MarÃ-a Pilar Callao

List of Publications by Year
in descending order

74 papers	3,218 citations	147801 31 h-index	161849 54 g-index
75 all docs	75 docs citations	75 times ranked	3969 citing authors

#	Article	IF	Citations
1	Kinetic and adsorption study of acid dye removal using activated carbon. Chemosphere, 2007, 69, 1151-1158.	8.2	292
2	Chromium determination and speciation since 2000. TrAC - Trends in Analytical Chemistry, 2006, 25, 1006-1015.	11.4	288
3	An overview of multivariate qualitative methods for food fraud detection. Food Control, 2018, 86, 283-293.	5.5	217
4	An analytical overview of processes for removing organic dyes from wastewater effluents. TrAC - Trends in Analytical Chemistry, 2010, 29, 1202-1211.	11.4	201
5	FT-Raman and NIR spectroscopy data fusion strategy for multivariate qualitative analysis of food fraud. Talanta, 2016, 161, 80-86.	5.5	130
6	Determining the adulteration of spices with Sudan I-II-II-IV dyes by UVâ€“visible spectroscopy and multivariate classification techniques. Talanta, 2009, 79, 887-892.	5.5	104
7	Analytical applications of second-order calibration methods. Analytica Chimica Acta, 2008, 627, 169-183.	5.4	96
8	A tutorial on the validation of qualitative methods: From the univariate to the multivariate approach. Analytica Chimica Acta, 2015, 891, 62-72.	5.4	95
9	Surface Enhanced Raman Spectroscopy (SERS) and multivariate analysis as a screening tool for detecting Sudan I dye in culinary spices. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2012, 87, 135-141.	3.9	86
10	Plasmonic Nanoprobes for Realâ€Time Optical Monitoring of Nitric Oxide inside Living Cells. Angewandte Chemie - International Edition, 2013, 52, 13694-13698.	13.8	74
11	1H NMR and UV-visible data fusion for determining Sudan dyes in culinary spices. Talanta, 2011, 84, 829-833.	5.5	69
12	Detection of several common adulterants in raw milk by MID-infrared spectroscopy and one-class and multi-class multivariate strategies. Food Chemistry, 2017, 230, 68-75.	8.2	66
13	Multivariate screening in food adulteration: Untargeted versus targeted modelling. Food Chemistry, 2014, 147, 177-181.	8.2	64
14	High-resolution 1H Nuclear Magnetic Resonance spectrometry combined with chemometric treatment to identify adulteration of culinary spices with Sudan dyes. Food Chemistry, 2011, 124, 1139-1145.	8.2	60
15	Multivariate experimental design in environmental analysis. TrAC - Trends in Analytical Chemistry, 2014, 62, 86-92.	11.4	59
16	Strategy for introducing NIR spectroscopy and multivariate calibration techniques in industry. TrAC - Trends in Analytical Chemistry, 2003, 22, 634-640.	11.4	54
17	Authentication of the geographical origin of extra-virgin olive oil of the Arbequina cultivar by chromatographic fingerprinting and chemometrics. Talanta, 2019, 203, 194-202.	5.5	46
18	Validation of multivariate screening methodology. Case study: Detection of food fraud. Analytica Chimica Acta, 2014, 827, 28-33.	5.4	45

