Marco F Ferrão

List of Publications by Year
in descending order

122	2,427	218677	254184
papers	citations	26	43
		h-index	g-index

122	122	122	2950
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Least-squares support vector machines and near infrared spectroscopy for quantification of common adulterants in powdered milk. Analytica Chimica Acta, 2006, 579, 25-32.	5.4	253
2	Development of methodology for identification the nature of the polyphenolic extracts by FTIR associated with multivariate analysis. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2016, 153, 94-101.	3.9	158
3	Classification of biomass through their pyrolytic bio-oil composition using FTIR and PCA analysis. Industrial Crops and Products, 2018, 111, 856-864.	5.2	134
4	Simultaneous determination of quality parameters of biodiesel/diesel blends using HATR-FTIR spectra and PLS, iPLS or siPLS regressions. Fuel, 2011, 90, 701-706.	6.4	106
5	Profiling cocaine by ATR–FTIR. Forensic Science International, 2015, 246, 65-71.	2.2	61
6	Films based on neutralized chitosan citrate as innovative composition for cosmetic application. Materials Science and Engineering C, 2016, 67, 115-124.	7.3	54
7	Near infrared spectroscopy combined with chemometrics for growth stage classification of cannabis cultivated in a greenhouse from seized seeds. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2017, 173, 318-323.	3.9	51
8	Total Acid Number Determination in Residues of Crude Oil Distillation Using ATR-FTIR and Variable Selection by Chemometric Methods. Energy & Fuels, 2010, 24, 5474-5478.	5.1	49
9	Classification of yerba mate (Ilex paraguariensis) according to the country of origin based on element concentrations. Microchemical Journal, 2014, 117, 164-171.	4.5	49
10	Total sulfur determination in residues of crude oil distillation using FT-IR/ATR and variable selection methods. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2012, 89, 82-87.	3.9	47
11	Seized cannabis seeds cultivated in greenhouse: A chemical study by gas chromatography–mass spectrometry and chemometric analysis. Science and Justice - Journal of the Forensic Science Society, 2016, 56, 35-41.	2.1	45
12	Fourier Transform Infrared Spectroscopy (FTIR) and Multivariate Analysis for Identification of Different Vegetable Oils Used in Biodiesel Production. Sensors, 2013, 13, 4258-4271.	3.8	43
13	Point-of-use electroanalytical platform based on homemade potentiostat and smartphone for multivariate data processing. Electrochimica Acta, 2016, 219, 170-177.	5.2	41
14	Ceramer coatings from castor oil or epoxidized castor oil and tetraethoxysilane. JAOCS, Journal of the American Oil Chemists' Society, 2006, 83, 147-151.	1.9	40
15	Fuel biodegradation and molecular characterization of microbial biofilms in stored diesel/biodiesel blend B10 and the effect of biocide. International Biodeterioration and Biodegradation, 2014, 95, 346-355.	3.9	39
16	A rapid and non-invasive method for the classification of natural tannin extracts by near-infrared spectroscopy and PLS-DA. Analytical Methods, 2016, 8, 644-649.	2.7	38
17	Simultaneous determination of sulphamethoxazole and trimethoprim in powder mixtures by attenuated total reflection-Fourier transform infrared and multivariate calibration. Journal of Pharmaceutical and Biomedical Analysis, 2009, 49, 800-805.	2.8	36
18	Ultraviolet spectroscopy and chemometrics for the identification of vegetable tannins. Industrial Crops and Products, 2016, 91, 279-285.	5.2	36

#	Article	IF	Citations
19	PhotoMetrix and colorimetric image analysis using smartphones. Journal of Chemometrics, 2020, 34, e3251.	1.3	34
20	Horizontal attenuated total reflection applied to simultaneous determination of ash and protein contents in commercial wheat flour. Analytica Chimica Acta, 2005, 540, 411-415.	5.4	32
