Gerardo F. Barbero

List of Publications by Year
in descending order

113	4,145	136740	133063
papers	citations	32 h-index	59 g-index

113	113	113	3951
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Extraction of Flavonoids From Natural Sources Using Modern Techniques. Frontiers in Chemistry, 2020, 8, 507887.	1.8	220
2	Pressurized liquid extraction of bioactive compounds from blackberry (Rubus fruticosus L.) residues: a comparison with conventional methods. Food Research International, 2015, 77, 675-683.	2.9	190
3	Ultrasound-assisted extraction of capsaicinoids from peppers. Talanta, 2008, 75, 1332-1337.	2.9	179
4	Optimization of the ultrasound-assisted extraction of anthocyanins and total phenolic compounds in mulberry (Morus nigra) pulp. Food Chemistry, 2017, 219, 23-32.	4.2	165
5	Extraction of phenolic compounds and anthocyanins from blueberry (Vaccinium myrtillus L.) residues using supercritical CO2 and pressurized liquids. Journal of Supercritical Fluids, 2014, 95, 8-16.	1.6	160
6	Extraction of phenolic compounds and anthocyanins from juÃ§ara (Euterpe edulis Mart.) residues using pressurized liquids and supercritical fluids. Journal of Supercritical Fluids, 2017, 119, 9-16.	1.6	153
7	Extraction of antioxidant compounds from blackberry (Rubus sp.) bagasse using supercritical CO2 assisted by ultrasound. Journal of Supercritical Fluids, 2014, 94, 223-233.	1.6	139
8	Supercritical carbon dioxide extraction of capsaicinoids from malagueta pepper (Capsicum frutescens) Tj ETQq0 0 0 rgBT /Overlock 10 T	3.8	131
9	Pressurized liquid extraction of bioactive compounds from grape marc. Journal of Food Engineering, 2019, 240, 105-113.	2.7	111
10	Recovery of anthocyanins from residues of Rubus fruticosus , Vaccinium myrtillus and Eugenia brasiliensis by ultrasound assisted extraction, pressurized liquid extraction and their combination. Food Chemistry, 2017, 231, 1-10.	4.2	110
11	Rapid quantification of honey adulteration by visible-near infrared spectroscopy combined with chemometrics. Talanta, 2018, 188, 288-292.	2.9	110
12	Evolution of total and individual capsaicinoids in peppers during ripening of the Cayenne pepper plant (Capsicum annuum L.). Food Chemistry, 2014, 153, 200-206.	4.2	106
13	Determination of capsaicinoids in peppers by microwave-assisted extractionâ€“high-performance liquid chromatography with fluorescence detection. Analytica Chimica Acta, 2006, 578, 227-233.	2.6	105
14	Pressurized Liquid Extraction of Capsaicinoids from Peppers. Journal of Agricultural and Food Chemistry, 2006, 54, 3231-3236.	2.4	99
15	Fast determination of capsaicinoids from peppers by high-performance liquid chromatography using a reversed phase monolithic column. Food Chemistry, 2008, 107, 1276-1282.	4.2	85
16	Encapsulation of anthocyanin-rich extract from blackberry residues by spray-drying, freeze-drying and supercritical antisolvent. Powder Technology, 2018, 340, 553-562.	2.1	68
17	Supercritical carbon dioxide extraction of Capsicum peppers: Global yield and capsaicinoid content. Journal of Supercritical Fluids, 2013, 81, 210-216.	1.6	64
18	Fast analysis of curcuminoids from turmeric (Curcuma longa L.) by high-performance liquid chromatography using a fused-core column. Food Chemistry, 2016, 200, 167-174.	4.2	61

