Manel del Valle

List of Publications by Year in descending order

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222 papers	7,316 citations	44069 48 h-index	85541 71 g-index
224 all docs	224 docs citations	224 times ranked	5823 citing authors

#	Article	IF	Citations
1	New materials for electrochemical sensing VI: Carbon nanotubes. TrAC - Trends in Analytical Chemistry, 2005, 24, 826-838.	11.4	626
2	Use of nanomaterials for impedimetric DNA sensors: A review. Analytica Chimica Acta, 2010, 678, 7-17.	5.4	163
3	Potentiometric bioelectronic tongue for the analysis of urea and alkaline ions in clinical samples. Biosensors and Bioelectronics, 2007, 22, 2171-2178.	10.1	133
4	Determination of phenolic compounds by a polyphenol oxidase amperometric biosensor and artificial neural network analysis. Biosensors and Bioelectronics, 2005, 20, 1668-1673.	10.1	117
5	Application of a potentiometric electronic tongue as a classification tool in food analysis. Talanta, 2005, 66, 1303-1309.	5.5	110
6	Electrochemical behavior of rigid carbon nanotube composite electrodes. Journal of Electroanalytical Chemistry, 2008, 619-620, 117-124.	3.8	104
7	A review of the use of the potentiometric electronic tongue in the monitoring of environmental systems. Environmental Modelling and Software, 2010, 25, 1023-1030.	4.5	99
8	Crown ether-modified electrodes for the simultaneous stripping voltammetric determination of Cd(II), Pb(II) and Cu(II). Talanta, 2015, 138, 130-137.	5.5	98
9	Electronic Tongues Employing Electrochemical Sensors. Electroanalysis, 2010, 22, 1539-1555.	2.9	97
10	Determination of total polyphenol index in wines employing a voltammetric electronic tongue. Analytica Chimica Acta, 2012, 732, 172-179.	5.4	97
11	Hybrid electronic tongue based on multisensor data fusion for discrimination of beers. Sensors and Actuators B: Chemical, 2013, 177, 989-996.	7.8	97
12	Application of the wavelet transform coupled with artificial neural networks for quantification purposes in a voltammetric electronic tongue. Sensors and Actuators B: Chemical, 2006, 113, 487-499.	7.8	81
13	An electronic tongue using potentiometric all-solid-state PVC-membrane sensors for the simultaneous quantification of ammonium and potassium ions in water. Analytical and Bioanalytical Chemistry, 2003, 377, 248-256.	3.7	80
14	Molecularly imprinted polymersÂ- towards electrochemical sensors and electronic tongues. Analytical and Bioanalytical Chemistry, 2021, 413, 6117-6140.	3.7	80
15	Lead(II) ion selective electrodes with PVC membranes based on two bis-thioureas as ionophores: 1,3-bis(Nâ€²-benzoylthioureido)benzene and 1,3-bis(Nâ€²-furoylthioureido)benzene. Journal of Hazardous Materials, 2010, 181, 140-146.	12.4	78
16	Rigid carbon composites: a new transducing material for label-free electrochemical genosensing. Journal of Electroanalytical Chemistry, 2004, 567, 29-37.	3.8	77
17	Genomagnetic assay based on label-free electrochemical detection using magneto-composite electrodes. Sensors and Actuators B: Chemical, 2006, 114, 591-598.	7.8	76
18	Comparison of methods for the processing of voltammetric electronic tongues data. Mikrochimica Acta, 2013, 180, 319-330.	5.0	75

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19	Application of a potentiometric electronic tongue to fertigation strategy in greenhouse cultivation. Computers and Electronics in Agriculture, 2007, 57, 12-22.	7.7	71
20	A flow-injection electronic tongue based on potentiometric sensors for the determination of nitrate in the presence of chloride. Sensors and Actuators B: Chemical, 2004, 101, 72-80.	7.8	70
