Oxana Rodionova

List of Publications by Year
in descending order

73 papers	2,520 citations	218677 26 h-index	197818 49 g-index
75 all docs	75 docs citations	75 times ranked	2215 citing authors

#	Article	IF	Citations
1	Trends in Chemometrics: Food Authentication, Microbiology, and Effects of Processing. Comprehensive Reviews in Food Science and Food Safety, 2018, 17, 663-677.	11.7	317
2	Discriminant analysis is an inappropriate method of authentication. TrAC - Trends in Analytical Chemistry, 2016, 78, 17-22.	11.4	167
3	NIR spectrometry for counterfeit drug detection. Analytica Chimica Acta, 2005, 549, 151-158.	5.4	149
4	DD-SIMCA â€“ A MATLAB GUI tool for data driven SIMCA approach. Chemometrics and Intelligent Laboratory Systems, 2017, 167, 23-28.	3.5	136
5	Rigorous and compliant approaches to one-class classification. Chemometrics and Intelligent Laboratory Systems, 2016, 159, 89-96.	3.5	127
6	Concept and role of extreme objects in PCA/SIMCA. Journal of Chemometrics, 2014, 28, 429-438.	1.3	125
7	Chemometrics in analytical chemistryâ€”part II: modeling, validation, and applications. Analytical and Bioanalytical Chemistry, 2018, 410, 6691-6704.	3.7	102
8	Chemometrics in analytical chemistryâ€”part I: history, experimental design and data analysis tools. Analytical and Bioanalytical Chemistry, 2017, 409, 5891-5899.	3.7	95
9	Process analytical technology: a critical view of the chemometricians. Journal of Chemometrics, 2012, 26, 299-310.	1.3	93
10	Chemometrics: achievements and prospects. Russian Chemical Reviews, 2006, 75, 271-287.	6.5	70
11	NIR-based approach to counterfeit-drug detection. TrAC - Trends in Analytical Chemistry, 2010, 29, 795-803.	11.4	64
12	Multiclass partial least squares discriminant analysis: Taking the right wayâ€”A critical tutorial. Journal of Chemometrics, 2018, 32, e3030.	1.3	53
13	Authentication of juices from antioxidant and chemical perspectives: A feasibility quality control study using chemometrics. Food Control, 2017, 73, 796-805.	5.5	46
14	Chemometric aided NIR portable instrument for rapid assessment of medicine quality. Journal of Pharmaceutical and Biomedical Analysis, 2016, 131, 87-93.	2.8	45
15	On the type II error in SIMCA method. Journal of Chemometrics, 2014, 28, 518-522.	1.3	44
16	Using the correct intervals for prediction: A tutorial on tolerance intervals for ordinary least-squares regression. Chemometrics and Intelligent Laboratory Systems, 2007, 87, 147-154.	3.5	42
17	Chemometric tools for food fraud detection: The role of target class in non-targeted analysis. Food Chemistry, 2020, 317, 126448.	8.2	41
18	Qualitative and quantitative analysis of counterfeit fluconazole capsules: A non-invasive approach using NIR spectroscopy and chemometrics. Talanta, 2019, 195, 662-667.	5.5	38