#	Article	IF	Citations
19	Effect of ultrasound on the supercritical CO2 extraction of bioactive compounds from dedo de moÃ§a pepper (Capsicum baccatum L. var. pendulum). Ultrasonics Sonochemistry, 2016, 31, 284-294.	3.8	60
20	Ultrasound-assisted extraction of bioactive compounds from dedo de moÃ§a pepper (Capsicum) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 7 2017, 198, 36-44.	2.7	59
21	Escape ClassRoom: Can You Solve a Crime Using the Analytical Process?. Journal of Chemical Education, 2019, 96, 267-273.	1.1	59
22	Application of Hanschâ€™s Model to Capsaicinoids and Capsinoids: A Study Using the Quantitative Structureâ^'Activity Relationship. A Novel Method for the Synthesis of Capsinoids. Journal of Agricultural and Food Chemistry, 2010, 58, 3342-3349.	2.4	57
23	Economic analysis of oleoresin production from malagueta peppers (Capsicum frutescens) by supercritical fluid extraction. Journal of Supercritical Fluids, 2018, 133, 86-93.	1.6	57
24	Simultaneous extraction and separation of bioactive compounds from apple pomace using pressurized liquids coupled on-line with solid-phase extraction. Food Chemistry, 2020, 318, 126450.	4.2	50
25	Capsaicinoid Contents in Peppers and Pepper-Related Spicy Foods. International Journal of Food Properties, 2016, 19, 485-493.	1.3	49
26	A screening method based on Visible-NIR spectroscopy for the identification and quantification of different adulterants in high-quality honey. Talanta, 2019, 203, 235-241.	2.9	49
27	Supercritical fluid extraction and low pressure extraction of Biquinho pepper (Capsicum chinense). LWT - Food Science and Technology, 2014, 59, 1239-1246.	2.5	41
28	Encapsulation of pepper oleoresin by supercritical fluid extraction of emulsions. Journal of Supercritical Fluids, 2016, 112, 37-43.	1.6	39
29	Authentication of virgin olive oil by a novel curve resolution approach combined with visible spectroscopy. Food Chemistry, 2017, 220, 331-336.	4.2	39
30	Fast analysis of capsaicinoids in Naga Jolokia extracts (Capsicum chinense) by high-performance liquid chromatography using fused core columns. Food Chemistry, 2018, 239, 217-224.	4.2	37
31	Comparative Study of Capsaicinoid Composition in Capsicum Peppers Grown in Brazil. International Journal of Food Properties, 2016, 19, 1292-1302.	1.3	34
32	Determination of Ignitable Liquids in Fire Debris: Direct Analysis by Electronic Nose. Sensors, 2016, 16, 695.	2.1	33
33	Isolation of gallic acid, caffeine and flavonols from black tea by on-line coupling of pressurized liquid extraction with an adsorbent for the production of functional bakery products. LWT - Food Science and Technology, 2020, 117, 108661.	2.5	33
34	Optimization of Microwave-Assisted Extraction for the Recovery of Bioactive Compounds from the Chilean Superfruit (Aristotelia chilensis (Mol.) Stuntz). Agronomy, 2018, 8, 240.	1.3	30
35	Alternative Ultrasound-Assisted Method for the Extraction of the Bioactive Compounds Present in Myrtle (Myrtus communis L.). Molecules, 2019, 24, 882.	1.7	30
36	Determination of Melatonin in Rice (Oryza sativa) Grains by Pressurized Liquid Extraction. Journal of Agricultural and Food Chemistry, 2015, 63, 1107-1115.	2.4	29