21	Development and application of an electronic tongue for detection and monitoring of nitrate, nitrite and ammonium levels in waters. Microchemical Journal, 2013, 110, 273-279.	4.5	70
22	Determination of Anionic Surfactants Employing Potentiometric Sensorsâ€"A Review. Critical Reviews in Analytical Chemistry, 2005, 35, 15-29.	3.5	69
23	A novel electrochemical aptamerâ€"antibody sandwich assay for lysozyme detection. Analyst, The, 2015, 140, 4148-4153.	3.5	69
24	Impedimetric genosensors for the detection of DNA hybridization. Analytical and Bioanalytical Chemistry, 2006, 385, 1195-1201.	3.7	67
25	Resolution of phenolic antioxidant mixtures employing a voltammetric bio-electronic tongue. Analyst, The, 2012, 137, 349-356.	3.5	67
26	Automated resolution of dichlorvos and methylparaoxon pesticide mixtures employing a Flow Injection system with an inhibition electronic tongue. Biosensors and Bioelectronics, 2009, 24, 1103-1108.	10.1	66
27	Voltammetric Electronic Tongue in the Analysis of Cava Wines. Electroanalysis, 2011, 23, 72-78.	2.9	66
28	Bioelectronic tongue for the simultaneous determination of urea, creatinine and alkaline ions in clinical samples. Biosensors and Bioelectronics, 2008, 23, 795-802.	10.1	64
29	Signal amplification for impedimetric genosensing using gold-streptavidin nanoparticles. Electrochimica Acta, 2008, 53, 4022-4029.	5.2	63
30	Glucose Biosensor Based on Carbon Nanotube Epoxy Composites. Journal of Nanoscience and Nanotechnology, 2005, 5, 1694-1698.	0.9	62
31	Impedimetric genosensors employing COOH-modified carbon nanotube screen-printed electrodes. Biosensors and Bioelectronics, 2009, 24, 2885-2891.	10.1	59
32	Simultaneous identification and quantification of nitro-containing explosives by advanced chemometric data treatment of cyclic voltammetry at screen-printed electrodes. Talanta, 2013, 107, 270-276.	5.5	58
33	A voltammetric electronic tongue made of modified epoxy-graphite electrodes for the qualitative analysis of wine. Mikrochimica Acta, 2010, 169, 261-268.	5.0	56
34	BioElectronic Tongue for the quantification of total polyphenol content in wine. Talanta, 2012, 99, 544-551.	5.5	56
35	Label free aptasensor for Lysozyme detection: A comparison of the analytical performance of two aptamers. Bioelectrochemistry, 2015, 105, 72-77.	4.6	56
36	DNA hybridization detection by electrochemical impedance spectroscopy using interdigitated gold nanoelectrodes. Mikrochimica Acta, 2010, 170, 275-281.	5.0	55

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37	Enhanced electrochemical response of carbon quantum dot modified electrodes. Talanta, 2018, 178, 679-685.	5.5	55
38	Determination of Ammonium Ion Employing an Electronic Tongue Based on Potentiometric Sensors. Analytical Letters, 2003, 36, 2893-2908.	1.8	54
39	Beer classification by means of a potentiometric electronic tongue. Food Chemistry, 2013, 141, 2533-2540.	8.2	53
40	Evaluation of red wines antioxidant capacity by means of a voltammetric e-tongue with an optimized sensor array. Electrochimica Acta, 2014, 120, 180-186.	5.2	53
41	Sensitive stripping voltammetry of heavy metals by using a composite sensor based on a built-in bismuth precursor. Analyst, The, 2005, 130, 971.	3.5	52
42	A flow injection voltammetric electronic tongue applied to paper mill industrial waters. Sensors and Actuators B: Chemical, 2006, 115, 390-395.	7.8	52
43	Instrumental measurement of wine sensory descriptors using a voltammetric electronic tongue. Sensors and Actuators B: Chemical, 2015, 207, 1053-1059.	7.8	52
