Cellulose/Polyvinylpyrrolidone Fibrous Composites Prepared by Electrospinning and Thermal Crosslinking. International Journal of Polymer Science, 2019, 2019, 1-12.	1.2	13
160	Polymerization Kinetics of Cyanate Ester Confined to Hydrophilic Nanopores of Silica Colloidal Crystals with Different Surface-Grafted Groups. Polymers, 2020, 12, 2329.	2.0	13
161	Thermomechanical study of the high temperature phase transition in KH2PO4. Solid State Communications, 2000, 113, 627-631.	0.9	12
162	Melting of Gelatin Gels Containing Laponite, Montmorillonite, and Chitosan Particles. Macromolecular Chemistry and Physics, 2014, 215, 867-872.	1.1	12

#	Article	IF	Citations
163	Some Basics En Route to Isoconversional Methodology. , 2015, , 1-25.		12
164	Isoconversional Methodology. , 2015, , 27-62.		12
165	Electronic solution to the problem of a kinetic standard for DSC measurements. Chemometrics and Intelligent Laboratory Systems, 2000, 52, 23-32.	1.8	11
166	Comments on â€œThe use of MoO3 and NiO (pure or mixed) oxide catalysts in the decomposition of KMnO4â€•by S.A. Halawy and M.A. Mohamed. Thermochimica Acta, 2001, 370, 149-154.	1.2	11
167	Evaluation of the Dynamic Response of a New Heat Flux Calorimeter for Kinetic Purposes. Industrial & Engineering Chemistry Research, 2002, 41, 6650-6655.	1.8	11
168	Melting of gelatin gels confined to silica nanopores. Physical Chemistry Chemical Physics, 2016, 18, 29056-29063.	1.3	11
169	Kinetics of Thermal Polymerization Can Be Studied during Continuous Cooling. Macromolecular Rapid Communications, 2018, 39, 1700624.	2.0	11
170	Some aspects of mathematical statistics as applied to non-isothermal kinetics. Journal of Thermal Analysis, 1986, 31, 319-324.	0.7	10
171	Nonâ€•oxidative Thermal Degradation of Poly(glycidol), Poly(glycidol)â€gâ€<scp>L</scp>â€lactide, and Poly(glycidol)â€gâ€glycolide. Macromolecular Chemistry and Physics, 2011, 212, 2103-2113.	1.1	10
172	Synthesis and Polymerization Kinetics of Novel Dicyanate Ester Based on Dimer of 4â€•tert â€butylphenol. Macromolecular Chemistry and Physics, 2021, 222, 2000410.	1.1	10
173	Solvent-induced changes in the reactivity of tricyanate esters undergoing thermal polymerization. Polymer Chemistry, 2021, 12, 6179-6187.	1.9	10
174	Interpretation of the dependence of the effective values of kinetic parameters on the degree of transformation. Thermochimica Acta, 1988, 128, 69-73.	1.2	9
175	Invariant kinetic parameters of polymer thermolysis. IV. Influence of fire-retardant additives on polypropylene thermolysis. Journal of Applied Polymer Science, 1992, 44, 2157-2160.	1.3	9
176	Dynamic Mechanical Analysis and Hydrolytic Degradation Behavior of Linear and Branched Poly(<scp>L</scp>â€lactide)s and Poly(<scp>L</scp>â€lactideâ€coâ€glycolide)s. Macromolecular Chemistry and Physics, 2013, 214, 835-843.	1.1	9
177	Isoconversional kinetics of vaporization of nanoconfined liquids. Journal of Molecular Liquids, 2021, 327, 114824.	2.3	9
178	Some aspects of mathematical statistics as applied to nonisothermal kinetics. Journal of Thermal Analysis, 1985, 30, 831-840.	0.7	8
179	Extrapolation kinetic problems solved by undiscriminating methods. Thermochimica Acta, 1993, 215, 315-324.	1.2	8
180	Detecting Mechanochemical Degradation of Nitrocellulose by Combining Dynamic Mechanical Analysis with Mass Spectrometry. Macromolecular Rapid Communications, 2005, 26, 29-33.	2.0	8