21	Attenuated total reflectance with Fourier transform infrared spectroscopy (ATR/FTIR) and different PLS Algorithms for simultaneous determination of clavulanic acid and amoxicillin in powder pharmaceutical formulation. Journal of the Brazilian Chemical Society, 2011, 22, 1903-1912.	0.6	32
22	Toxic and nutrient elements in yerba mate (<i>Ilex paraguariensis</i>). Food Additives and Contaminants: Part B Surveillance, 2015, 8, 215-220.	2.8	31
23	Quantification of Lactobacillus in fermented milk by multivariate image analysis with least-squares support-vector machines. Analytical and Bioanalytical Chemistry, 2007, 387, 1105-1112.	3.7	30
24	Microbial community composition in Brazilian stored diesel fuel of varying sulfur content, using high-throughput sequencing. Fuel, 2017, 189, 340-349.	6.4	29
25	Detection of the origin of Brazilian wines based on the determination of only four elements using high-resolution continuum source flame AAS. Talanta, 2013, 111, 147-155.	5.5	28
26	Non-destructive method for determination of hydroxyl value of soybean polyol by LS-SVM using HATR/FT-IR. Analytica Chimica Acta, 2007, 595, 114-119.	5.4	27
27	Extraction method based on emulsion breaking for the determination of Cu, Fe and Pb in Brazilian automotive gasoline samples by high-resolution continuum source flame atomic absorption spectrometry. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2018, 142, 62-67.	2.9	27
28	Methods of multivariate analysis of NIR reflectance spectra for classification of yerba mate. Analytical Methods, 2014, 6, 7621-7627.	2.7	26
29	Direct determination of tannins in Acacia mearnsii bark using near-infrared spectroscopy. Analytical Methods, 2014, 6, 8299-8305.	2.7	25
30	A New Tool for Interpretation of Thermal Stability of Raw Milk by Means of the Alizarol Test Using a PLS Model on a Mobile Device. Food Analytical Methods, 2018, 11, 2022-2028.	2.6	25
31	Rapid Determination of Ethanol in Sugarcane Spirit Using Partial Least Squares Regression Embedded in Smartphone. Food Analytical Methods, 2018, 11, 1951-1957.	2.6	25
32	Determination of the Hydroxyl Value of Soybean Polyol by Attenuated Total Reflectance/Fourier Transform Infrared Spectroscopy. JAOCS, Journal of the American Oil Chemists' Society, 2007, 84, 503-508.	1.9	24
33	Element selection and concentration analysis for classifying South America wine samples according to the country of origin. Computers and Electronics in Agriculture, 2018, 150, 33-40.	7.7	24
34	Chemical and microbial storage stability studies and shelf life determinations of commercial Brazilian biodiesels stored in carbon steel containers in subtropical conditions. Fuel, 2019, 236, 993-1007.	6.4	24
35	LS-SVM: uma nova ferramenta quimiométrica para regressão multivariada. Comparação de modelos de regressão LS-SVM e PLS na quantificação de adulterantes em leite em pó empregando NIR. Quimica Nova, 2007, 30, 852-859.	0.3	22
36	Monitoring of efficacy of antimicrobial products during 60days storage simulation of diesel (B0), biodiesel (B100) and blends (B7 and B10). Fuel, 2013, 112, 153-162.	6.4	22

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37	PhotoMetrix: An Application for Univariate Calibration and Principal Components Analysis Using Colorimetry on Mobile Devices. Journal of the Brazilian Chemical Society, 2016, , .	0.6	22
38	Scott test evaluation by multivariate image analysis in cocaine samples. Microchemical Journal, 2016, 127, 87-93.	4.5	21
39	Multivariate optimization for cloud point extraction and determination of lanthanides. Analytical Methods, 2012, 4, 2809.	2.7	19