44	Automated SIA e-Tongue Employing a Voltammetric Biosensor Array for the Simultaneous Determination of Glucose and Ascorbic Acid. Electroanalysis, 2006, 18, 82-88.	2.9	51
45	Sequential injection system with higher dimensional electrochemical sensor signalsPart 2. Potentiometric e-tongue for the determination of alkaline ions. Talanta, 2005, 66, 1197-1206.	5.5	50
46	Data Compression for a Voltammetric Electronic Tongue Modelled with Artificial Neural Networks. Analytical Letters, 2005, 38, 2189-2206.	1.8	50
47	Label-free selective impedimetric detection of Cu2+ ions using catalytic DNA. Analyst, The, 2013, 138, 1995.	3.5	50
48	Electronic tongues in flow analysis. Analytica Chimica Acta, 2007, 600, 90-96.	5.4	49
49	Impedimetric detection of influenza A (H1N1) DNA sequence using carbon nanotubes platform and gold nanoparticles amplification. Analyst, The, 2010, 135, 1765.	3.5	49
50	Sequential injection system with higher dimensional electrochemical sensor signalsPart 1. Voltammetric e-tongue for the determination of oxidizable compounds. Talanta, 2005, 66, 1187-1196.	5.5	48
51	Electronic tongues to assess wine sensory descriptors. Talanta, 2017, 162, 218-224.	5.5	48
52	Renewable Protein A modified graphite-epoxy composite for electrochemical immunosensing. Journal of Immunological Methods, 2004, 286, 35-46.	1.4	47
53	A sequential injection electronic tongue employing the transient response from potentiometric sensors for anion multideterminations. Analytical and Bioanalytical Chemistry, 2006, 385, 1186-1194.	3.7	47
54	Use of Sequential Injection Analysis to construct a potentiometric electronic tongue: Application to the multidetermination of heavy metals. Sensors and Actuators B: Chemical, 2010, 146, 420-426.	7.8	47

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55	Simultaneous determination of phenolic compounds by means of an automated voltammetric â€œelectronic tongueâ€: Analytical and Bioanalytical Chemistry, 2005, 382, 471-476.	3.7	46
56	Automatic sequential injection analysis electronic tongue with integrated reference electrode for the determination of ascorbic acid, uric acid and paracetamol. Mikrochimica Acta, 2007, 157, 1-6.	5.0	45
57	Sensor Arrays and Electronic Tongue Systems. International Journal of Electrochemistry, 2012, 2012, 1-11.	2.4	45
58	Independent comparison study of six different electronic tongues applied for pharmaceutical analysis. Journal of Pharmaceutical and Biomedical Analysis, 2015, 114, 321-329.	2.8	45
59	Nutrient Solution Monitoring in Greenhouse Cultivation Employing a Potentiometric Electronic Tongue. Journal of Agricultural and Food Chemistry, 2008, 56, 1810-1817.	5.2	44
60	Array of peptide-modified electrodes for the simultaneous determination of Pb(II), Cd(II) and Zn(II). Talanta, 2014, 125, 159-166.	5.5	44
61	Electronic Tongue Using an Enzyme Inhibition Biosensor Array for the Resolution of Pesticide Mixtures. Electroanalysis, 2008, 20, 54-60.	2.9	42
62	Electrochemical immunosensor for the diagnosis of celiac disease. Analytical Biochemistry, 2009, 388, 229-234.	2.4	42
63	Use of an Electronic Tongue Based on All-Solid-State Potentiometric Sensors for the Quantitation of Alkaline Ions. Electroanalysis, 2005, 17, 348-355.	2.9	41
64	EIS multianalyte sensing with an automated SIA systemâ€”An electronic tongue employing the impedimetric signal. Talanta, 2007, 72, 774-779.	5.5	41
65	Computational design of molecularly imprinted polymer for direct detection of melamine in milk. Separation Science and Technology, 2017, 52, 1441-1453.	2.5	41
