Oxana Rodionova

List of Publications by Citations

71 papers	1,713 citations	22 h-index	39 g-index
75 ext. papers	2,064 ext. citations	4.3 avg, IF	5.33 L-index

#	Paper	IF	Citations
71	Trends in Chemometrics: Food Authentication, Microbiology, and Effects of Processing. *Comprehensive Reviews in Food Science and Food Safety*, **2018**, 17, 663-677	16.4	236
70	NIR spectrometry for counterfeit drug detection. *Analytica Chimica Acta*, **2005**, 549, 151-158	6.6	120
69	Discriminant analysis is an inappropriate method of authentication. *TrAC - Trends in Analytical Chemistry*, **2016**, 78, 17-22	14.6	108
68	Rigorous and compliant approaches to one-class classification. *Chemometrics and Intelligent Laboratory Systems*, **2016**, 159, 89-96	3.8	83
67	DD-SIMCA – A MATLAB GUI tool for data driven SIMCA approach. *Chemometrics and Intelligent Laboratory Systems*, **2017**, 167, 23-28	3.8	78
66	Concept and role of extreme objects in PCA/SIMCA. *Journal of Chemometrics*, **2014**, 28, 429-438	1.6	76
65	Process analytical technology: a critical view of the chemometricians. *Journal of Chemometrics*, **2012**, 26, 299-310	1.6	75
64	Chemometrics in analytical chemistry-part II: modeling, validation, and applications. *Analytical and Bioanalytical Chemistry*, **2018**, 410, 6691-6704	4.4	62
63	Chemometrics in analytical chemistry-part I: history, experimental design and data analysis tools. *Analytical and Bioanalytical Chemistry*, **2017**, 409, 5891-5899	4.4	59
62	Chemometrics: achievements and prospects. *Russian Chemical Reviews*, **2006**, 75, 271-287	6.8	54
61	NIR-based approach to counterfeit-drug detection. *TrAC - Trends in Analytical Chemistry*, **2010**, 29, 795-803	14.6	53
60	Authentication of juices from antioxidant and chemical perspectives: A feasibility quality control study using chemometrics. *Food Control*, **2017**, 73, 796-805	6.2	39
59	Chemometric aided NIR portable instrument for rapid assessment of medicine quality. *Journal of Pharmaceutical and Biomedical Analysis*, **2016**, 131, 87-93	3.5	36
58	Quality control of packed raw materials in pharmaceutical industry. *Analytica Chimica Acta*, **2009**, 642, 222-7	6.6	34
57	On the type II error in SIMCA method. *Journal of Chemometrics*, **2014**, 28, 518-522	1.6	30
56	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	3.8	30
55	Non-linear regression analysis: new approach to traditional implementations. *Journal of Chemometrics*, **2000**, 14, 667-692	1.6	29

54	Qualitative and quantitative analysis of counterfeit fluconazole capsules: A non-invasive approach using NIR spectroscopy and chemometrics. *Talanta*, **2019**, 195, 662-667	6.2	29
53	Quantitative risk assessment in classification of drugs with identical API content. *Journal of Pharmaceutical and Biomedical Analysis*, **2014**, 98, 186-92	3.5	26
52	Subset selection strategy. *Journal of Chemometrics*, **2008**, 22, 674-685	1.6	25
51	Hard and soft methods for prediction of antioxidants' activity based on the DSC measurements. *Chemometrics and Intelligent Laboratory Systems*, **2005**, 79, 73-83	3.8	25
50	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, 1927-35	4.4	24
49	Chemometric tools for food fraud detection: The role of target class in non-targeted analysis. *Food Chemistry*, **2020**, 317, 126448	8.5	22
48	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	3.6	18
47	Application of NIR spectroscopy and chemometrics for revealing of the "high quality fakes" among the medicines. *Forensic Chemistry*, **2018**, 8, 82-89	2.8	18
46	In-line prediction of drug release profiles for pH-sensitive coated pellets. *Analyst, The*, **2011**, 136, 4830-85		18
45	Prediction of the aging of polymer materials. *Chemometrics and Intelligent Laboratory Systems*, **1999**, 47, 175-178	3.8	17
44	Process control and optimization with simple interval calculation method. *Chemometrics and Intelligent Laboratory Systems*, **2006**, 81, 165-179	3.8	16
43	Estimating the Parameters of the Arrhenius Equation. *Kinetics and Catalysis*, **2005**, 46, 305-308	1.5	16
42	Multiclass partial least squares discriminant analysis: Taking the right way—A critical tutorial. *Journal of Chemometrics*, **2018**, 32, e3030	1.6	15
41	Application of SIC (simple interval calculation) for object status classification and outlier detection—comparison with regression approach. *Journal of Chemometrics*, **2004**, 18, 402-413	1.6	15
40	Chemometric Authentication of Brazilian Coffees Based on Chemical Profiling. *Journal of Food Science*, **2019**, 84, 3099-3108	3.4	13
39	PLS-DA—A MATLAB GUI tool for hard and soft approaches to partial least squares discriminant analysis. *Chemometrics and Intelligent Laboratory Systems*, **2020**, 203, 104064	3.8	13
38	Evolutionary design of experiment for accelerated aging tests. *Polymer Testing*, **2000**, 19, 221-229	4.5	12
37	Path modeling and process control. *Chemometrics and Intelligent Laboratory Systems*, **2007**, 88, 84-99	3.8	11

