Zeljko D CupiÄ

List of Publications by Year
in descending order

79	756	566801 15	642321 23
papers	citations	h-index	g-index

82	82	82	502
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Pseudo-steady states in the model of the Brayâ€“Liebhafsky oscillatory reaction. Journal of the Chemical Society, Faraday Transactions, 1997, 93, 2147-2152.	1.7	62
2	Mathematical modeling of the hypothalamicâ€“pituitaryâ€“adrenal system activity. Mathematical Biosciences, 2005, 197, 173-187.	0.9	58
3	Predictive modeling of the hypothalamic-pituitary-adrenal (HPA) axis response to acute and chronic stress. Endocrine Journal, 2011, 58, 889-904.	0.7	41
4	Cyclohexane oxidation and cyclohexyl hydroperoxide decomposition by poly(4-vinylpyridine-co-divinylbenzene) supported cobalt and chromium complexes. Chemical Engineering Journal, 2010, 157, 181-188.	6.6	36
5	Improvement of the stoichiometric network analysis for determination of instability conditions of complex nonlinear reaction systems. Chemical Engineering Science, 2010, 65, 3718-3728.	1.9	29
6	Stoichiometric Network Analysis and Associated Dimensionless Kinetic Equations. Application to a Model of the Brayâ˜Liebhafsky Reaction. Journal of Physical Chemistry A, 2008, 112, 13452-13457.	1.1	28
7	Malonic acid concentration as a control parameter in the kinetic analysis of the Belousovâ€“Zhabotinsky reaction under batch conditions. Physical Chemistry Chemical Physics, 2008, 10, 6658.	1.3	27
8	Modelling cholesterol effects on the dynamics of the hypothalamicâ€“pituitaryâ€“adrenal (HPA) axis. Mathematical Medicine and Biology, 2016, 33, 1-28.	0.8	23
9	The chaotic sequences in the Brayâ€“Liebhafsky reaction in an open reactor. Physical Chemistry Chemical Physics, 2008, 10, 5848.	1.3	22
10	Regularity of Intermittent Bursts in Briggsï£¿Rauscher Oscillating Systems with Phenol. Helvetica Chimica Acta, 2014, 97, 321-333.	1.0	19
11	Structures of chaos in open reaction systems. Physical Chemistry Chemical Physics, 2011, 13, 20162.	1.3	18
12	The influence of the isomerization reactions on the soybean oil hydrogenation process. Journal of Molecular Catalysis A, 2000, 159, 353-357.	4.8	17
13	Fluctuations in transient response of adsorption-based plasmonic sensors. Sensors and Actuators B: Chemical, 2014, 190, 419-428.	4.0	17
14	Advances in mathematical modelling of the hypothalamicâ€“pituitaryâ€“adrenal (HPA) axis dynamics and the neuroendocrine response to stress. Current Opinion in Chemical Engineering, 2018, 21, 84-95.	3.8	16
15	Examinations of Cross-Linked Polyvinylpyridine in Open Reactor. Materials Science Forum, 2005, 494, 369-374.	0.3	15
16	Toluene Degradation in Water Using AlFe-Pillared Clay Catalysts. Chinese Journal of Catalysis, 2009, 30, 14-18.	6.9	15
17	Synthesis, Characterization and Application Î¿f Al,Fe-Pillared Clays. Acta Physica Polonica A, 2009, 115, 811-815.	0.2	14
18	Textural and fractal properties of CuO/Al2O3 catalyst supports. Chemical Engineering Journal, 2006, 120, 55-61.	6.6	13