66	Bioinspired Sensor Systems. Sensors, 2011, 11, 10180-10186.	3.8	40
67	Determination of Trace Levels of Anionic Surfactants in River Water and Wastewater by a Flow Injection Analysis System with On-Line Preconcentration and Potentiometric Detection. Analytical Chemistry, 1999, 71, 3684-3691.	6.5	39
68	Label-Free Aptasensor for Lysozyme Detection Using Electrochemical Impedance Spectroscopy. Sensors, 2018, 18, 354.	3.8	39
69	Flow-through tubular ion-selective electrodes responsive to anionic surfactants for flow-injection analysis. Analytica Chimica Acta, 1995, 308, 115-121.	5.4	38
70	Integrated Waveguide Absorbance Optode for Chemical Sensing. Analytical Chemistry, 1999, 71, 5037-5044.	6.5	38
71	Label-free impedimetric aptasensor based on epoxy-graphite electrode for the recognition of cytochrome c. Sensors and Actuators B: Chemical, 2014, 191, 860-865.	7.8	38
72	Sandwich Techniques in flow injection analysis. Analytica Chimica Acta, 1987, 199, 191-196.	5.4	37

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73	Use of sequential injection analysis to construct an electronic-tongue. Analytica Chimica Acta, 2007, 600, 97-104.	5.4	37
74	A Solid-Contact Ion Selective Electrode for Copper(II) Using a Succinimide Derivative as Ionophore. Sensors, 2013, 13, 4367-4377.	3.8	37
75	Voltammetric sensor for theophylline using solâ€“gel immobilized molecularly imprinted polymer particles. Mikrochimica Acta, 2015, 182, 933-942.	5.0	37
76	Application of the avidinâ€“biotin interaction to immobilize DNA in the development of electrochemical impedance genosensors. Analytical and Bioanalytical Chemistry, 2007, 389, 851-861.	3.7	36
77	Application of an all-solid-state ion-selective electrode for the automated titration of anionic surfactants. Analyst, The, 1994, 119, 2319-2322.	3.5	35
78	Construction and development of ion-selective electrodes responsive to anionic surfactants. Sensors and Actuators B: Chemical, 1993, 15, 179-183.	7.8	34
79	Assessment of Individual Polyphenol Content in Beer by Means of a Voltammetric BioElectronic Tongue. Electroanalysis, 2013, 25, 68-76.	2.9	34
80	Resolution of galactose, glucose, xylose and mannose in sugarcane bagasse employing a voltammetric electronic tongue formed by metals oxy-hydroxide/MWCNT modified electrodes. Sensors and Actuators B: Chemical, 2016, 222, 645-653.	7.8	34
81	Voltammetric BioElectronic Tongue for the analysis of phenolic compounds in rosÃ© cava wines. Food Research International, 2014, 55, 455-461.	6.2	33
82	Aptamer-antibody sandwich assay for cytochrome c employing an MWCNT platform and electrochemical impedance. Mikrochimica Acta, 2015, 182, 2045-2053.	5.0	33
83	Cava Wine Authentication Employing a Voltammetric Electronic Tongue. Electroanalysis, 2014, 26, 1504-1512.	2.9	32
84	Signal amplification for thrombin impedimetric aptasensor: Sandwich protocol and use of gold-streptavidin nanoparticles. Biosensors and Bioelectronics, 2014, 54, 408-414.	10.1	32
85	Simultaneous Voltammetric Determination of Heavy Metals by Use of Crown Etherâ€modified Electrodes and Chemometrics. Electroanalysis, 2016, 28, 663-670.	2.9	32
86	Voltammetric electronic tongue to identify Brett character in wines. On-site quantification of its ethylphenol metabolites. Talanta, 2018, 179, 70-74.	5.5	32
87	Sandwich techniques in flow-injection analysis. Analytica Chimica Acta, 1989, 219, 345-350.	5.4	31