36	Procrustes Cross-Validation-A Bridge between Cross-Validation and Independent Validation Sets. *Analytical Chemistry*, **2020**, 92, 11842-11850	7.8	11
35	The influence of fiber-probe accessories application on the results of near-infrared (NIR) measurements. *Applied Spectroscopy*, **2013**, 67, 1401-7	3.1	10
34	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		10
33	Detection of counterfeit and substandard tablets using non-invasive NIR and chemometrics - A conceptual framework for a big screening system. *Talanta*, **2019**, 205, 120150	6.2	9
32	Nonlinear multivariate curve resolution alternating least squares (NL-MCR-ALS). *Journal of Chemometrics*, **2014**, 28, 740-748	1.6	9
31	Popular decision rules in SIMCA: Critical review. *Journal of Chemometrics*, **2020**, 34, e3250	1.6	8
30	Chemometric view on □omprehensive chemometrics□*Chemometrics and Intelligent Laboratory Systems*, **2010**, 103, 19-24	3.8	8
29	Prediction of rubber stability by accelerated aging test modeling. *Journal of Applied Polymer Science*, **2005**, 95, 1275-1284	2.9	8
28	Detection of Outliers in Projection-Based Modeling. *Analytical Chemistry*, **2020**, 92, 2656-2664	7.8	8
27	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	3.8	8
26	Spectrophotometric determination of Rare Earth Elements in aqueous nitric acid solutions for process control. *Analytica Chimica Acta*, **2015**, 869, 59-67	6.6	7
25	Non-linear multivariate curve resolution applied to the spectrophotometric determination of cerium(III) in aqueous nitric acid solutions for process control. *Analytical Methods*, **2016**, 8, 435-444	3.2	7
24	On One Method of Parameter Estimation in Chemical Kinetics Using Spectra with Unknown Spectral Components. *Kinetics and Catalysis*, **2004**, 45, 455-466	1.5	7
23	Chemometric non-targeted analysis for detection of soybean meal adulteration by near infrared spectroscopy. *Food Control*, **2021**, 119, 107459	6.2	7
22	Application of nonlinear PCR for optimization of hybrid binder used in construction materials. *Chemometrics and Intelligent Laboratory Systems*, **2009**, 97, 46-51	3.8	6
21	Simple view on Simple Interval Calculation (SIC) method. *Chemometrics and Intelligent Laboratory Systems*, **2009**, 97, 64-74	3.8	6
20	Screening Malaysian edible birds□ nests for structural adulterants and geographical origin using Mid-Infrared □Attenuated Total Reflectance (MIR-ATR) spectroscopy combined with chemometric analysis by Data-Driven □Soft Independent Modelling of Class Analogy (DD-SIMCA). *Forensic Chemistry*, **2020**, 17, 100197	2.8	6
19	New trends in qualitative analysis: Performance, optimization, and validation of multi-class and soft models. *TrAC - Trends in Analytical Chemistry*, **2021**, 143, 116372	14.6	6

18	Differentiating Pakistani long-grain rice grown inside and outside the accepted Basmati Himalayan geographical region using a one-class multi-element chemometric model. *Food Control*, **2021**, 123, 107827	6.2	5
17	Efficient tools for principal component analysis of complex data a tutorial. *Chemometrics and Intelligent Laboratory Systems*, **2021**, 213, 104304	3.8	5
16	Aerosol Dry Printing for SERS and Photoluminescence-Active Gold Nanostructures Preparation for Detection of Traces in Dye Mixtures.. *Nanomaterials*, **2022**, 12,	5.4	4
15	Diffuse Reflectance Spectroscopy of Hidden Objects, Part I: Interpretation of the Reflection-Absorption-Scattering Fractions in Near-Infrared (NIR) Spectra of Polyethylene Films. *Applied Spectroscopy*, **2017**, 71, 1760-1772	3.1	3
14	Construction of a multivariate calibration by the simple interval calculation method. *Journal of Analytical Chemistry*, **2006**, 61, 952-966	1.1	3
13	Application of the curve resolution method to the preprocessing spectral data in two-layer systems. *Journal of Analytical Chemistry*, **2016**, 71, 56-61	1.1	3
12	Conference report: The first "food and drug testing workshop" (FDT-2018), 12-14 December, Genoa, Italy. *Food Chemistry*, **2019**, 292, 106-107	8.5	2
11	Ecological assessment of landfills with multivariate analysis A feasibility study. *Chemometrics and Intelligent Laboratory Systems*, **2007**, 88, 3-10	3.8	2
10	Foreword Chemometrics in Russia: The first five-year plan fulfilled. *Chemometrics and Intelligent Laboratory Systems*, **2007**, 88, 1-2	3.8	2
9	A New Approach to Analyze the Initiated Thermal Destruction of Polycarbonate. *Russian Journal of Physical Chemistry B*, **2020**, 14, 1042-1048	1.2	2
8	Diffuse Reflectance Spectroscopy of Hidden Objects. Part II: Recovery of a Target Spectrum. *Applied Spectroscopy*, **2017**, 71, 1773-1784	3.1	1
7	Trends in chemometrics and meat products. *IOP Conference Series: Earth and Environmental Science*, **2019**, 333, 012016	0.3	1
6	Two approaches to kinetic analysis applied to the prediction of antioxidant activity. *Kinetics and Catalysis*, **2006**, 47, 537-548	1.5	1
5	Symposium report: 5th Russian winter symposium on chemometrics: WSC-5. *Chemometrics and Intelligent Laboratory Systems*, **2006**, 83, 180-181	3.8	1
4	Procrustes Cross-Validation of short datasets in PCA context. *Talanta*, **2021**, 226, 122104	6.2	1
3	The 7th winter symposium on chemometrics, Saint Petersburg, Russia, 15 19 February 2010. *Journal of Chemometrics*, **2011**, 25, 349-351	1.6	
2	Soft Independent Modeling by Class Analogy **2020**, 605-623		
1	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	3.5	