Alexey L Pomerantsev

List of Publications by Year
in descending order

94 papers	3,196 citations	186209 28 h-index	168321 53 g-index
97 all docs	97 docs citations	97 times ranked	2837 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.	5.9	317
2	Discriminant analysis is an inappropriate method of authentication. TrAC - Trends in Analytical Chemistry, 2016, 78, 17-22.	5.8	167
3	NIR spectrometry for counterfeit drug detection. Analytica Chimica Acta, 2005, 549, 151-158.	2.6	149
4	DD-SIMCA â€“ A MATLAB GUI tool for data driven SIMCA approach. Chemometrics and Intelligent Laboratory Systems, 2017, 167, 23-28.	1.8	136
5	Rigorous and compliant approaches to one-class classification. Chemometrics and Intelligent Laboratory Systems, 2016, 159, 89-96.	1.8	127
6	Concept and role of extreme objects in PCA/SIMCA. Journal of Chemometrics, 2014, 28, 429-438.	0.7	125
7	Acceptance areas for multivariate classification derived by projection methods. Journal of Chemometrics, 2008, 22, 601-609.	0.7	108
8	The impact of signal pre-processing on the final interpretation of analytical outcomes â€“ A tutorial. Analytica Chimica Acta, 2019, 1058, 9-17.	2.6	106
9	Chemometrics in analytical chemistryâ€”part II: modeling, validation, and applications. Analytical and Bioanalytical Chemistry, 2018, 410, 6691-6704.	1.9	102
10	E-nose, e-tongue and e-eye for edible olive oil characterization and shelf life assessment: A powerful data fusion approach. Talanta, 2018, 182, 131-141.	2.9	100
11	Chemometrics in analytical chemistryâ€”part I: history, experimental design and data analysis tools. Analytical and Bioanalytical Chemistry, 2017, 409, 5891-5899.	1.9	95
12	Process analytical technology: a critical view of the chemometricians. Journal of Chemometrics, 2012, 26, 299-310.	0.7	93
13	Chemometrics: achievements and prospects. Russian Chemical Reviews, 2006, 75, 271-287.	2.5	70
14	NIR-based approach to counterfeit-drug detection. TrAC - Trends in Analytical Chemistry, 2010, 29, 795-803.	5.8	64
15	Multiclass partial least squares discriminant analysis: Taking the right wayâ€”A critical tutorial. Journal of Chemometrics, 2018, 32, e3030.	0.7	53
16	Authentication of juices from antioxidant and chemical perspectives: A feasibility quality control study using chemometrics. Food Control, 2017, 73, 796-805.	2.8	46
17	Chemometric aided NIR portable instrument for rapid assessment of medicine quality. Journal of Pharmaceutical and Biomedical Analysis, 2016, 131, 87-93.	1.4	45
18	On the type II error in SIMCA method. Journal of Chemometrics, 2014, 28, 518-522.	0.7	44

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19	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.	1.8	42
20	Chemometric tools for food fraud detection: The role of target class in non-targeted analysis. Food Chemistry, 2020, 317, 126448.	4.2	41
21	Qualitative pattern recognition in chemistry: Theoretical background and practical guidelines. Microchemical Journal, 2021, 162, 105725.	2.3	40
22	Qualitative and quantitative analysis of counterfeit fluconazole capsules: A non-invasive approach using NIR spectroscopy and chemometrics. Talanta, 2019, 195, 662-667.	2.9	38
23	Quality control of packed raw materials in pharmaceutical industry. Analytica Chimica Acta, 2009, 642, 222-227.	2.6	37
24	A modified mid-level data fusion approach on electronic nose and FT-NIR data for evaluating the effect of different storage conditions on rice germ shelf life. Talanta, 2020, 206, 120208.	2.9	37
25	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.	1.8	37
26	Quantitative risk assessment in classification of drugs with identical API content. Journal of Pharmaceutical and Biomedical Analysis, 2014, 98, 186-192.	1.4	34
27	New trends in qualitative analysis: Performance, optimization, and validation of multi-class and soft models. TrAC - Trends in Analytical Chemistry, 2021, 143, 116372.	5.8	33
28	Subset selection strategy. Journal of Chemometrics, 2008, 22, 674-685.	0.7	32
29	Assessment of the Efficiency of a Nanospherical Gallic Acid Dendrimer for Longâ€Term Preservation of Essential Oils: An Integrated Chemometricâ€Assisted FTIR Study. ChemistrySelect, 2019, 4, 8891-8901.	0.7	32
30	Popular decision rules in SIMCA: Critical review. Journal of Chemometrics, 2020, 34, e3250.	0.7	32
31	Rapid and direct detection of small microplastics in aquatic samples by a new near infrared hyperspectral imaging (NIR-HSI) method. Chemosphere, 2020, 260, 127655.	4.2	30
32	An innovative multivariate strategy for HSI-NIR images to automatically detect defects in green coffee. Talanta, 2019, 199, 270-276.	2.9	29
33	Hard and soft methods for prediction of antioxidants' activity based on the DSC measurements. Chemometrics and Intelligent Laboratory Systems, 2005, 79, 73-83.	1.8	28
34	Detection of Outliers in Projection-Based Modeling. Analytical Chemistry, 2020, 92, 2656-2664.	3.2	27
35	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.	1.9	26
36	Application of NIR spectroscopy and chemometrics for revealing of the â€˜high quality fakesâ€™ among the medicines. Forensic Chemistry, 2018, 8, 82-89.	1.7	26