88	Characterization of an ion-selective polypyrrole coating and application to the joint determination of potassium, sodium and ammonium by electrochemical impedance spectroscopy and partial least squares method. Analytica Chimica Acta, 2007, 597, 231-237.	5.4	31
89	Bioelectronic tongue using MIP sensors for the resolution of volatile phenolic compounds. Sensors and Actuators B: Chemical, 2018, 258, 665-671.	7.8	31
90	Development of a new ion-selective field-effect transistor sensor for anionic surfactants: Application to potentiometric titrations. Analytica Chimica Acta, 1999, 382, 157-164.	5.4	30

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91	Voltammetric Electronic Tongue Based on Carbon Paste Electrodes Modified with Biochar for Phenolic Compounds Stripping Detection. Electroanalysis, 2019, 31, 2238-2245.	2.9	30
92	Integration of a glucose biosensor based on an epoxy-graphite-TTFÂ·TCNQ-GOD biocomposite into a FIA system. Sensors and Actuators B: Chemical, 2005, 107, 742-748.	7.8	29
93	Virtual Instrument for an Automated Potentiometric e-Tongue Employing the SIA Technique. Sensors, 2006, 6, 19-29.	3.8	28
94	A Reusable Impedimetric Aptasensor for Detection of Thrombin Employing a Graphite-Epoxy Composite Electrode. Sensors, 2012, 12, 3037-3048.	3.8	28
95	Multivariate calibration model from overlapping voltammetric signals employing wavelet neural networks. Chemometrics and Intelligent Laboratory Systems, 2006, 83, 169-179.	3.5	27
96	Impedimetric detection of double-tagged PCR products using novel amplification procedures based on gold nanoparticles and Protein G. Analyst, The, 2009, 134, 602-608.	3.5	26
97	Impedimetric genosensing of DNA polymorphism correlated to cystic fibrosis: A comparison among different protocols and electrode surfaces. Biosensors and Bioelectronics, 2010, 26, 1245-1251.	10.1	26
98	Spectrophotometric determination of low levels of anionic surfactants in water by solvent extraction in a flow injection system. Analyst, The, 1988, 113, 1677-1681.	3.5	25
99	Determination of polyethoxylated non-ionic surfactants using potentiometric flow injection systems.. Analytica Chimica Acta, 2002, 454, 217-227.	5.4	25
100	Electronic tongue for the determination of alkaline ions using a screen-printed potentiometric sensor array. Mikrochimica Acta, 2008, 163, 81-88.	5.0	25
101	Wavelet neural networks to resolve the overlapping signal in the voltammetric determination of phenolic compounds. Talanta, 2008, 76, 373-381.	5.5	25
102	Rapid determination of chemical oxygen demand using a focused microwave heating system featuring temperature control. Analytica Chimica Acta, 2003, 491, 99-109.	5.4	24
103	Enhancing the electrochemical response of myoglobin with carbon nanotube electrodes. Nanotechnology, 2009, 20, 355502.	2.6	24
104	Potentiometric electronic tongue-flow injection analysis system for the monitoring of heavy metal biosorption processes. Talanta, 2012, 93, 285-292.	5.5	24
105	pH-ISFET with NMOS technology. Electroanalysis, 1991, 3, 355-360.	2.9	23
106	Use of pulse transient response as input information for an automated SIA electronic tongue. Sensors and Actuators B: Chemical, 2008, 131, 77-84.	7.8	23
107	Potentiometric Electronic Tongue to Resolve Mixtures of Sulfide and Perchlorate Anions. Sensors, 2011, 11, 3214-3226.	3.8	23
108	Simultaneous Determination of Zn(II), Cu(II), Cd(II) and Pb(II) in Soil Samples Employing an Array of Potentiometric Sensors and an Artificial Neural Network Model. Electroanalysis, 2012, 24, 2249-2256.	2.9	23

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109	Real time protein recognition in a liquid-gated carbon nanotube field-effect transistor modified with aptamers. Nanoscale, 2012, 4, 5917.	5.6	23