40	Effect of SiCl 4 on the preparation of functionalized mixed-structure silica from monodisperse solâ€"gel silica nanoparticles. Chemical Engineering Journal, 2016, 292, 233-245.	12.7	18
41	Green method by diffuse reflectance infrared spectroscopy and spectral region selection for the quantification of sulphamethoxazole and trimethoprim in pharmaceutical formulations. Anais Da Academia Brasileira De Ciencias, 2016, 88, 1-15.	0.8	17
42	Wavenumber selection method to determine the concentration of cocaine and adulterants in cocaine samples. Journal of Pharmaceutical and Biomedical Analysis, 2018, 152, 120-127.	2.8	17
43	Comparison between counterfeit and authentic medicines: A novel approach using differential scanning calorimetry and hierarchical cluster analysis. Journal of Pharmaceutical and Biomedical Analysis, 2019, 166, 304-309.	2.8	17
44	Chemical profiling and classification of cannabis through electrospray ionization coupled to Fourier transform ion cyclotron resonance mass spectrometry and chemometrics. Analytical Methods, 2017, 9, 4070-4081.	2.7	17
45	Fast, cheap and easy routine quantification method for atrazine and its transformation products in water matrixes using a DLLME-GC/MS method. Analytical Methods, 2018, 10, 5447-5452.	2.7	16
46	Determination of cocaine and its main adulterants in seized drugs from Rio Grande do Sul, Brazil, by a Doehlert optimized LC-DAD method. Analytical Methods, 2016, 8, 5212-5217.	2.7	15
47	Pseudallescheria boydii and Meyerozyma guilliermondii: behavior of deteriogenic fungi during simulated storage of diesel, biodiesel, and B10 blend in Brazil. Environmental Science and Pollution Research, 2018, 25, 30410-30424.	5.3	15
48	Multivariate Optimization for Extraction of Pyrethroids in Milk and Validation for GC-ECD and CG-MS/MS Analysis. International Journal of Environmental Research and Public Health, 2014, 11, 11421-11437.	2.6	14
49	Growth of Paecilomyces variotii in B0 (diesel), B100 (biodiesel) and B7 (blend), degradation and molecular detection. Brazilian Journal of Biology, 2015, 75, 541-547.	0.9	13
50	Multicriteria wavenumber selection in cocaine classification. Journal of Pharmaceutical and Biomedical Analysis, 2015, 115, 562-569.	2.8	13
51	An LCâ€"ESIâ€"MS/MS method for residues of fluoroquinolones, sulfonamides, tetracyclines and trimethoprim in feedingstuffs: validation and surveillance. Food Additives and Contaminants - Part A Chemistry, Analysis, Control, Exposure and Risk Assessment, 2018, 35, 1975-1989.	2.3	13
52	Authentication of yerba mate according to the country of origin by using Fourier transform infrared (FTIR) associated with chemometrics. Food Additives and Contaminants - Part A Chemistry, Analysis, Control, Exposure and Risk Assessment, 2015, 32, 1215-1222.	2.3	12
53	Biodegradation potential of Serratiamarcescens for diesel/biodiesel blends. International Biodeterioration and Biodegradation, 2016, 110, 141-146.	3.9	12
54	Comparison of Cocaine/Crack Biomarkers Concentrations in Oral Fluid, Urine and Plasma Simultaneously Collected From Drug Users. Journal of Analytical Toxicology, 2018, 42, 69-76.	2.8	12

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55	Simultaneous determination of sulfur, nitrogen and ash for vegetable tannins using ATR-FTIR spectroscopy and multivariate regression. Microchemical Journal, 2019, 149, 103994.	4.5	12
56	Biodiesel blend (B10) treated with a multifunctional additive (biocide) under simulated stored conditions: a field and lab scale monitoring. Biofuel Research Journal, 2017, 4, 627-636.	13.3	12
57	Determinação de umidade em café cru usando espectroscopia NIR e regressão multivariada. Food Science and Technology, 2008, 28, .	1.7	11