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37	Development of New Analytical Microwave-Assisted Extraction Methods for Bioactive Compounds from Myrtle (Myrtus communis L.). Molecules, 2018, 23, 2992.	1.7	28
38	Optimization of a Novel Method Based on Ultrasound-Assisted Extraction for the Quantification of Anthocyanins and Total Phenolic Compounds in Blueberry Samples (Vaccinium corymbosum L.). Foods, 2020, 9, 1763.	1.9	28
39	A comparison study between ultrasoundâ€“assisted and enzymeâ€“assisted extraction of anthocyanins from blackcurrant (Ribes nigrum L.). Food Chemistry: X, 2022, 13, 100192.	1.8	28
40	Assessment of Capsaicinoid and Capsinoid Accumulation Patterns during Fruit Development in Three Chili Pepper Genotypes (Capsicum spp.) Carrying Pun1 and pAMT Alleles Related to Pungency. Journal of Agricultural and Food Chemistry, 2019, 67, 12219-12227.	2.4	27
41	Assessment of Ultrasound Assisted Extraction as an Alternative Method for the Extraction of Anthocyanins and Total Phenolic Compounds from Maqui Berries (Aristotelia chilensis (Mol.) Stuntz). Agronomy, 2019, 9, 148.	1.3	27
42	Flavonol Composition and Antioxidant Activity of Onions (Allium cepa L.) Based on the Development of New Analytical Ultrasound-Assisted Extraction Methods. Antioxidants, 2021, 10, 273.	2.2	27
43	Co-precipitation of anthocyanins of the extract obtained from blackberry residues by pressurized antisolvent process. Journal of Supercritical Fluids, 2018, 137, 81-92.	1.6	26
44	Alternative Extraction Method of Bioactive Compounds from Mulberry (Morus nigra L.) Pulp Using Pressurized-Liquid Extraction. Food Analytical Methods, 2018, 11, 2384-2395.	1.3	25
45	Stability of Anthocyanins from Red Grape Skins under Pressurized Liquid Extraction and Ultrasound-Assisted Extraction Conditions. Molecules, 2014, 19, 21034-21043.	1.7	24
46	Ontogenetic Variation of Individual and Total Capsaicinoids in Malagueta Peppers (Capsicum) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 382	1.7	24
47	Ultrasound-Assisted Extraction of Two Types of Antioxidant Compounds (TPC and TA) from Black Chokeberry (Aronia melanocarpa L.): Optimization of the Individual and Simultaneous Extraction Methods. Agronomy, 2019, 9, 456.	1.3	24
48	FT-IR, Vis spectroscopy, color and multivariate analysis for the control of ageing processes in distinctive Spanish wines. Food Chemistry, 2019, 277, 6-11.	4.2	24
49	Comparison of different processing approaches by SVM and RF on HS-MS eNose and NIR Spectrometry data for the discrimination of gasoline samples. Microchemical Journal, 2022, 172, 106893.	2.3	24
50	Novel method based on ion mobility spectrometry sum spectrum for the characterization of ignitable liquids in fire debris. Talanta, 2019, 199, 189-194.	2.9	23
51	Optimizing and Comparing Ultrasound- and Microwave-Assisted Extraction Methods Applied to the Extraction of Antioxidant Capsinoids in Peppers. Agronomy, 2019, 9, 633.	1.3	23
52	Extraction of Anthocyanins and Total Phenolic Compounds from AÃ§ai (Euterpe oleracea Mart.) Using an Experimental Design Methodology. Part 2: Ultrasound-Assisted Extraction. Agronomy, 2020, 10, 326.	1.3	23
53	Application of Headspace Gas Chromatography-Ion Mobility Spectrometry for the Determination of Ignitable Liquids from Fire Debris. Separations, 2018, 5, 41.	1.1	21
54	Quantitation of capsiate and dihydrocapsiate and tentative identification of minor capsinoids in pepper fruits (Capsicum spp.) by HPLC-ESI-MS/MS(QTOF). Food Chemistry, 2019, 270, 264-272.	4.2	21

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55	A Screening Method Based on Headspace-Ion Mobility Spectrometry to Identify Adulterated Honey. Sensors, 2019, 19, 1621.	2.1	21
56	Novel method based on ion mobility spectroscopy for the quantification of adulterants in honeys. Food Control, 2020, 114, 107236.	2.8	21
57	Development of Optimized Ultrasound-Assisted Extraction Methods for the Recovery of Total Phenolic Compounds and Anthocyanins from Onion Bulbs. Antioxidants, 2021, 10, 1755.	2.2	21
58	Optimization of an Ultrasound-Assisted Extraction Method Applied to the Extraction of Flavonoids from Moringa Leaves (Moringa oleÃfera Lam.). Agronomy, 2022, 12, 261.	1.3	21
59	A New Solid Phase Extraction for the Determination of Anthocyanins in Grapes. Molecules, 2014, 19, 21398-21410.	1.7	20
60	Characterization and Differentiation of Petroleum-Derived Products by E-Nose Fingerprints. Sensors, 2017, 17, 2544.	2.1	20
61	Concentration of bioactive compounds from grape marc using pressurized liquid extraction followed by integrated membrane processes. Separation and Purification Technology, 2020, 250, 117206.	3.9	20
62	An Electronic Nose Based Method for the Discrimination of Weathered Petroleum-Derived Products. Sensors, 2018, 18, 2180.	2.1	19
63	Progression of the Total and Individual Capsaicinoids Content in the Fruits of Three Different Cultivars of Capsicum chinense Jacq.. Agronomy, 2019, 9, 141.	1.3	19
64	Characterization of Arabica and Robusta Coffees by Ion Mobility Sum Spectrum. Sensors, 2020, 20, 3123.	2.1	19
65	Extraction of Anthocyanins and Total Phenolic Compounds from AÃ§ai (Euterpe oleracea Mart.) Using an Experimental Design Methodology. Part 1: Pressurized Liquid Extraction. Agronomy, 2020, 10, 183.	1.3	19
66	Development of a rapid and accurate UHPLC-PDA-FL method for the quantification of phenolic compounds in grapes. Food Chemistry, 2021, 334, 127569.	4.2	19
67	Obtaining anthocyanin-rich extracts from frozen aÃ§ai (Euterpe oleracea Mart.) pulp using pressurized liquid extraction. Food Science and Technology, 2017, 37, 48-54.	0.8	18
68	Extraction of Antioxidants from Blackberry (Rubus ulmifolius L.): Comparison between Ultrasound- and Microwave-Assisted Extraction Techniques. Agronomy, 2019, 9, 745.	1.3	18
69	Evolution of Capsaicinoids in Peter Pepper (Capsicum annuum var. annuum) During Fruit Ripening. Chemistry and Biodiversity, 2016, 13, 1068-1075.	1.0	17
70	Optimization of Analytical Ultrasound-Assisted Methods for the Extraction of Total Phenolic Compounds and Anthocyanins from Sloes (Prunus spinosa L.). Agronomy, 2020, 10, 966.	1.3	17
71	A Novel Ultrasound-Assisted Extraction Method for the Analysis of Anthocyanins in Potatoes (Solanum tuberosum L.). Antioxidants, 2021, 10, 1375.	2.2	17
72	Toxic elements and trace elements in Macrolepiota procera mushrooms from southern Spain and northern Morocco. Journal of Food Composition and Analysis, 2022, 108, 104419.	1.9	17