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19	Quality control of packed raw materials in pharmaceutical industry. Analytica Chimica Acta, 2009, 642, 222-227.	5.4	37
20	PLS-DA â€“ A MATLAB GUI tool for hard and soft approaches to partial least squares discriminant analysis. Chemometrics and Intelligent Laboratory Systems, 2020, 203, 104064.	3.5	37
21	Non-linear regression analysis: new approach to traditional implementations. Journal of Chemometrics, 2000, 14, 667-692.	1.3	35
22	Quantitative risk assessment in classification of drugs with identical API content. Journal of Pharmaceutical and Biomedical Analysis, 2014, 98, 186-192.	2.8	34
23	New trends in qualitative analysis: Performance, optimization, and validation of multi-class and soft models. TrAC - Trends in Analytical Chemistry, 2021, 143, 116372.	11.4	33
24	Subset selection strategy. Journal of Chemometrics, 2008, 22, 674-685.	1.3	32
25	Popular decision rules in SIMCA: Critical review. Journal of Chemometrics, 2020, 34, e3250.	1.3	32
26	Hard and soft methods for prediction of antioxidants' activity based on the DSC measurements. Chemometrics and Intelligent Laboratory Systems, 2005, 79, 73-83.	3.5	28
27	Detection of Outliers in Projection-Based Modeling. Analytical Chemistry, 2020, 92, 2656-2664.	6.5	27
28	Noninvasive detection of counterfeited ampoules of dexamethasone using NIR with confirmation by HPLC-DAD-MS and CE-UV methods. Analytical and Bioanalytical Chemistry, 2010, 397, 1927-1935.	3.7	26
29	Application of NIR spectroscopy and chemometrics for revealing of the â€˜high quality fakesâ€™ among the medicines. Forensic Chemistry, 2018, 8, 82-89.	2.8	26
30	Efficient tools for principal component analysis of complex dataâ€” a tutorial. Chemometrics and Intelligent Laboratory Systems, 2021, 213, 104304.	3.5	26
31	Kinetic analysis of non-isothermal solid-state reactions: multi-stage modeling without assumptions in the reaction mechanism. Physical Chemistry Chemical Physics, 2017, 19, 3606-3615.	2.8	23
32	Procrustes Cross-Validationâ€”A Bridge between Cross-Validation and Independent Validation Sets. Analytical Chemistry, 2020, 92, 11842-11850.	6.5	22
33	Chemometric Authentication of Brazilian Coffees Based on Chemical Profiling. Journal of Food Science, 2019, 84, 3099-3108.	3.1	21
34	Prediction of the aging of polymer materials. Chemometrics and Intelligent Laboratory Systems, 1999, 47, 175-178.	3.5	20
35	Estimating the Parameters of the Arrhenius Equation. Kinetics and Catalysis, 2005, 46, 305-308.	1.0	20
36	In-line prediction of drug release profiles for pH-sensitive coated pellets. Analyst, The, 2011, 136, 4830.	3.5	20

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37	Chemometric non-targeted analysis for detection of soybean meal adulteration by near infrared spectroscopy. Food Control, 2021, 119, 107459.	5.5	19
38	Detection of counterfeit and substandard tablets using non-invasive NIR and chemometrics - A conceptual framework for a big screening system. Talanta, 2019, 205, 120150.	5.5	18
39	Process control and optimization with simple interval calculation method. Chemometrics and Intelligent Laboratory Systems, 2006, 81, 165-179.	3.5	17
40	Application of SIC (simple interval calculation) for object status classification and outlier detection?comparison with regression approach. Journal of Chemometrics, 2004, 18, 402-413.	1.3	15
41	Differentiating Pakistani long-grain rice grown inside and outside the accepted Basmati Himalayan geographical region using a â€˜one-classâ€™ multi-element chemometric model. Food Control, 2021, 123, 107827.	5.5	15
42	Evolutionary design of experiment for accelerated aging tests. Polymer Testing, 2000, 19, 221-229.	4.8	14
43	Path modeling and process control. Chemometrics and Intelligent Laboratory Systems, 2007, 88, 84-99.	3.5	14
44	Screening Malaysian edible birdâ€™s nests for structural adulterants and geographical origin using Mid-Infrared â€“ Attenuated Total Reflectance (MIR-ATR) spectroscopy combined with chemometric analysis by Data-Driven â€“ Soft Independent Modelling of Class Analogy (DD-SIMCA). Forensic Chemistry, 2020, 17, 100197.	2.8	14
45	Procrustes Cross-Validation of short datasets in PCA context. Talanta, 2021, 226, 122104.	5.5	11
46	The method of local linearization in the numerical solution of stiff systems of ordinary differential equations. USSR Computational Mathematics and Mathematical Physics, 1987, 27, 30-38.	0.0	10
47	Prediction of rubber stability by accelerated aging test modeling. Journal of Applied Polymer Science, 2005, 95, 1275-1284.	2.6	10
48	The Influence of Fiber-Probe Accessories Application on the Results of Near-Infrared (NIR) Measurements. Applied Spectroscopy, 2013, 67, 1401-1407.	2.2	10
49	Nonlinear multivariate curve resolution alternating least squares (NLâ€MCRâ€ALS). Journal of Chemometrics, 2014, 28, 740-748.	1.3	9
50	Confocal Raman spectroscopy and multivariate data analysis for evaluation of spermatozoa with normal and abnormal morphology. A feasibility study. Chemometrics and Intelligent Laboratory Systems, 2018, 182, 172-179.	3.5	9
51	Aerosol Dry Printing for SERS and Photoluminescence-Active Gold Nanostructures Preparation for Detection of Traces in Dye Mixtures. Nanomaterials, 2022, 12, 448.	4.1	9
52	Chemometric view on â€œcomprehensive chemometricsâ€• Chemometrics and Intelligent Laboratory Systems, 2010, 103, 19-24.	3.5	8
53	Spectrophotometric determination of Rare Earth Elements in aqueous nitric acid solutions for process control. Analytica Chimica Acta, 2015, 869, 59-67.	5.4	8
54	Non-linear multivariate curve resolution applied to the spectrophotometric determination of cerium(<scp>iii</scp>) in aqueous nitric acid solutions for process control. Analytical Methods, 2016, 8, 435-444.	2.7	8