58	HATR–FTIR wavenumber selection for predicting biodiesel/diesel blends flash point. Chemometrics and Intelligent Laboratory Systems, 2015, 145, 1-6.	3.5	11
59	Identification of Possible Milk Adulteration Using Physicochemical Data and Multivariate Analysis. Food Analytical Methods, 2018, 11, 1994-2003.	2.6	11
60	Interval importance index to select relevant ATR-FTIR wavenumber Intervals for falsified drug classification. Journal of Pharmaceutical and Biomedical Analysis, 2018, 158, 494-503.	2.8	11
61	Rapid classification of chromoblastomycosis agents genera by infrared spectroscopy and chemometrics supervised by sequencing of rDNA regions. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2021, 254, 119647.	3.9	11
62	CHEMOSTAT: EXPLORATORY MULTIVARIATE DATA ANALYSIS SOFTWARE. Quimica Nova, 2015, , .	0.3	11
63	Determination of intrinsic viscosity of poly(ethylene terephthalate) using infrared spectroscopy and multivariate calibration method. Talanta, 2006, 69, 643-649.	5.5	10
64	Determinação de açúcar total em café cru por espectroscopia no infravermelho próximo e regressão por mínimos quadrados parciais. Quimica Nova, 2007, 30, 346-350.	0.3	10
65	Environmentally Friendly Determination of Quality Parameters of Biodiesel/Diesel Blends Using Fourier Transform Infrared Spectra. JAOCS, Journal of the American Oil Chemists' Society, 2015, 92, 309-315.	1.9	10
66	Wavelength selection framework for classifying food and pharmaceutical samples into multiple classes. Journal of Chemometrics, 2016, 30, 346-353.	1.3	10
67	A non-destructive, rapid and inexpensive methodology based on digital images for the classification of natural tannin extracts. RSC Advances, 2016, 6, 32358-32364.	3.6	10
68	Influence of Monoterpenes in Biological Activities of Nectandra megapotamica (Spreng.) Mez Essential Oils. Biomolecules, 2019, 9, 112.	4.0	10
69	Effects of winemaking on 'Marselan' red wines: volatile compounds and sensory aspects. Ciencia E Tecnica Vitivinicola, 2020, 35, 63-75.	0.9	10
70	Low cost method for copper determination in sugarcane spirits using Photometrix UVC® embedded in smartphone. Food Chemistry, 2022, 367, 130669.	8.2	10
71	Simultaneous diffuse reflectance infrared determination of clavulanic acid and amoxicillin using multivariate calibration techniques. Drug Testing and Analysis, 2012, 4, 500-506.	2.6	9
72	Structural discrimination of nanosilica particles and mixed-structure silica by multivariate analysis applied to SAXS profiles in combination with FT-IR spectroscopy. RSC Advances, 2016, 6, 72306-72316.	3.6	9

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73	Total dissolved iron and hydrogen peroxide determination using the PhotoMetrixPRO application: A portable colorimetric analysis tool for controlling important conditions in the solar photo-Fenton process. Journal of Hazardous Materials, 2019, 378, 120740.	12.4	9
74	Seizures of Clandestinely Produced Tablets in Santa Catarina, Brazil: The Increase in NPS from 2011 to 2017. Journal of Forensic Sciences, 2020, 65, 906-912.	1.6	9
75	Computer-vision based second-order (kinetic-color) data generation: arsenic quantitation in natural waters. Microchemical Journal, 2020, 157, 104916.	4.5	9
76	A genetic algorithm‐based framework for wavelength selection on sample categorization. Drug Testing and Analysis, 2017, 9, 1172-1181.	2.6	8
77	A non-equidistant wavenumber interval selection approach for classifying diesel/biodiesel samples. Chemometrics and Intelligent Laboratory Systems, 2017, 167, 171-178.	3.5	8
78	Rapid discrimination of natural polyphenols (vegetable tannins) from different plants by molecular spectroscopy and PLS-DA. Analytical Methods, 2018, 10, 968-974.	2.7	8