110	Integrating molecularly imprinted polymer beads in graphite-epoxy electrodes for the voltammetric biosensing of histamine in wines. Talanta, 2020, 208, 120348.	5.5	23
111	Modification of electrodes with N-and S-doped carbon dots. Evaluation of the electrochemical response. Talanta, 2020, 212, 120806.	5.5	23
112	Flow-through pH-ISFET as detector in the determination of ammonia. Analytica Chimica Acta, 1990, 231, 53-58.	5.4	22
113	Automated electronic tongue based on potentiometric sensors for the determination of a trinary anionic surfactant mixture. Journal of Pharmaceutical and Biomedical Analysis, 2008, 46, 213-218.	2.8	22
114	Simultaneous Voltammetric Determination of Acetaminophen, Ascorbic Acid and Uric Acid by Use of Integrated Array of Screen-Printed Electrodes and Chemometric Tools. Sensors, 2019, 19, 3286.	3.8	21
115	Evaluation of natural computation techniques in the modelling and optimization of a sequential injection flow system for colorimetric iron(III) determination. Analytica Chimica Acta, 1997, 348, 143-150.	5.4	20
116	Photocurable ISFET for anionic surfactants. Monitoring of photodegradation processes. Talanta, 2001, 54, 893-902.	5.5	20
117	EIS study of potentiometric membranes selective to Ca2+ employing the new ionophoric antibiotic tetronasin. Electrochimica Acta, 2006, 51, 1569-1575.	5.2	20
118	Quantitative Analysis of Active Pharmaceutical Ingredients (APIs) Using a Potentiometric Electronic Tongue in a SIA Flow System. Electroanalysis, 2016, 28, 626-632.	2.9	20
119	A novel electronic tongue using electropolymerized molecularly imprinted polymers for the simultaneous determination of active pharmaceutical ingredients. Biosensors and Bioelectronics, 2022, 198, 113807.	10.1	20
120	Comparison of the Powell and simplex methods in the optimization of flow-injection systems. Simulation on modelled experimental surfaces and experimental optimizations. Analytica Chimica Acta, 1990, 241, 31-42.	5.4	19
121	Flow-through pH-ISFET + reference-ISE as integrated detector in automated FIA determinations. Sensors and Actuators B: Chemical, 1992, 7, 555-560.	7.8	19
122	Urea impedimetric biosensor based on polymer degradation onto interdigitated electrodes. Sensors and Actuators B: Chemical, 2006, 118, 84-89.	7.8	19
123	Use of a solid-phase extraction disk module in a FI system for the automated preconcentration and determination of surfactants using potentiometric detection. Microchemical Journal, 2006, 83, 48-54.	4.5	19
124	Carbon nanofiber vs. carbon microparticles as modifiers of glassy carbon and gold electrodes applied in electrochemical sensing of NADH. Talanta, 2007, 74, 398-404.	5.5	19
125	Remote environmental monitoring employing a potentiometric electronic tongue. International Journal of Environmental Analytical Chemistry, 2008, 88, 103-117.	3.3	19
126	A comparison of four protocols for the immobilization of an aptamer on graphite composite electrodes. Mikrochimica Acta, 2014, 181, 355-363.	5.0	19

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127	Electronic tongue for nitro and peroxide explosive sensing. Talanta, 2016, 153, 340-346.	5.5	19
128	A novel bio-electronic tongue using different cellobiose dehydrogenases to resolve mixtures of various sugars and interfering analytes. Biosensors and Bioelectronics, 2016, 79, 515-521.	10.1	19
129	Potentiometric flow injection system for the determination of polyethoxylate nonionic surfactants using tubular ion-selective electrodes. Analytica Chimica Acta, 2001, 438, 305-313.	5.4	18