#	Article	IF	Citations
181	Phase separation of triethylamine and water in native and organically modified silica nanopores. Journal of Chemical Physics, 2017, 147, 114508.	1.2	8
182	Complementarity methodology as applied for solution of the inverse problem of solid-phase reaction kinetics. Journal of Thermal Analysis, 1988, 34, 85-88.	0.7	7
183	Isokinetic relationships at the thermal decomposition of tetranuclear copper(II)-complexes. International Journal of Chemical Kinetics, 1995, 27, 597-604.	1.0	7
184	Mechanochemical effects in degradation of nitrocellulose and nitrocelluloseâ€“diphenylamine mixture. Thermochimica Acta, 2005, 437, 75-81.	1.2	7
185	Making impact in thermal sciences: Overview of highly cited papers published in Thermochimica Acta. Thermochimica Acta, 2010, 500, 1-5.	1.2	7
186	The kinetics and mechanism of nanoconfined molten salt reactions: trimerization of potassium and rubidium dicyanamide. Physical Chemistry Chemical Physics, 2015, 17, 10209-10217.	1.3	7
187	Power Law and Arrhenius Approaches to the Melting Kinetics of Superheated Crystals: Are They Compatible?. Crystal Growth and Design, 2018, 18, 6389-6392.	1.4	7
188	Accelerating Effect of Poly(vinylpyrrolidone) Matrix on Thermal Decomposition of Malonic Acid. Industrial & Engineering Chemistry Research, 2019, 58, 2891-2898.	1.8	7
189	When can the effect of thermal inertia be considered negligible?. International Journal of Chemical Kinetics, 2021, 53, 1058-1060.	1.0	7
190	Problems with Applying the Ozawaâ€“Avrami Crystallization Model to Non-Isothermal Crosslinking Polymerization. Polymers, 2022, 14, 693.	2.0	7
191	Novel adamantane-based dicyanate ester: Synthesis, polymerization kinetics, and thermal properties of resulting polymer. Thermochimica Acta, 2022, 710, 179177.	1.2	7
192	Complementarity methodology as applied for solution of the inverse problem for solid-phase reaction kinetics II. Journal of Thermal Analysis, 1988, 34, 239-247.	0.7	6
193	A method of comparing kinetic curves obtained under isothermal and nonisothermal conditions. Thermochimica Acta, 1991, 177, 259-264.	1.2	6
194	Crystallization of ionic salts for calibration of differential scanning calorimeters. Thermochimica Acta, 2016, 640, 62-65.	1.2	6
195	An approach to the solution of the inverse kinetic problem in the case of complex processes. Thermochimica Acta, 1991, 176, 49-56.	1.2	5
196	Loading salts from solutions into nanopores: Model and its test. Chemical Physics Letters, 2013, 558, 72-76.	1.2	5
197	Some aspects of mathematical statistics as applied to nonisothermal kinetics V. Journal of Thermal Analysis, 1987, 32, 1145-1150.	0.7	4
198	Gelation of Poly(Vinylidene Fluoride) Solutions in Native and Organically Modified Silica Nanopores. Molecules, 2018, 23, 3025.	1.7	4

#	Article	IF	Citations
199	All You Need to Know about the Kinetics of Thermally Stimulated Reactions Occurring on Cooling. Molecules, 2019, 24, 1918.	1.7	4
200	Crystallization of ammonium perchlorate from solution confined to native and organically modified silica nanopores. Thermochimica Acta, 2019, 677, 109-116.	1.2	4
201	The Kinetics of Formation of Microporous Polytriazine in Diphenyl Sulfone. Molecules, 2022, 27, 3605.	1.7	4
202	The use of non-linear statistic methods for determination of kinetic parameters and kinetic functions choise according to thermogravimetric data. Thermochimica Acta, 1985, 92, 161-164.	1.2	3
203	Viscoelastic properties of crosslinked LLDPE films biaxially oriented at temperatures below melting point. Journal of Applied Polymer Science, 2007, 103, 3718-3723.	1.3	3
204	Physical Processes. , 2015, , 63-161.		3
205	The truncated ÅestÃ¡kâ€“Berggren equation is still the ÅestÃ¡kâ€“Berggren equation, just truncated. Journal of Thermal Analysis and Calorimetry, 2017, 127, 1125-1126.	2.0	3
206	Hard to swallow dry: formation of linear and cyclic oligomers in the anhydrous thermal decomposition of acetylsalicylic acid. Perkin Transactions II RSC, 2001, , 436-437.	1.1	2
207	Chemical Processes. , 2015, , 163-231.		2
208	Is the kinetics of crosslinking polymerization the same on heating and cooling?. Polymer, 2019, 161, 8-15.	1.8	2
209	Nanoconfined gelation in systems based on stearic and 12-hydroxystearic acids: A calorimetric study. Journal of Molecular Liquids, 2021, 335, 116191.	2.3	2
210	Evaluation of activation energy of thermally stimulated solid-state reactions under arbitrary variation of temperature. , 1997, 18, 393.		2
211	Kinetic information and models used for its extraction. Thermochimica Acta, 1992, 200, 461-466.	1.2	1
212	Macromol. Chem. Phys. 23/2007. Macromolecular Chemistry and Physics, 2007, 208, 2580-2580.	1.1	1
213	Notes on workshop on kinetics/ESTAC-10, Rotterdam. Journal of Thermal Analysis and Calorimetry, 2011, 105, 931-931.	2.0	1
214	Dr. Joseph Henry Flynn. Thermochimica Acta, 2011, 523, 258-259.	1.2	1
215	Isoconversional Kinetics by Fast Scanning Calorimetry. , 2016, , 237-257.		1
216	Nanoconfined gelation of polyacrylonitrile, poly(vinyl alcohol), and isotactic polypropylene probed by calorimetry. Soft Matter, 2020, 16, 3285-3293.	1.2	1

#	Article	IF	Citations
217	Effect of viscosity on the kinetics of initial cure stages. , 2000, 201, 199.		1
218	Remarks on â€œtransformation of dynamic DSC curves for thermosetting polymers in curing kinetic analysisâ€• Journal of Thermal Analysis, 1991, 37, 1109-1110.	0.7	0