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73	Validation of an HS-MS method for direct determination and classification of ignitable liquids. Microchemical Journal, 2017, 132, 358-364.	2.3	16
74	Influence of Fruit Ripening on the Total and Individual Capsaicinoids and Capsiate Content in Naga Jolokia Peppers (Capsicum chinense Jacq.). Agronomy, 2020, 10, 252.	1.3	16
75	Fast analysis of Î²-ecdysone in Brazilian ginseng (Pfaffia glomerata) extracts by high-performance liquid chromatography using a fused-core column. Analytical Methods, 2014, 6, 2452-2459.	1.3	15
76	Optimization and Comparison of Ultrasound and Microwave-Assisted Extraction of Phenolic Compounds from Cotton-Lavender (Santolina chamaecyparissus L.). Agronomy, 2021, 11, 84.	1.3	15
77	Optimization of the Microwave-Assisted Extraction of Simple Phenolic Compounds from Grape Skins and Seeds. Agronomy, 2021, 11, 1527.	1.3	15
78	Extraction of Antioxidant Compounds from Onion Bulb (Allium cepa L.) Using Individual and Simultaneous Microwave-Assisted Extraction Methods. Antioxidants, 2022, 11, 846.	2.2	15
79	Fast Separation of Capsaicinoids from Peppers by Reversed Phase Ultra-Performance Liquid Chromatography: Comparation with Traditional High-Performance Liquid Chromatography Methods. International Journal of Food Properties, 2016, 19, 984-992.	1.3	14
80	Rapid Determination of Simple Polyphenols in Grapes by LC Using a Monolithic Column. Chromatographia, 2010, 72, 417-424.	0.7	13
81	Use of multivariate statistical techniques to optimize the separation of 17 capsinoids by ultra performance liquid chromatography using different columns. Talanta, 2015, 134, 256-263.	2.9	13
82	Study of the Weathering Process of Gasoline by eNose. Sensors, 2018, 18, 139.	2.1	12
83	Extraction of Anthocyanins and Total Phenolic Compounds from AÃ§ai (Euterpe oleracea Mart.) Using an Experimental Design Methodology. Part 3: Microwave-Assisted Extraction. Agronomy, 2020, 10, 179.	1.3	12
84	Exposure to Essential and Toxic Elements via Consumption of Agaricaceae, Amanitaceae, Boletaceae, and Russulaceae Mushrooms from Southern Spain and Northern Morocco. Journal of Fungi (Basel,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	3.5	12
85	A Methodology Based on FT-IR Data Combined with Random Forest Model to Generate Spectralprints for the Characterization of High-Quality Vinegars. Foods, 2021, 10, 1411.	1.9	10
86	Metal concentrations in Lactarius mushroom species collected from Southern Spain and Northern Morocco: Evaluation of health risks and benefits. Journal of Food Composition and Analysis, 2021, 99, 103859.	1.9	10
87	Development of a Rapid UHPLC-PDA Method for the Simultaneous Quantification of Flavonol Contents in Onions (Allium cepa L.). Pharmaceuticals, 2021, 14, 310.	1.7	9
88	Modeling of counter-current multistage extraction of Moringa oleifera leaves using a mechanistic model. Food and Bioproducts Processing, 2019, 115, 165-174.	1.8	8
89	Changes in Capsiate Content in Four Chili Pepper Genotypes (Capsicum spp.) at Different Ripening Stages. Agronomy, 2020, 10, 1337.	1.3	8
90	Characterization of petroleum-based products in water samples by HS-MS. Fuel, 2018, 222, 506-512.	3.4	7