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37	Efficient tools for principal component analysis of complex dataâ€" a tutorial. Chemometrics and Intelligent Laboratory Systems, 2021, 213, 104304.	1.8	26
38	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.	1.3	23
39	Prediction of quality parameters in straw wine by means of FT-IR spectroscopy combined with multivariate data processing. Food Chemistry, 2020, 305, 125512.	4.2	23
40	Procrustes Cross-Validationâ€"A Bridge between Cross-Validation and Independent Validation Sets. Analytical Chemistry, 2020, 92, 11842-11850.	3.2	22
41	Chemometric Authentication of Brazilian Coffees Based on Chemical Profiling. Journal of Food Science, 2019, 84, 3099-3108.	1.5	21
42	Analysing the water spectral pattern by near-infrared spectroscopy and chemometrics as a dynamic multidimensional biomarker in preservation: rice germ storage monitoring. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2022, 265, 120396.	2.0	21
43	Prediction of the aging of polymer materials. Chemometrics and Intelligent Laboratory Systems, 1999, 47, 175-178.	1.8	20
44	Confidence intervals for nonlinear regression extrapolation. Chemometrics and Intelligent Laboratory Systems, 1999, 49, 41-48.	1.8	20
45	Estimating the Parameters of the Arrhenius Equation. Kinetics and Catalysis, 2005, 46, 305-308.	0.3	20
46	In-line prediction of drug release profiles for pH-sensitive coated pellets. Analyst, The, 2011, 136, 4830.	1.7	20
47	Assessing the Feasibility of a Miniaturized Near-Infrared Spectrometer in Determining Quality Attributes of San Marzano Tomato. Food Analytical Methods, 2019, 12, 1497-1510.	1.3	20
48	Chemometric non-targeted analysis for detection of soybean meal adulteration by near infrared spectroscopy. Food Control, 2021, 119, 107459.	2.8	19
49	Detection of counterfeit and substandard tablets using non-invasive NIR and chemometrics - A conceptual framework for a big screening system. Talanta, 2019, 205, 120150.	2.9	18
50	Process control and optimization with simple interval calculation method. Chemometrics and Intelligent Laboratory Systems, 2006, 81, 165-179.	1.8	17
51	Application of SIC (simple interval calculation) for object status classification and outlier detection?comparison with regression approach. Journal of Chemometrics, 2004, 18, 402-413.	0.7	15
52	Phenomenological modeling of anomalous diffusion in polymers. Journal of Applied Polymer Science, 2005, 96, 1102-1114.	1.3	15
53	Combining excitation-emission matrix fluorescence spectroscopy, parallel factor analysis, cyclodextrin-modified micellar electrokinetic chromatography and partial least squares class-modelling for green tea characterization. Journal of Pharmaceutical and Biomedical Analysis, 2018, 159, 311-317.	1.4	15
54	An in-depth study of cheese ripening by means of NIR hyperspectral imaging: Spatial mapping of dehydration, proteolysis and lipolysis. Food Chemistry, 2021, 343, 128547.	4.2	15