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19	Partial least squares density modeling (PLS-DM) â€“ A new class-modeling strategy applied to the authentication of olives in brine by near-infrared spectroscopy. Analytica Chimica Acta, 2014, 851, 30-36.	5.4	43
20	Multivariate standardization techniques using UV-Vis data. Chemometrics and Intelligent Laboratory Systems, 1997, 38, 63-73.	3.5	39
21	HPLC-UV and HPLC-CAD chromatographic data fusion for the authentication of the geographical origin of palm oil. Talanta, 2017, 170, 413-418.	5.5	38
22	Monitoring ethylene content in heterophasic copolymers by near-infrared spectroscopy. Analytica Chimica Acta, 2001, 445, 213-220.	5.4	37
23	Coupling of Sequential Injection Chromatography with Multivariate Curve Resolution-Alternating Least-Squares for Enhancement of Peak Capacity. Analytical Chemistry, 2007, 79, 7767-7774.	6.5	37
24	Detection of adulterants in grape nectars by attenuated total reflectance Fourier-transform mid-infrared spectroscopy and multivariate classification strategies. Food Chemistry, 2018, 266, 254-261.	8.2	37
25	Determination of amoxicillin in pharmaceuticals using sequential injection analysis and multivariate curve resolution. Analytica Chimica Acta, 2004, 515, 159-165.	5.4	36
26	Study of the influential factors in the simultaneous photocatalytic degradation process of three textile dyes. Talanta, 2009, 79, 1292-1297.	5.5	36
27	1H NMR variable selection approaches for classification. A case study: The determination of adulterated foodstuffs. Talanta, 2011, 86, 316-323.	5.5	34
28	Standardization of UVâ€“visible data in a food adulteration classification problem. Food Chemistry, 2012, 134, 2326-2331.	8.2	34
29	UVâ€“visible-DAD and 1H-NMR spectroscopy data fusion for studying the photodegradation process of azo-dyes using MCR-ALS. Talanta, 2013, 117, 75-80.	5.5	33
30	Figures of merit of a SERS method for Sudan I determination at traces levels. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2013, 111, 237-241.	3.9	33
31	Multivariate standardization techniques on ion-selective sensor arrays. Analyst, The, 1999, 124, 1045-1051.	3.5	32
32	Multivariate Statistical Process Control Applied to Sulfate Determination by Sequential Injection Analysis. Analyst, The, 1997, 122, 737-741.	3.5	31
33	Simultaneous analysis of the photocatalytic degradation of polycyclic aromatic hydrocarbons using three-dimensional excitationâ€“emission matrix fluorescence and parallel factor analysis. Analytica Chimica Acta, 2006, 576, 184-191.	5.4	30
34	Multivariate standardization for correcting the ionic strength variation on potentiometric sensor arrays. Analyst, The, 2000, 125, 883-888.	3.5	29
35	Resolution of phenol, and its di-hydroxyderivative mixtures by excitationâ€“emission fluorescence using MCR-ALSApplication to the quantitative monitoring of phenol photodegradation. Talanta, 2007, 72, 800-807.	5.5	26
36	Reliability of analytical systems: use of control charts, time series models and recurrent neural networks (RNN). Chemometrics and Intelligent Laboratory Systems, 1998, 40, 1-18.	3.5	24

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37	Self-configuration of sequential injection analytical systems. Analytica Chimica Acta, 1995, 316, 27-37.	5.4	22
38	Determination of amoxicillin in pharmaceuticals using sequential injection analysis (SIA). Analytica Chimica Acta, 2003, 485, 195-204.	5.4	22
39	Determination of sulphate in water and biodiesel samples by a sequential injection analysisâ€"Multivariate curve resolution method. Analytica Chimica Acta, 2010, 676, 28-33.	5.4	22
40	ROC curves for the optimization of one-class model parameters. A case study: Authenticating extra virgin olive oil from a Catalan protected designation of origin. Talanta, 2021, 222, 121564.	5.5	22
41	Multicomponent analysis using flow systems. TrAC - Trends in Analytical Chemistry, 2007, 26, 767-774.	11.4	21
42	Automatic simultaneous determination of Ca and Mg in natural waters with no interference separation. Chemometrics and Intelligent Laboratory Systems, 1994, 24, 55-63.	3.5	20
43	Modelling of the simultaneous photodegradation of Acid Red 97, Acid Orange 61 and Acid Brown 425 using factor screening and response surface strategies. Journal of Hazardous Materials, 2010, 180, 474-480.	12.4	20
44	Variable selection for multivariate classification aiming to detect individual adulterants and their blends in grape nectars. Talanta, 2018, 190, 55-61.	5.5	20
45	Standardization of a multivariate calibration model applied to the determination of chromium in tanning sewage. Talanta, 2000, 52, 329-336.	5.5	19
46	Sequential injection analysis with second-order treatment for the determination of dyes in the exhaustion process of tanning effluents. Talanta, 2007, 71, 1393-1398.	5.5	19
47	Data fusion in the wavelet domain by means of fuzzy aggregation connectives. Analytica Chimica Acta, 2007, 584, 360-369.	5.4	19
48	Sequential injection analysis linked to multivariate curve resolution with alternating least squares. TrAC - Trends in Analytical Chemistry, 2006, 25, 77-85.	11.4	18
49	Modeling the adsorption of dyes onto activated carbon by using experimental designs. Talanta, 2008, 77, 84-89.	5.5	18
50	Evaluation of the adsorption and rate constants of a photocatalytic degradation by means of HS-MCR-ALS. Study of process variables using experimental design. Chemometrics and Intelligent Laboratory Systems, 2012, 114, 64-71.	3.5	18
51	Fractional factorial design and simplex algorithm for optimizing sequential injection analysis (SIA) and second order calibration. Chemometrics and Intelligent Laboratory Systems, 2006, 83, 127-132.	3.5	17
52	Sequential injection titration method using second-order signals: Determination of acidity in plant oils and biodiesel samples. Talanta, 2010, 81, 1572-1577.	5.5	17
53	Multisyringe chromatography (MSC) using a monolithic column for the determination of sulphonated azo dyes. Talanta, 2010, 82, 137-142.	5.5	17
54	Qualitative and quantitative multivariate strategies for determining paprika adulteration with SUDAN I and II dyes. Microchemical Journal, 2019, 145, 686-692.	4.5	17