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19	Contraction of the model for the Brayâ€“Liebhafsky oscillatory reaction by eliminating intermediate I2O. Journal of Chemical Physics, 1999, 110, 3951-3954.	1.2	12
20	The stability of the extended model of hypothalamic-pituitary-adrenal axis examined by stoichiometric network analysis. Russian Journal of Physical Chemistry A, 2011, 85, 2327-2335.	0.1	11
21	Plasmonic sensors in multi-analyte environment: Rate constants and transient analysis. Chemical Engineering Research and Design, 2014, 92, 91-101.	2.7	11
22	Dynamic transitions in a model of the hypothalamic-pituitary-adrenal axis. Chaos, 2016, 26, 033111.	1.0	11
23	Intermittent chaos in the Brayâ€“Liebhafsky oscillator. Temperature dependence. Physical Chemistry Chemical Physics, 2016, 18, 9770-9778.	1.3	11
24	The sorption and crystallographic characteristics of alumina activated in a reactor for pneumatic transport. Journal of the Serbian Chemical Society, 2006, 71, 1237-1246.	0.4	11
25	Characteristics and catalytic behavior of supported NiMgAg/D catalysts in the partial hydrogenation of soybean oil. Reaction Kinetics, Mechanisms and Catalysis, 2015, 115, 105-127.	0.8	10
26	Model of the nonlinear reaction system with autocatalysis and autoinhibition: Stability of dynamic states. Hemijska Industrija, 2012, 66, 637-646.	0.3	10
27	Dynamic behavior of the bray-liebhafsky oscillatory reaction controlled by sulfuric acid and temperature. Russian Journal of Physical Chemistry A, 2011, 85, 2310-2316.	0.1	9
28	The Illustration of Multistability. Journal of Chemical Education, 2000, 77, 1502.	1.1	8
29	Monolayer gas adsorption in plasmonic sensors: Comparative analysis of kinetic models. Russian Journal of Physical Chemistry A, 2013, 87, 2134-2139.	0.1	8
30	Autocatalator as the source of instability in the complex non-linear neuroendocrine model. International Journal of Non-Linear Mechanics, 2015, 73, 25-30.	1.4	8
31	The HPA axis and ethanol: a synthesis of mathematical modelling and experimental observations. Addiction Biology, 2017, 22, 1486-1500.	1.4	8
32	Stoichiometric network analysis of a reaction system with conservation constraints. Chaos, 2018, 28, 083114.	1.0	8
33	Fractal analysis of physical adsorption on surfaces of acid activated bentonites from Serbia. Chemical Industry and Chemical Engineering Quarterly, 2008, 14, 227-229.	0.4	8
34	Inhibition effects in the partial oxidation of cyclohexane on polymer supported Co(II) catalysts. Journal of the Serbian Chemical Society, 2005, 70, 209-221.	0.4	8
35	Activity of polymer supported cobalt catalyst in the Bray-Liebhafsky oscillator. Russian Journal of Physical Chemistry A, 2009, 83, 1468-1472.	0.1	7
36	Mixed-mode oscillations and chaos in return maps of an oscillatory chemical reaction. Russian Journal of Physical Chemistry A, 2015, 89, 2349-2358.	0.1	7

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37	The perspective of using nanocatalysts in the environmental requirements and energy needs of industry. , 2019, , 91-122.		7
38	The Bray-Liebhafsky reaction. Influence of some polymers based on poly (4-vinylpyridine). Reaction Kinetics and Catalysis Letters, 1995, 54, 43-49.	0.6	6
39	Adsorption-induced fluctuations and noise in plasmonic metamaterial devices. Physica Scripta, 2014, T162, 014047.	1.2	6
40	Complex bifurcations in the oscillatory reaction model. Chaos, Solitons and Fractals, 2016, 87, 84-91.	2.5	6
41	Bifurcation analysis of the reduced model of the Brayâ€“Liebhafsky reaction. Reaction Kinetics, Mechanisms and Catalysis, 2016, 118, 39-55.	0.8	6
42	Temperature influence on the malonic acid decomposition in the Belousov-Zhabotinsky reaction. Russian Journal of Physical Chemistry A, 2009, 83, 1496-1501.	0.1	5
43	Large deviation spectra of chaotic time series from Bray-Liebhafsky reaction. Russian Journal of Physical Chemistry A, 2009, 83, 1526-1530.	0.1	5
44	Methanol electrooxidation in alkaline solutions on platinum-based electrodes: Classical and dynamical approach. Russian Journal of Physical Chemistry A, 2013, 87, 2127-2133.	0.1	5
45	New Experimental and Mechanistic Investigation on the KSCN-H2O2-NaOH-Cu(II)-Catalyzed Oscillating System (OrbÃn-Epstein Reaction): Inhibitory Effects by Diphenols. International Journal of Chemical Kinetics, 2015, 47, 82-92.	1.0	5
46	Experimental and mechanistic study of the inhibitory effects by phenolics on the oscillations of the OrbÃnâ€“Epstein Reaction. Reaction Kinetics, Mechanisms and Catalysis, 2018, 123, 125-139.	0.8	5
47	Kinetics of the Bray-Liebhafsky oscillatory reaction perturbed by polymer supported cobalt catalyst. Science of Sintering, 2011, 43, 55-62.	0.5	5
48	Influence of most important radicals on the numerically simulated belousov-zhabotinsky oscillatory reaction under batch conditions. Russian Journal of Physical Chemistry A, 2011, 85, 2274-2278.	0.1	4
49	Current rates and reaction rates in the Stoichiometric Network Analysis (SNA). Open Chemistry, 2015, 13, .	1.0	4
50	Intermittent Chaos in the Brayâ€“Liebhafsky Oscillator. Dependence of Dynamic States on the Iodate Concentration. Russian Journal of Physical Chemistry A, 2017, 91, 2525-2529.	0.1	4
51	Corticosterone oscillations during mania induction in the lateral hypothalamic kindled ratâ€”Experimental observations and mathematical modeling. PLoS ONE, 2017, 12, e0177551.	1.1	4
52	Temperature dependence of catalytic cyclohexane partial oxidation in a polytetrafluoroethylene reactor. Russian Journal of Physical Chemistry A, 2007, 81, 1398-1401.	0.1	3
53	Numerical evidence of complex nonlinear phenomena of the Belousov-Zhabotinsky oscillatory reaction under batch conditions. Russian Journal of Physical Chemistry A, 2013, 87, 2140-2145.	0.1	3
54	Non-isothermal reduction of silica-supported nickel catalyst precursors in hydrogen atmosphere: a kinetic study and statistical interpretation. Journal of the Iranian Chemical Society, 2014, 11, 1743-1758.	1.2	3