79	Determinação simultânea dos teores de cinza e proteína em farinha de trigo empregando NIRR-PLS e DRIFT-PLS. Food Science and Technology, 2004, 24, 333-340.	1.7	8
80	Effect of Sulfur Content on Microbial Composition and Biodegradation of a Brazilian Diesel and Biodiesel Blend (B10). Energy & Fuels, 2017, 31, 12305-12316.	5.1	7
81	Determination of Total Sugar Content in Soy-Based Drinks Using Infrared Spectroscopy and Chemometrics. Food Analytical Methods, 2018, 11, 1986-1993.	2.6	7
82	Fast quantitative determination of phenolic compounds in grape juice by UPLC-MS: method validation and characterization of juices produced with different grape varieties. Journal of Food Measurement and Characterization, 2021, 15, 1044-1056.	3.2	7
83	Quantitative analysis of total mycotoxins in metabolic extracts of four strains of Bipolaris sorokiniana (Helminthosporium sativum). Process Biochemistry, 2006, 41, 177-180.	3.7	6
84	Lipolytic activity of chromoblastomycosis agents measured by infrared spectroscopy and chemometric methods. Medical Mycology, 2009, 47, 63-69.	0.7	6
85	Development of an inexpensive, practical and non-destructive methodology based on digital images from a scanner for the classification of commercial tannins from Acacia mearnsii. Analytical Methods, 2017, 9, 3977-3982.	2.7	6
86	Geographical origin authentication of southern Brazilian red wines by means of EEM-pH four-way data modelling coupled with one class classification approach. Food Chemistry, 2021, 362, 130087.	8.2	6
87	Otimização de métodos de controle de qualidade de fármacos usando algoritmo genético e busca tabu. Pesquisa Operacional, 2003, 23, 189-207.	0.4	5
88	Exploratory Analysis Applied for the Evaluation of Yerba Mate Adulteration (Ilex paraguariensis). Food Analytical Methods, 2018, 11, 2035-2041.	2.6	5
89	Enhancing counterfeit and illicit medicines grouping via feature selection and X-ray fluorescence spectrometry. Journal of Pharmaceutical and Biomedical Analysis, 2019, 174, 198-205.	2.8	5
90	Deterioration potential of Aureobasidium pullulans on biodiesel, diesel, and B20 blend. International Biodeterioration and Biodegradation, 2020, 147, 104839.	3.9	5

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91	Wavenumber selection based on Singular Value Decomposition for sample classification. Forensic Science International, 2020, 309, 110191.	2.2	5
92	Curve fitting and linearization of UVâ€"Vis spectrophotometric measurements to estimate yeast in inoculum preparation. Analytical Biochemistry, 2021, 625, 114216.	2.4	5
93	Microbial sludge formation in Brazilian marine diesel oil (B0) and soybean methylic biodiesel blends (B10 and B20) during simulated storage. Fuel, 2022, 308, 121905.	6.4	5
94	Determination of amoxicillin content in powdered pharmaceutical formulations using DRIFTS and PLS. BJPS: Brazilian Journal of Pharmaceutical Sciences, 2007, 43, 89-96.	0.5	5
95	Blue Ballpoint Pen Inks Differentiation using Multivariate Image Analysis of Digital Images Captured with PhotoMetrix PROÂ®. Brazilian Journal of Forensic Sciences, Medical Law and Bioethics, 2020, 9, 331-355.	0.3	5
96	EXPLORATORY ANALYSIS APPLIED TO ATTENUATED TOTAL REFLECTANCE FOURIER TRANSFORM INFRARED (ATR-FTIR) OF BIODIESEL/DIESEL BLENDS. Quimica Nova, 2014, , .	0.3	4
97	Characterization of Gasoline by ^{1}H Nuclear Magnetic Resonance and Chemometrics. Analytical Letters, 2017, 50, 1767-1777.	1.8	4
98	Classification of Milk Samples Using CART. Food Analytical Methods, 2020, 13, 13-20.	2.6	4
99	Impact of water content on microbial growth in Brazilian biodiesel during simulated storage. Fuel, 2021, 297, 120761.	6.4	4
100	OTIMIZATION OF TRANSESTERIFICATION DOUBLE STEP PROCESS (TDSP) TO THE PRODUCTION OF BIODIESEL THROUGH DOEHLERT EXPERIMENTAL DESIGN. Quimica Nova, 2016, , .	0.3	3