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55	Factorial design for optimising chromium determination in tanning wastewater. Microchemical Journal, 2006, 83, 98-104.	4.5	16
56	Chromium speciation using sequential injection analysis and multivariate curve resolution. Analytica Chimica Acta, 2006, 571, 129-135.	5.4	15
57	Determining performance parameters in qualitative multivariate methods using probability of detection (POD) curves. Case study: Two common milk adulterants. Talanta, 2017, 168, 23-30.	5.5	15
58	Assessing the validity of principal component regression models in different analytical conditions. Analytica Chimica Acta, 1997, 337, 287-296.	5.4	14
59	Sequential Injection Analysis for the Simultaneous Determination of Clavulanic Acid and Amoxicillin in Pharmaceuticals Using Second-order Calibration. Analytical Sciences, 2006, 22, 131-135.	1.6	14
60	Establishing time stability for multivariate qualitative methods. Case study: Sudan I and IV adulteration in food spices. Food Control, 2018, 92, 341-347.	5.5	14
61	Outlier Detection in the Ethylene Content Determination in Propylene Copolymer by Near-Infrared Spectroscopy and Multivariate Calibration. Applied Spectroscopy, 2001, 55, 1532-1536.	2.2	12
62	Kinetic analysis of C.I. Acid Yellow 9 photooxidative decolorization by UVâ€“visible and chemometrics. Journal of Hazardous Materials, 2011, 190, 986-992.	12.4	12
63	Comparison of Different Multivariate Classification Methods for the Detection of Adulterations in Grape Nectars by Using Low-Field Nuclear Magnetic Resonance. Food Analytical Methods, 2020, 13, 108-118.	2.6	12
64	Matrix effect in second-order data. Analytica Chimica Acta, 2007, 600, 233-239.	5.4	11
65	Use of multivariate curve resolution for determination of chromium in tanning samples using sequential injection analysis. Analytical and Bioanalytical Chemistry, 2005, 382, 328-334.	3.7	10
66	Time series: a complementary technique to control charts for monitoring analytical systems. Chemometrics and Intelligent Laboratory Systems, 2003, 66, 79-87.	3.5	9
67	Chemometric resolution of NIR spectra data of a model aza-Michael reaction with a combination of local rank exploratory analysis and multivariate curve resolution-alternating least squares (MCR-ALS) method. Analytica Chimica Acta, 2009, 642, 148-154.	5.4	9
68	Optimization by means of responses surface of an analytical sequence using a sequential injection system. Talanta, 2006, 68, 1617-1622.	5.5	7
69	Analysing the Temperature Effect on the Competitiveness of the Amine Addition versus the Amidation Reaction in the Epoxidized Oil/Amine System by MCR-ALS of FTIR Data. International Journal of Analytical Chemistry, 2011, 2011, 1-10.	1.0	6
70	Simultaneous Determination of Organic Dyes Using Second-Order Data. Data Handling in Science and Technology, 2015, 29, 399-426.	3.1	5
71	Multivariate qualitative methodology for semi-quantitative information. A case study: Adulteration of olive oil with sunflower oil. Analytica Chimica Acta, 2022, 1206, 339785.	5.4	4
72	Application of time series models to the monitoring of a sensor array analytical system. TrAC - Trends in Analytical Chemistry, 2001, 20, 168-177.	11.4	3

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73	Spectroscopic and Quantitative Chemometric Analysis of the Epoxidised Oil/Amine System. Journal of Near Infrared Spectroscopy, 2010, 18, 281-290.	1.5	3
74	Chemometric strategies for authenticating extra virgin olive oils from two geographically adjacent Catalan protected designations of origin. Microchemical Journal, 2021, 169, 106611.	4.5	3