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55	On One Method of Parameter Estimation in Chemical Kinetics Using Spectra with Unknown Spectral Components. Kinetics and Catalysis, 2004, 45, 455-466.	1.0	7
56	Application of nonlinear PCR for optimization of hybrid binder used in construction materials. Chemometrics and Intelligent Laboratory Systems, 2009, 97, 46-51.	3.5	7
57	Simple view on Simple Interval Calculation (SIC) method. Chemometrics and Intelligent Laboratory Systems, 2009, 97, 64-74.	3.5	7
58	Diffuse Reflectance Spectroscopy of Hidden Objects, Part I: Interpretation of the Reflectionâ€“Absorption-Scattering Fractions in Near-Infrared (NIR) Spectra of Polyethylene Films. Applied Spectroscopy, 2017, 71, 1760-1772.	2.2	5
59	Construction of a multivariate calibration by the simple interval calculation method. Journal of Analytical Chemistry, 2006, 61, 952-966.	0.9	3
60	Ecological assessment of landfills with multivariate analysis â€" A feasibility study. Chemometrics and Intelligent Laboratory Systems, 2007, 88, 3-10.	3.5	3
61	Application of the curve resolution method to the preprocessing spectral data in two-layer systems. Journal of Analytical Chemistry, 2016, 71, 56-61.	0.9	3
62	Diffuse Reflectance Spectroscopy of Hidden Objects. Part II: Recovery of a Target Spectrum. Applied Spectroscopy, 2017, 71, 1773-1784.	2.2	3
63	A New Approach to Analyze the Initiated Thermal Destruction of Polycarbonate. Russian Journal of Physical Chemistry B, 2020, 14, 1042-1048.	1.3	3
64	Foreword â€" Chemometrics in Russia: The first five-year plan fulfilled. Chemometrics and Intelligent Laboratory Systems, 2007, 88, 1-2.	3.5	2
65	Conference report: The first â€œfood and drug testing workshopâ€•(FDT-2018), 12â€“14 December, Genoa, Italy. Food Chemistry, 2019, 292, 106-107.	8.2	2
66	Two approaches to kinetic analysis applied to the prediction of antioxidant activity. Kinetics and Catalysis, 2006, 47, 537-548.	1.0	1
67	Symposium report: 5th Russian winter symposium on chemometrics: WSC-5. Chemometrics and Intelligent Laboratory Systems, 2006, 83, 180-181.	3.5	1
68	Multiclass partial least squares discriminant analysis: Taking the right way-A critical tutorial. Journal of Chemometrics, 2018, 32, e3076.	1.3	1
69	Trends in chemometrics and meat products. IOP Conference Series: Earth and Environmental Science, 2019, 333, 012016.	0.3	1
70	Symposium report: 6th Russian Winter Symposium on Chemometrics (WSC-6). Chemometrics and Intelligent Laboratory Systems, 2009, 96, 98-100.	3.5	0
71	The 7th winter symposium on chemometrics, Saint Petersburg, Russia, 15-19 February 2010. Journal of Chemometrics, 2011, 25, 349-351.	1.3	0
72	Influence of the quality of capsule shell on the non-invasive monitoring of medicines using Terizidone as an example. Journal of Pharmaceutical and Biomedical Analysis, 2021, 204, 114245.	2.8	0

#	Article	IF	Citations
73	Soft Independent Modeling by Class Analogy. , 2020, , 605-623.		0