#	ARTICLE	IF	CITATIONS
55	Dynamics and kinetics of complex reaction systems. Contributions of the Professor emeritus Ljiljana Kolar-AniÄ‡. Reaction Kinetics, Mechanisms and Catalysis, 2018, 123, 1-15.	0.8	3
56	Contraction of the Complex Models by the Stoichiometric Network Analysis. , 1999, , 75-79.		3
57	Non-isothermal kinetic characterisation of a gas-solid reaction by TG analysis. Journal of the Serbian Chemical Society, 2005, 70, 1301-1311.	0.4	3
58	Kinetic analytical method for determination of uric acid in human urine using analyte pulse perturbation technique. Journal of the Brazilian Chemical Society, 2012, , .	0.6	2
59	Perturbations of the Dushman Reaction with Piroxicam: Experimental and Model Calculations. Helvetica Chimica Acta, 2014, 97, 47-55.	1.0	2
60	Return map analysis of the highly nonlinear Brayâ€“Liebhafsky reaction model. Reaction Kinetics, Mechanisms and Catalysis, 2016, 118, 27-38.	0.8	2
61	Modelling of the Hypothalamic-Pituitary-Adrenal Axis Perturbations by Externally Induced Cholesterol Pulses of Finite Duration and with Asymmetrically Distributed Concentration Profile. Russian Journal of Physical Chemistry A, 2017, 91, 2600-2607.	0.1	2
62	Bifurcation analysis: a tool for determining model parameters of the considered process. Reaction Kinetics, Mechanisms and Catalysis, 2018, 123, 31-45.	0.8	2
63	Alternating catalytic reactions. Reaction Kinetics, Mechanisms and Catalysis, 2019, 126, 577-586.	0.8	2
64	Brayâ€“Liebhafsky oscillatory reaction as the matrix system for the kinetic determination of microquantities of alizarin and purpurin. Reaction Kinetics, Mechanisms and Catalysis, 2020, 130, 655-668.	0.8	2
65	Editorial: Advances in Oscillating Reactions. Frontiers in Chemistry, 2021, 9, 690699.	1.8	2
66	Oscillators: Phenomenological mappings and analogies: First part: Mathematical analogy and chains. Scientific Technical Review, 2015, 65, 27-38.	0.3	2
67	Analysis of transients in adsorption-desorption at the surface of plasmonic sensors: Nonlinear versus linear approach. , 2012, , .		1
68	Kinetic Analysis of Nonisothermal Reduction of Silica-Supported Nickel Catalyst Precursors in a Hydrogen Atmosphere. Chemical Engineering Communications, 2016, 203, 182-199.	1.5	1
69	Intermittent Chaos in the CSTR Brayâ€“Liebhafsky Oscillator-Specific Flow Rate Dependence. Frontiers in Chemistry, 2020, 8, 560274.	1.8	1
70	Oscillators: Phenomenological mappings and analogies: Second part: Structural analogy and chains. Scientific Technical Review, 2015, 65, 37-45.	0.3	1
71	Investigating chemical parameters in hot dog sausages from Novi Sad market. Veterinarski Glasnik, 2011, 65, 385-397.	0.1	1
72	Microelements and heavy metals in raw cow milk from various regions in Serbia. Veterinarski Glasnik, 2013, 67, 317-328.	0.1	1

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73	Experimentally observable transitions between dynamical states in complex reaction systems. Computers and Chemical Engineering, 2008, 32, 1293-1304.	2.0	0
74	The poissonian nature of adsorption-desorption processes. , 2012, , .		0
75	In situ videometry monitoring of bubble behavior during the electrocatalytic oxygen evolution reaction. Reaction Kinetics, Mechanisms and Catalysis, 2015, 115, 81-91.	0.8	0
76	Optimal feeding and maintenance technology for dairy cows in intensive production conditions. Veterinarski Glasnik, 2003, 57, 125-136.	0.1	0
77	Cyclic voltammetric study of the influence of porosity on electrochemical response of nickel-alumina modified glassy carbon electrode. Science of Sintering, 2018, 50, 313-321.	0.5	0
78	Oscillatory carbonylation of poly(ethylene glycol)methyl ether acetylene. Improved model of reaction mechanism. Reaction Kinetics, Mechanisms and Catalysis, 2022, 135, 3-14.	0.8	0
79	Brayâ€“Liebhafsky oscillatory reaction in a continuous-flow stirred tank reactor as the matrix system for determination of tyrosine. Reaction Kinetics, Mechanisms and Catalysis, 0, , 1.	0.8	0