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55	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.	2.8	15
56	Evolutionary design of experiment for accelerated aging tests. Polymer Testing, 2000, 19, 221-229.	2.3	14
57	Path modeling and process control. Chemometrics and Intelligent Laboratory Systems, 2007, 88, 84-99.	1.8	14
58	Fast determination of extra-virgin olive oil acidity by voltammetry and Partial Least Squares regression. Analytica Chimica Acta, 2019, 1056, 7-15.	2.6	14
59	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.	1.7	14
60	Successive Bayesian estimation of reaction rate constants from spectral data. Chemometrics and Intelligent Laboratory Systems, 2003, 66, 127-139.	1.8	11
61	Procrustes Cross-Validation of short datasets in PCA context. Talanta, 2021, 226, 122104.	2.9	11
62	Prediction of rubber stability by accelerated aging test modeling. Journal of Applied Polymer Science, 2005, 95, 1275-1284.	1.3	10
63	The Influence of Fiber-Probe Accessories Application on the Results of Near-Infrared (NIR) Measurements. Applied Spectroscopy, 2013, 67, 1401-1407.	1.2	10
64	Nonlinear multivariate curve resolution alternating least squares (NLâ€MCRâ€ALS). Journal of Chemometrics, 2014, 28, 740-748.	0.7	9
65	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.	1.8	9
66	Chemometric view on â€œcomprehensive chemometricsâ€• Chemometrics and Intelligent Laboratory Systems, 2010, 103, 19-24.	1.8	8
67	Spectrophotometric determination of Rare Earth Elements in aqueous nitric acid solutions for process control. Analytica Chimica Acta, 2015, 869, 59-67.	2.6	8
68	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.	1.3	8
69	On One Method of Parameter Estimation in Chemical Kinetics Using Spectra with Unknown Spectral Components. Kinetics and Catalysis, 2004, 45, 455-466.	0.3	7
70	Application of nonlinear PCR for optimization of hybrid binder used in construction materials. Chemometrics and Intelligent Laboratory Systems, 2009, 97, 46-51.	1.8	7
71	Simple view on Simple Interval Calculation (SIC) method. Chemometrics and Intelligent Laboratory Systems, 2009, 97, 64-74.	1.8	7
72	Multivariate Classification Techniques. , 2018, , .		7

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73	Macroscopic mid-FTIR mapping and clustering-based automated data-reduction: An advanced diagnostic tool for in situ investigations of artworks. Talanta, 2020, 209, 120575.	2.9	7
74	An effective strategy for the monitoring of microplastics in complex aquatic matrices: Exploiting the potential of near infrared hyperspectral imaging (NIR-HSI). Chemosphere, 2022, 286, 131861.	4.2	7
75	A laser ablation resonance ionisation mass spectrometer (LA-RIMS) for the detection of isotope ratios of uranium at ultra-trace concentrations from solid particles and solutions. Journal of Analytical Atomic Spectrometry, 2019, 34, 1630-1638.	1.6	6
76	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.	1.2	5
77	Chemical modifications of Tonda Gentile Trilobata hazelnut and derived processing products under different infrared and hotâ€air roasting conditions: a combined analytical study. Journal of the Science of Food and Agriculture, 2018, 98, 4561-4569.	1.7	5
78	Analytical Chemistry and Chemometrics Group, Department of Pharmacy, University of Genova: An update. NIR News, 2020, 31, 30-33.	1.6	4
79	Construction of a multivariate calibration by the simple interval calculation method. Journal of Analytical Chemistry, 2006, 61, 952-966.	0.4	3
80	Application of the curve resolution method to the preprocessing spectral data in two-layer systems. Journal of Analytical Chemistry, 2016, 71, 56-61.	0.4	3
81	Diffuse Reflectance Spectroscopy of Hidden Objects. Part II: Recovery of a Target Spectrum. Applied Spectroscopy, 2017, 71, 1773-1784.	1.2	3
82	Application of Chemometrics in the Food Sciences. , 2020, , 99-111.		3
83	A New Approach to Analyze the Initiated Thermal Destruction of Polycarbonate. Russian Journal of Physical Chemistry B, 2020, 14, 1042-1048.	0.2	3
84	Determining the sensitivity of materials to polychromatic light. Journal of Applied Spectroscopy, 1987, 46, 97-101.	0.3	2
85	Conference report: The first â€œfood and drug testing workshopâ€•(FDT-2018), 12â€“14 December, Genoa, Italy. Food Chemistry, 2019, 292, 106-107.	4.2	2
86	Two approaches to kinetic analysis applied to the prediction of antioxidant activity. Kinetics and Catalysis, 2006, 47, 537-548.	0.3	1
87	Symposium report: 5th Russian winter symposium on chemometrics: WSC-5. Chemometrics and Intelligent Laboratory Systems, 2006, 83, 180-181.	1.8	1
88	Multiclass partial least squares discriminant analysis: Taking the right way-A critical tutorial. Journal of Chemometrics, 2018, 32, e3076.	0.7	1
89	Trends in chemometrics and meat products. IOP Conference Series: Earth and Environmental Science, 2019, 333, 012016.	0.2	1
90	VIII Italian Symposium on Near Infrared Spectroscopy â€“ NIRItalia 2018. Journal of Near Infrared Spectroscopy, 2019, 27, 3-5.	0.8	1

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91	Univariate and multivariate strategies for the rheological tests evaluation: Influence of additives in composite materials. Journal of Applied Polymer Science, 2020, 137, 49019.	1.3	1
92	Change in the physicomechanical properties of polyethylene on radiation ageing. Polymer Science USSR, 1989, 31, 1007-1011.	0.2	0
93	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.	1.4	0
94	Soft Independent Modeling by Class Analogy. , 2020, , 605-623.		0