Antonio Gustavo GonzÃ¡lez

List of Publications by Year
in descending order

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142 papers	7,506 citations	57631 44 h-index	56606 83 g-index
146 all docs	146 docs citations	146 times ranked	6685 citing authors

#	Article	IF	Citations
1	The Correlation Coefficient: An Overview. Critical Reviews in Analytical Chemistry, 2006, 36, 41-59.	1.8	721
2	Electrohydrodynamics and dielectrophoresis in microsystems: scaling laws. Journal Physics D: Applied Physics, 2003, 36, 2584-2597.	1.3	587
3	A practical guide to analytical method validation, including measurement uncertainty and accuracy profiles. TrAC - Trends in Analytical Chemistry, 2007, 26, 227-238.	5.8	482
4	Fluid flow induced by nonuniform ac electric fields in electrolytes on microelectrodes.â€ƒIII.â€ƒObservation of streamlines and numerical simulation. Physical Review E, 2002, 66, 026305.	0.8	330
5	Intra-laboratory testing of method accuracy from recovery assays. Talanta, 1999, 48, 729-736.	2.9	301
6	Electrothermally induced fluid flow on microelectrodes. Journal of Electrostatics, 2001, 53, 71-87.	1.0	251
7	Differentiation of Tea (Camellia sinensis) Varieties and Their Geographical Origin According to their Metal Content. Journal of Agricultural and Food Chemistry, 2001, 49, 4775-4779.	2.4	229
8	Pumping of liquids with ac voltages applied to asymmetric pairs of microelectrodes. Physical Review E, 2003, 67, 056302.	0.8	205
9	HPLC determination of catechins and caffeine in tea. Differentiation of green, black and instant teas. Analyst, The, 2000, 125, 421-425.	1.7	161
10	Pumping of liquids with traveling-wave electroosmosis. Journal of Applied Physics, 2005, 97, 084906.	1.1	153
11	Electrothermal flows generated by alternating and rotating electric fields in microsystems. Journal of Fluid Mechanics, 2006, 564, 415.	1.4	142
12	HPLC analysis of tocopherols and triglycerides in coffee and their use as authentication parameters. Food Chemistry, 2001, 73, 93-101.	4.2	121
13	Fatty acid profiles as discriminant parameters for coffee varieties differentiation. Talanta, 2001, 54, 291-297.	2.9	113
14	Multi-element analysis of tea beverages by inductively coupled plasma atomic emission spectrometry. Food Chemistry, 2002, 76, 483-489.	4.2	111
15	Electric field induced fluid flow on microelectrodes: the effect of illumination. Journal Physics D: Applied Physics, 2000, 33, L13-L17.	1.3	103
16	Study of Catechin and Xanthine Tea Profiles as Geographical Tracers. Journal of Agricultural and Food Chemistry, 2002, 50, 1833-1839.	2.4	95
17	Discrimination between arabica and robusta green coffee varieties according to their chemical composition. Talanta, 1998, 46, 1259-1264.	2.9	91
18	Multivariate characterisation of beers according to their mineral content. Talanta, 2002, 57, 45-52.	2.9	91

#	Article	IF	Citations
19	Estimation of the uncertainty of indirect measurements from the propagation of distributions by using the Monte-Carlo method: An overview. Chemometrics and Intelligent Laboratory Systems, 2005, 79, 115-122.	1.8	90
20	Pattern recognition procedures for differentiation of Green, Black and Oolong teas according to their metal content from inductively coupled plasma atomic emission spectrometry. Talanta, 2001, 53, 1249-1257.	2.9	88
21	Characterisation of Moroccan unifloral honeys using multivariate analysis. European Food Research and Technology, 2003, 218, 88-95.	1.6	86
22	Intra-laboratory assessment of method accuracy (trueness and precision) by using validation standards. Talanta, 2010, 82, 1995-1998.	2.9	83
23	Mineral content and electrical conductivity of the honeys produced in Northwest Morocco and their contribution to the characterisation of unifloral honeys. Journal of the Science of Food and Agriculture, 2003, 83, 637-643.	1.7	80