130	Automated SIA System Using an Array of Potentiometric Sensors for Determining Alkaline-Earth Ions in Water. Electroanalysis, 2007, 19, 644-651.	2.9	18
131	Inhibition equivalency factors for microcystin variants in recombinant and wild-type protein phosphatase 1 and 2A assays. Environmental Science and Pollution Research, 2014, 21, 10652-10660.	5.3	18
132	Mathematical modelling of sequential determinations by flow-injection sandwich techniques. Analytica Chimica Acta, 1990, 234, 67-74.	5.4	17
133	Carbon Nanotubes and Electrochemistry. Zeitschrift Fur Physikalische Chemie, 2007, 221, 1161-1173.	2.8	17
134	Application of an electronic tongue towards the analysis of brandies. Analytical Methods, 2013, 5, 1120.	2.7	17
135	Use of a Bioelectronic Tongue for the Monitoring of the Photodegradation of Phenolic Compounds. Electroanalysis, 2015, 27, 225-233.	2.9	17
136	Analysis of Amino Acid Mixtures by Voltammetric Electronic Tongues and Artificial Neural Networks. Electroanalysis, 2016, 28, 1894-1900.	2.9	17
137	Three different signal amplification strategies for the impedimetric sandwich detection of thrombin. Analytica Chimica Acta, 2016, 912, 117-124.	5.4	17
138	A Voltammetric Electronic Tongue for the Resolution of Ternary Nitrophenol Mixtures. Sensors, 2018, 18, 216.	3.8	17
139	Improved Sensing of Capsaicin with TiO₂ Nanoparticles Modified Epoxy Graphite Electrode. Electroanalysis, 2020, 32, 230-237.	2.9	17
140	Simultaneous Optimization of Variables in Fia Systems by Means of the Simplex Method. Analytical Letters, 1987, 20, 1247-1263.	1.8	16
141	Rapid Field Identification of Subjects Involved in Firearm-Related Crimes Based on Electroanalysis Coupled with Advanced Chemometric Data Treatment. Analytical Chemistry, 2012, 84, 10306-10314.	6.5	16
142	Voltammetric Electronic Tongue for the Qualitative Analysis of Beers. Electroanalysis, 2013, 25, 1635-1644.	2.9	16
143	Discrimination of Soils and Assessment of Soil Fertility Using Information from an Ion Selective Electrodes Array and Artificial Neural Networks. Clean - Soil, Air, Water, 2014, 42, 1808-1815.	1.1	16
144	Enhanced electrocatalytic effects of Pd particles immobilized on GC surface on the nitrite oxidation reactions. Journal of Electroanalytical Chemistry, 2019, 839, 1-8.	3.8	16

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145	Voltammetric Electronic Tongue for the Simultaneous Determination of Three Benzodiazepines. Sensors, 2019, 19, 5002.	3.8	16
146	Dualâ€Genic Hybridization Sensor Employing Electrochemical Impedance Spectroscopy. Electroanalysis, 2008, 20, 941-948.	2.9	15
147	SIA system employing the transient response from a potentiometric sensor arrayâ€"Correction of a saline matrix effect. Talanta, 2010, 82, 931-938.	5.5	15
148	Resolution of amino acid mixtures by an array of potentiometric sensors based on boronic acid derivative in a SIA flow system. Sensors and Actuators B: Chemical, 2013, 189, 179-186.	7.8	15
149	Evaluation of microwave digestion for chemical oxygen demand determination. Environmental Technology (United Kingdom), 1990, 11, 1087-1092.	2.2	14
150	Mathematical modelling of two-analyte sequential determinations by flow-injection sandwich techniques. Analytica Chimica Acta, 1991, 254, 177-187.	5.4	14
151	An integrated design strategy for flow-injection analysis based on the coupling of mathematical modelling and optimization algorithms. Analytica Chimica Acta, 1995, 310, 289-296.	5.4	14