101	Principal Component Analysis of Commercial Tannin Extracts Using Digital Images on Mobile Devices. Journal of the Brazilian Chemical Society, 2016, , .	0.6	2
102	Method Development and Total Uncertainty Estimation for Boron, Sulfur and Phosphorus Determination in Mineral Fertilizer Using ICP OES. Journal of the Brazilian Chemical Society, 2016, , .	0.6	2
103	Nature of Insoluble Material Found in the Bottom of Soybean Biodiesel Storage Tank: Chemical and Microbiological Approach. Journal of the Brazilian Chemical Society, 0, , .	0.6	2
104	Fingermark Analysis by Fourier Transform Infrared Microscopy Using Chemometric Tools. Brazilian Journal of Analytical Chemistry, 2021, 8, .	0.5	2
105	CHEMOMETRIC TOOLS AND FTIR-ATR SPECTROSCOPY APPLIED IN MILK ADULTERATED WITH CHEESE WHEY. Quimica Nova, 2019, , .	0.3	2
106	Particle Swarm Method for Optimization of Multivariate Regression Models Employees for Biodiesel Determination in Biodiesel/Vegetable Oil/Diesel Blends. Revista Virtual De Quimica, 2016, 8, 1877-1892.	0.4	2
107	Determination of Caseinomacropeptide in Brazilian Bovine Milk by High-performance Liquid Chromatographyâ€"Mass Spectrometry. Analytical Letters, 2017, 50, 2068-2077.	1.8	1
108	Chemometric Approaches in Questioned Documents. Brazilian Journal of Analytical Chemistry, 2021, , .	0.5	1

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109	Characterization of Biodiesel from Animal Fat, Vegetable Oil, and Adulterants by Infrared Spectroscopy Combined with Chemometric Methods. Energy & Fuels, 2021, 35, 13801-13812.	5.1	1
110	Multivariate regression models for the simultaneous quantitative analysis of calcium and magnesium carbonates and magnesium oxide through drifts data. Journal of the Brazilian Chemical Society, 2006, 17, 594-598.	0.6	1
111	Desenvolvimento de Modelos de RegressÃ£o Multivariada para a QuantificaÃ§Ã£o de Benzoilmetronidazol na PresenÃ§a de seus Produtos de DegradaÃ§Ã£o por Espectroscopia no Infravermelho PrÃ³ximo. Orbital, 2015, 7, .	0.3	1
112	Multivariate Analysis of the Profile of Elements Concentrations in the Yerba Mate (Ilex) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 622 Td (par	0.4	1
113	PulicaÃ§Ã£o de mÃ©todos de anÃ¡lise multivariada no controle qualitativo de essÃªncias alimentÃcias empregando espectroscopia no infravermelho mÃ©dio. Food Science and Technology, 2006, 26, 779-786.	1.7	1
114	AvaliaÃ§Ã£o de fragmentos de lenhos carbonizados de Araucariaceae por meio de anÃ¡lise por termogravimetria e infravermelho associado Ã anÃ¡lise multivariada. Quimica Nova, 0, , .	0.3	1
115	Digital images coupled to PLS regression for pH prediction in sterile culture medium. Biomedical Signal Processing and Control, 2022, 73, 103435.	5.7	1
116	Multivariate classification of Southern Brazilian table wines. Journal of Chemometrics, 2020, 34, e3302.	1.3	0
117	Use of digital images to count colonies of biodiesel deteriogenic microorganisms. Journal of Microbiological Methods, 2020, 178, 106063.	1.6	0
118	Applications of smartphones in analysis: Challenges and solutions. , 2021, , 199-248.		0
119	OtimizaÃ§Ã£o de mÃ©todos de regressÃ£o multivariada para quantificaÃ§Ã£o de sulfametoxazol e trimetoprima em medicamentos. Revista ProduÃ§Ã£o Online, 2008, 7, .	0.2	0
120	Multivariate Control Charts Application to the Control and Quality Assurance of Biodiesel (B100). Revista Virtual De Quimica, 2015, 7, 2273-2289.	0.4	0
121	Simultaneous determination of valsartan, amlodipine besylate and hydrochlorothiazide in tablets by near infrared. Journal of Applied Pharmaceutical Science, 0, , .	1.0	0
122	Exploratory Analysis Methods Applied to the Infrared Spectrometry Teaching. Revista Virtual De Quimica, 0, , 229-243.	0.4	0