24	Characterization of arabica and robusta roasted coffee varieties and mixture resolution according to their metal content. Food Chemistry, 1999, 66, 365-370.	4.2	75
25	Simultaneous determination of caffeine and non-steroidal anti-inflammatory drugs in pharmaceutical formulations and blood plasma by reversed-phase HPLC from linear gradient elution. Talanta, 1999, 49, 453-459.	2.9	71
26	Characterization of green coffee varieties according to their metal content. Analytica Chimica Acta, 1998, 358, 177-183.	2.6	68
27	Evaluation of measurement uncertainty in analytical assays by means of Monte-Carlo simulation. Talanta, 2004, 64, 415-422.	2.9	66
28	Differentiation of two Canary DO red wines according to their metal content from inductively coupled plasma optical emission spectrometry and graphite furnace atomic absorption spectrometry by using Probabilistic Neural Networks. Talanta, 2007, 72, 263-268.	2.9	66
29	Multivariate characterization of wine vinegars from the south of Spain according to their metallic content. Talanta, 1997, 45, 379-386.	2.9	62
30	Differentiation of sparkling wines (cava and champagne) according to their mineral content. Talanta, 2004, 63, 377-382.	2.9	61
31	Authentication of green coffee varieties according to their sterolic profile. Analytica Chimica Acta, 1998, 370, 131-139.	2.6	60
32	Ion chromatographic determination of some organic acids, chloride and phosphate in coffee and tea. Talanta, 2003, 61, 95-101.	2.9	59
33	Determination of Al, Ba, Ca, Cu, Fe, K, Mg, Mn, Na, Sr and Zn in red wine samples by inductively coupled plasma optical emission spectroscopy: Evaluation of preliminary sample treatments. Microchemical Journal, 2008, 88, 56-61.	2.3	59
34	Optimization and validation of headspace sorptive extraction for the analysis of volatile compounds in wine vinegars. Journal of Chromatography A, 2008, 1204, 93-103.	1.8	57
35	The effect of size on trace metal levels in raft cultivated mussels (Mytilus galloprovincialis). Science of the Total Environment, 2004, 318, 115-124.	3.9	56
36	Two level factorial experimental designs based on multiple linear regression models: a tutorial digest illustrated by case studies. Analytica Chimica Acta, 1998, 360, 227-241.	2.6	54

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37	Differentiation of â€˜two Andalusian DO â€˜finoâ€™ wines according to their metal content from ICP-OES by using supervised pattern recognition methods. Microchemical Journal, 2007, 87, 72-76.	2.3	54
38	Ion-exclusion chromatographic determination of organic acids in vinegars. Journal of Chromatography A, 1998, 822, 45-51.	1.8	53
39	Nonlinear electrohydrodynamics of free surfaces. IEEE Transactions on Dielectrics and Electrical Insulation, 1998, 5, 334-343.	1.8	51
40	Solvent effects on the dissociation of aliphatic carboxylic acids in water-N,N-dimethylformamide mixtures: Correlation between acidity constants and solvatochromic parameters. Journal of Solution Chemistry, 1994, 23, 1101-1109.	0.6	50
41	Differentiation of Spanish brandies according to their metal content. Talanta, 2001, 54, 53-59.	2.9	50
42	Study of mineral profile of Montilla-Moriles â€œfinoâ€•wines using inductively coupled plasma atomic emission spectrometry methods. Journal of Food Composition and Analysis, 2007, 20, 391-395.	1.9	50
43	Cylindrospermopsin determination in water by LCâ€“MS/MS: Optimization and validation of the method and application to real samples. Environmental Toxicology and Chemistry, 2012, 31, 2233-2238.	2.2	45
44	Classification of tea samples by their chemical composition using discriminant analysis. Talanta, 1996, 43, 415-419.	2.9	44
45	Flow Reversal in Traveling-Wave Electrokinetics: An Analysis of Forces Due to Ionic Concentration Gradients. Langmuir, 2009, 25, 4988-4997.	1.6	44
46	Accuracy profiles from uncertainty measurements. Talanta, 2006, 70, 896-901.	2.9	42