152	Graphene electrode platform for impedimetric aptasensing. Electrochimica Acta, 2017, 229, 458-466.	5.2	14
153	A new amperometric bienzymatic biosensor based on biocomposites for the determination of gluconic acid in wines. Talanta, 2011, 85, 1207-1212.	5.5	13
154	A simple approach for DNA detection on carbon nanotube microelectrode arrays. Sensors and Actuators B: Chemical, 2012, 162, 120-127.	7.8	13
155	Dummy Molecularly Imprinted Polymers Using DNP as a Template Molecule for Explosive Sensing and Nitroaromatic Compound Discrimination. Chemosensors, 2021, 9, 255.	3.6	13
156	Flow-through pH-ISFET as detector in automated determinations. Electroanalysis, 1991, 3, 349-354.	2.9	12
157	Automated analytical biosystem for urea monitoring. Analytica Chimica Acta, 1996, 327, 243-251.	5.4	12
158	All-solid-state potentiometric sensors sensitive to nonionic surfactants based on ionophores containing ethoxylate units. Talanta, 2001, 54, 811-820.	5.5	12
159	Simultaneous titration of ternary alkalineâ€"earth mixtures employing a potentiometric electronic tongue. Microchemical Journal, 2007, 87, 27-34.	4.5	12
160	Bioelectronic Tongues Employing Electrochemical Biosensors. Bioanalytical Reviews, 2016, , 143-202.	0.2	12
161	Avoiding nonsense in electronic taste sensing. TrAC - Trends in Analytical Chemistry, 2019, 121, 115675.	11.4	12
162	Resolution of opiate illicit drugs signals in the presence of some cutting agents with use of a voltammetric sensor array and machine learning strategies. Sensors and Actuators B: Chemical, 2022, 357, 131345.	7.8	12

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163	Bidimensional planar micro-optics for optochemical absorbance sensing. Optics Letters, 1998, 23, 225.	3.3	11
164	Resolution of Heavy Metal Mixtures from Highly Overlapped ASV Voltammograms Employing a Wavelet Neural Network. Electroanalysis, 2009, 21, 445-451.	2.9	11
165	Simultaneous and automated monitoring of the multimetal biosorption processes by potentiometric sensor array and artificial neural network. Talanta, 2013, 114, 17-24.	5.5	11
166	Artificial Neural Networks for the Resolution of Dopamine and Serotonin Complex Mixtures Using a Grapheneâ€Modified Carbon Electrode. Electroanalysis, 2019, 31, 390-397.	2.9	11
167	Comparison of the simplex and Powell methods with a weighted response function for the optimization of FIA systems. Talanta, 1993, 40, 1113-1126.	5.5	10
168	Resolution of binary mixtures of microorganisms using electrochemical impedance spectroscopy and artificial neural networks. Biosensors and Bioelectronics, 2008, 24, 958-962.	10.1	10
169	Pd Nanoparticles/Multiwalled Carbon Nanotubes Electrode System for Voltammetric Sensing of Tyrosine. Journal of Nanoscience and Nanotechnology, 2014, 14, 6692-6698.	0.9	10
170	Simultaneous Titration of Ternary Mixtures of Pb(II), Cd(II) and Cu(II) with Potentiometric Electronic Tongue Detection. Electroanalysis, 2015, 27, 336-342.	2.9	10
171	Voltammetric sensing using an array of modified SPCE coupled with machine learning strategies for the improved identification of opioids in presence of cutting agents. Journal of Electroanalytical Chemistry, 2021, 902, 115770.	3.8	10
172	Chapter 30 Potentiometric electronic tongues applied in ion multidetermination. Comprehensive Analytical Chemistry, 2007, , 721-753.	1.3	9
173	Computer controlled-flow injection potentiometric system based on virtual instrumentation for the monitoring of metal-biosorption processes. Analytica Chimica Acta, 2010, 668, 26-34.	5.4	9
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