47	A linear analysis of the effect of Faradaic currents on traveling-wave electroosmosis. Journal of Colloid and Interface Science, 2007, 309, 323-331.	5.0	42
48	Estimation of pH and autoprotolysis constants in mixtures of aliphatic amides with water: Medium effect on the 4-aminoazobenzene system. Talanta, 1993, 40, 479-484.	2.9	40
49	Non-linear QSAR modeling by using multilayer perceptron feedforward neural networks trained by back-propagation. Talanta, 2002, 56, 79-90.	2.9	40
50	Authentication and differentiation of irish whiskeys by higher-alcohol congener analysis. Analytica Chimica Acta, 1999, 381, 257-264.	2.6	37
51	Determination of the arabica/robusta composition of roasted coffee according to their sterolic content. Analyst, The, 1999, 124, 999-1002.	1.7	37
52	Optimisation of a pressurised liquid extraction method for haloanisoles in cork stoppers. Analytica Chimica Acta, 2005, 540, 17-24.	2.6	36
53	Supervised Pattern Recognition Procedures for Discrimination of Whiskeys from Gas Chromatography/Mass Spectrometry Congener Analysis. Journal of Agricultural and Food Chemistry, 2006, 54, 1982-1989.	2.4	36
54	Uncertainty evaluation from Monte-Carlo simulations by using Crystal-Ball software. Accreditation and Quality Assurance, 2005, 10, 149-154.	0.4	34

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55	Improving the quality of African robustas: QTLs for yield- and quality-related traits in Coffea canephora. Tree Genetics and Genomes, 2011, 7, 781-798.	0.6	34
56	Application of pattern recognition to the discrimination of roasted coffees. Analytica Chimica Acta, 1996, 320, 191-197.	2.6	33
57	Practical digest for evaluating the uncertainty of analytical assays from validation data according to the LGC/VAM protocol. Talanta, 2005, 65, 1022-1030.	2.9	33
58	Effect of the combined action of Faradaic currents and mobility differences in ac electro-osmosis. Physical Review E, 2010, 81, 016320.	0.8	33
59	Optimization of pharmaceutical formulations based on response-surface experimental designs. International Journal of Pharmaceutics, 1993, 97, 149-159.	2.6	30
60	Solubility prediction of caffeine in aqueous N,N-dimethylformamide mixtures using the Extended Hildebrand Solubility Approach. International Journal of Pharmaceutics, 1997, 156, 239-244.	2.6	30
61	Classification of aniseed drinks by means of cluster, linear discriminant analysis and soft independent modelling of class analogy based on their Zn, B, Fe, Mg, Ca, Na and Si content. Talanta, 2005, 66, 1350-1354.	2.9	30
62	DESCRIPTIVE SENSORY ANALYSIS OF WINE VINEGAR: TASTING PROCEDURE AND RELIABILITY OF NEW ATTRIBUTES. Journal of Sensory Studies, 2010, 25, 216-230.	0.8	30
63	HPLC determination of 2-furaldehyde and 5-hydroxymethyl-2-furaldehyde in alcoholic beverages. Microchemical Journal, 2006, 82, 22-28.	2.3	29
64	Interspecific Variation of Metal Concentrations in Three Bivalve Mollusks from Galicia. Archives of Environmental Contamination and Toxicology, 2004, 47, 341-51.	2.1	28
65	Potentiometric titrations in acetonitrileâ€“water mixtures: evaluation of aqueous ionisation constant of ketoprofen. Talanta, 2002, 56, 769-775.	2.9	27
66	Some observations on fitting a straight line to data. Microchemical Journal, 1989, 40, 216-225.	2.3	26
67	The correlation coefficient attacks again. Accreditation and Quality Assurance, 2006, 11, 256-258.	0.4	25
68	Use and misuse of supervised pattern recognition methods for interpreting compositional data. Journal of Chromatography A, 2007, 1158, 215-225.	1.8	25
69	Determination of Phosphate in Cola Beverages Using Nonsuppressed Ion Chromatography: An Experiment Introducing Ion Chromatography for Quantitative Analysis. Journal of Chemical Education, 1996, 73, 1174.	1.1	24
70	Differentiation between microcystin contaminated and uncontaminated fish by determination of unconjugated MCs using an ELISA antiâ€adda test based on receiverâ€operating characteristic curves threshold values: Application to Tinca tinca from natural ponds. Environmental Toxicology, 2011, 26, 45-56.	2.1	24
71	Development and optimization of a method for the determination of Cylindrospermopsin from strains of Aphanizomenon cultures: Intra-laboratory assessment of its accuracy by using validation standards. Talanta, 2012, 100, 356-363.	2.9	24
72	Correction factors for the glass electrode revisited. Talanta, 1992, 39, 91.	2.9	23

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73	Kamlet-Taft solvatochromic parameters of aqueous binary mixtures oftert-butyl alcohol and ethyleneglycol. Journal of Solution Chemistry, 1996, 25, 289-293.	0.6	23
74	Ionization constants of water insoluble arylpropionic acids in aqueous N,N-dimethylformamide mixtures from potentiometric pH-titrations. Analytica Chimica Acta, 1997, 356, 253-258.	2.6	23
75	Solvent effects on the dissociation of aliphatic carboxylic acids in waterâ€" N,N -dimethylformamide mixtures. Analytica Chimica Acta, 1990, 228, 301-306.	2.6	22
76	Spectrophotometric determination of total procyanidins in wine vinegars. Talanta, 1997, 44, 119-123.	2.9	20
77	Adaptation of linear discriminant analysis to second level-pattern recognition classification. Analytica Chimica Acta, 1998, 363, 89-95.	2.6	20
78	Performing procrustes discriminant analysis with HOLMES. Talanta, 1999, 49, 189-197.	2.9	20
79	Repeated Red Wine Consumption and Changes on Plasma Antioxidant Capacity and Endogenous Antioxidants (Uric Acid and Protein Thiol Groups). Journal of Agricultural and Food Chemistry, 2007, 55, 9713-9718.	2.4	20
80	Determination of Zn, B, Fe, Mg, Ca, Na and Si in anisette samples by inductively coupled plasma atomic emission spectrometry. Talanta, 2004, 63, 297-302.	2.9	19
81	Kortewegâ€"de Vriesâ€"Burgers equation for surface waves in nonideal conducting liquids. Physical Review E, 1994, 49, 2935-2940.	0.8	18
82	Holmes, a program for performing Procrustes Transformations. Chemometrics and Intelligent Laboratory Systems, 2001, 57, 133-137.	1.8	18
83	Determination of vanadium in mussels by electrothermal atomic absorption spectrometry without chemical modifiers. Analytical and Bioanalytical Chemistry, 2004, 379, 72-76.	1.9	18
84	Estimation of dietary intake and target hazard quotients for metals by consumption of wines from the Canary Islands. Food and Chemical Toxicology, 2017, 108, 10-18.	1.8	18
85	holmes: a program for target factor analysis. Analytica Chimica Acta, 1994, 295, 119-125.	2.6	17
86	Inorganic Indicators of the Origin of Edible Salts Marketed in Spain from a Chemometric Approach. Journal of Food Protection, 1998, 61, 891-895.	0.8	17
87	Computational program for evaluating and optimizing responseâ€"surface curves based on uniform shell designs. Talanta, 1999, 49, 433-439.	2.9	17
88	Supercritical carbon dioxide extraction of lipids from Eucalyptus globulus wood. Journal of Proteomics, 2000, 43, 345-351.	2.4	17
89	Acid-base behaviour of some substituted azo dyes in aqueous N,N-dimethylformamide mixtures. Analytica Chimica Acta, 1991, 246, 429-434.	2.6	16
90	Advantages of target factor analysis against multiple linear regression methods for testing model equations in linear free energy relationships. Analytica Chimica Acta, 1995, 312, 295-306.	2.6	16

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91	Enzymatic-spectrophotometric determination of sucrose in coffee beans. Talanta, 2005, 67, 760-766.	2.9	15
92	Pumping of electrolytes using travelling-wave electro-osmosis: a weakly nonlinear analysis. Microfluidics and Nanofluidics, 2008, 5, 507-515.	1.0	15
93	Determination of trigonelline in green and roasted coffee from single column ionic chromatography. Fresenius' Journal of Analytical Chemistry, 1997, 357, 357-358.	1.5	14
94	Metallic contaminants in Andalusian vinegars. Molecular Nutrition and Food Research, 1988, 32, 743-748.	0.0	13
95	Evaluation of acidity constants in dioxaneâ€"water mixtures by spectrophotometric and potentiometric pH titrations. Analytica Chimica Acta, 1991, 251, 321-325.	2.6	13
96	Study of the mineral profile of Catalonian ?brut? cava using atomic spectrometric methods. European Food Research and Technology, 2004, 218, 448-451.	1.6	13
97	The assessment of electronic balances for accuracy of mass measurements in the analytical laboratory. Accreditation and Quality Assurance, 2007, 12, 21-29.	0.4	13
98	Metallic profiles of Sherry brandies. Sciences Des Aliments, 2000, 20, 433-440.	0.2	12
99	Evaluation of solvent effects on the dissociation of aliphatic carboxylic acids in aqueousN,N-dimethylformamide mixtures according to the scaled particle theory. Journal of Physical Organic Chemistry, 1991, 4, 87-95.	0.9	11
100	Interfacial electrohydrodynamic instability: The Kath and Hoburg model revisited. Physics of Fluids A, Fluid Dynamics, 1992, 4, 1307-1309.	1.6	11
101	Computational program for validating analytical methods. Fresenius' Journal of Analytical Chemistry, 1993, 346, 885-887.	1.5	11
102	Mineral profile of â€œfinoâ€•wines using inductively coupled plasma optical emission spectrometry methods. Food Chemistry, 2012, 135, 309-313.	4.2	11
103	Differentiation of mangoes (Magnifera indica L.) conventional and organically cultivated according to their mineral content by using support vector machines. Talanta, 2012, 97, 325-330.	2.9	10
104	The Use of Catechins and Purine Alkaloids as Descriptors for the Differentiation of Tea Beverages. Mikrochimica Acta, 2003, 142, 79-84.	2.5	9
105	An iterative algorithm for consistent and unbiased estimation of linear regression parameters when there are errors in both the x and y variables. Computers & Chemistry, 1992, 16, 25-27.	1.2	8
106	Application of the extended Hildebrand solubility parameter treatment for optimizing reversed-phase high-performance liquid chromatography determination of pharmaceuticals. International Journal of Pharmaceutics, 1993, 93, 183-188.	2.6	8
107	Holmes: a program for target factor analysis. Analytica Chimica Acta, 1994, 297, 473.	2.6	8
108	Computational program for evaluating and optimizing response-surface curves based on central composite designs. Analytica Chimica Acta, 1994, 298, 65-73.	2.6	8

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109	Solvent effects on the dissociation of bromopyridinium ions in N,N-dimethylformamide mixtures by electrochemical measurements. Analytica Chimica Acta, 1989, 224, 109-117.	2.6	7
110	Practical digest for the evaluation of acidity constants of drugs by reversed-phase high performance liquid chromatography. International Journal of Pharmaceutics, 1993, 91, R1-R5.	2.6	7
111	Supercritical-carbon-dioxide extraction of lipids from a contaminated soil. Journal of Chromatography A, 1999, 845, 365-371.	1.8	7
112	Estimation of the uncertainty of mass measurements from in-house calibrated analytical balances. Accreditation and Quality Assurance, 2005, 10, 386-391.	0.4	7
113	Validation of a simple method for the determination of glyphosate and aminomethylphosphonic acid in human urine by UPLC-MS/MS. Microchemical Journal, 2021, 170, 106760.	2.3	7
114	Resolution of acid strength in non-aqueous acid-base titrations. Analytica Chimica Acta, 1993, 281, 179-183.	2.6	6
115	Solubility of theophylline in aqueous N,N-dimethylformamide mixtures. International Journal of Pharmaceutics, 1994, 108, 149-154.	2.6	6
116	Statistical assessment of a new criterion for selecting the number of factors in factor analysis. Analytica Chimica Acta, 1995, 314, 251-252.	2.6	6
117	Determination of Î²-adrenoceptor blocking agents in tablets using reversed-phase high-performance liquid chromatography. International Journal of Pharmaceutics, 1995, 123, 149-151.	2.6	6
118	Simltaneous determination of organic acids and sweeteners in soft drinks by ion-exclusion HPLC. Journal of Separation Science, 2001, 24, 879-884.	1.3	6
119	AC electrokinetic pumping of liquids using arrays of microelectrodes. , 2005, , .		6
120	Classification of Spanish Red Wines Using Artificial Neural Networks with Enological Parameters and Mineral Content. American Journal of Enology and Viticulture, 2018, 69, 167-175.	0.9	6
121	Determination of phosphorous oxoanions in pharmaceuticals using non-suppressed ion chromatography. Analusis - European Journal of Analytical Chemistry, 1999, 27, 97-100.	0.4	6
122	Metallic profiles of Sherry wines using inductively coupled plasma atomic emission spectrometry methods (ICP-AES). Sciences Des Aliments, 2007, 27, 83-92.	0.2	6
123	Hydrophobicity of $beta;-adrenoceptor blocking agents: Study of correlations between retention in reversed-phase HPLC systems and octanol-water partition constants. International Journal of Pharmaceutics, 1995, 120, 215-220.	2.6	5
124	Comment on â€œTheoretical Model of Electrode Polarization and AC Electroosmotic Fluid Flow in Planar Electrode Arraysâ€• Journal of Colloid and Interface Science, 2001, 243, 265-266.	5.0	4
125	Spectrophotometric determination of acidity constants of compounds with unsuitable absorption features. International Journal of Pharmaceutics, 1991, 72, 193-197.	2.6	3
126	Computational method for unbiased evaluation of equivalence volumes and ionization constants from potentiometric acid-base titrations. Analytica Chimica Acta, 1992, 257, 29-33.	2.6	3

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127	Computational method for evaluating and optimizing response surface curves based on mixture designs. Analytica Chimica Acta, 1994, 293, 205-210.	2.6	3
128	A multiple hollow fibre liquid-phase microextraction method for the determination of halogenated solvent residues in olive oil. Analytical and Bioanalytical Chemistry, 2014, 406, 1567-1571.	1.9	3
129	The feasibility and accuracy of nonaqueous acid-base titrations. Microchemical Journal, 1991, 44, 243-248.	2.3	2
130	Drug solubility prediction by using solvatochromic parameters. International Journal of Pharmaceutics, 1991, 75, R13-R16.	2.6	2
131	NEUTIT: a computer program for evaluating equivalence volumes and ionization constants in polar non-aqueous or partially aqueous media. Analytica Chimica Acta, 1994, 298, 203-207.	2.6	2
132	Manipulation of Bio-Particles in Microelectrode Structures by Means of Non-Uniform AC Electric Fields. , 2002, , 165.		2
133	Determination of microcystins in biological samples from freshwater fish. International Journal of Environmental Analytical Chemistry, 2010, 90, 1000-1013.	1.8	2
134	Gradient Scouting in Reversed-Phase HPLC Revisited. Journal of Chemical Education, 2011, 88, 74-76.	1.1	2
135	Evaluation of acidity constants for sparingly soluble compounds from fluorescence measurements. International Journal of Pharmaceutics, 1991, 67, R1-R4.	2.6	1
136	Evaluation of ionization constants of drugs in aqueous organic mixtures from reversed phase high-performance liquid chromatography. International Journal of Pharmaceutics, 1992, 84, R1-R4.	2.6	1
137	Effect of the difference in ion mobilities on traveling-wave electro-osmosis. , 2008, , .		1
138	Practical Considerations on Indirect Calibration in Analytical Chemistry. , 2017, , .		1
139	A Practical Way to ISO/GUM Measurement Uncertainty for Analytical Assays Including In-House Validation Data. , 0, , .		1
140	Electrothermal Liquid Motion in Microsystems Subjected to Alternating and Rotating Electric Fields. , 2003, , .		1
141	A computational method for approximate evaluation of ionization constants from potentiometric data. Talanta, 1988, 35, 249-252.	2.9	0
142	Manipulation of bio-particles by means of nonuniform AC electric fields. , 2005, 5839, 138.		0