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91	Characterization of Biodegraded Ignitable Liquids by Headspaceâ€“Ion Mobility Spectrometry. Sensors, 2020, 20, 6005.	2.1	7
92	Extraction and Analysis of Natural Product in Plant. Agronomy, 2021, 11, 415.	1.3	7
93	Simultaneous determination by UHPLC-PDA of major capsaicinoids and capsinoids contents in peppers. Food Chemistry, 2021, 356, 129688.	4.2	7
94	Multivariate optimization by statistical methods of ultra high performance liquid chromatography conditions for the separation of 17 capsaicinoids. Analytical Methods, 2016, 8, 1659-1666.	1.3	6
95	Content of Capsaicinoids and Capsiate in â€œFiliusâ€•Pepper Varieties as Affected by Ripening. Plants, 2020, 9, 1222.	1.6	6
96	Optimization of an Ultrasound-Assisted Extraction Method for the Analysis of Major Anthocyanin Content in Erica australis Flowers. Molecules, 2021, 26, 2884.	1.7	6
97	Optimization of a New Extraction Technique for Analysis of Verbenone and cis-Verbenol in Pine Seeds. Chromatographia, 2007, 66, 571-575.	0.7	5
98	Discrimination of Myrtle Ecotypes from Different Geographic Areas According to Their Morphological Characteristics and Anthocyanins Composition. Plants, 2019, 8, 328.	1.6	5
99	Volatile and Semi-Volatile Organic Compounds May Help Reduce Pollinator-Prey Overlap in the Carnivorous Plant Drosophyllum lusitanicum (Drosophyllaceae). Journal of Chemical Ecology, 2021, 47, 73-86.	0.9	5
100	Optimization by Means of Chemometric Tools of an Ultrasound-Assisted Method for the Extraction of Betacyanins from Red Dragon Fruit (Hylocereus polyrhizus). Agronomy, 2021, 11, 1053.	1.3	5
101	How Different Cooking Methods Affect the Phenolic Composition of Sweet Potato for Human Consumption (Ipomea batata (L.) Lam). Agronomy, 2021, 11, 1636.	1.3	5
102	An Evaluation of the Equilibrium Properties in Hexane and Ethanol Extractive Systems for Moringa oleifera Seeds and Fatty Acid Profiles of the Extracts. Separations, 2021, 8, 217.	1.1	5
103	Tryptophan Levels during Grape Ripening: Effects of Cultural Practices. Molecules, 2017, 22, 941.	1.7	4
104	Closed-loop spray drying with N₂ of Moringa oleifera leaf ethanolic extracts: Effects on bioactive compounds and antiradical activity. Drying Technology, 2021, 39, 2092-2104.	1.7	4
105	Optimization through a Boxâ€“Behnken Experimental Design of the Microwave-Assisted Extraction of the Psychoactive Compounds in Hallucinogenic Fungi (Psylocibe cubensis). Journal of Fungi (Basel,) Tj ETQq1 1 0.784314 rgBT /Overlo	3.4	4
106	Co-precipitation of grape residue extract using sub- and supercritical CO2 technology. Journal of CO2 Utilization, 2022, 61, 102010.	3.3	3
107	Evaluation of the Effect of Different Co-Solvent Mixtures on the Supercritical CO2 Extraction of the Phenolic Compounds Present in Moringa oleifera Lam. Leaves. Agronomy, 2022, 12, 1450.	1.3	3
108	A Novel Method Based on Headspace-Ion Mobility Spectrometry for the Detection and Discrimination of Different Petroleum Derived Products in Seawater. Sensors, 2021, 21, 2151.	2.1	2

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109	Composition and antifungal effects of aqueous extracts of Cymbopogon citratus, Laurus nobilis and Santolina chamaecyparissus on the growth of Fusarium oxysporum f. sp. lentis. Archives of Phytopathology and Plant Protection, 0, , 1-19.	0.6	2
110	OTP-PRL: an app for occupational risk prevention in policing activities. BMC Public Health, 2019, 19, 1549.	1.2	1
111	Editorial: Exploring the Potential of Natural Products Through Advanced Techniques and Green Solvents. Frontiers in Chemistry, 2020, 8, 627111.	1.8	1
112	Analysis of Compounds with Oenological Interest in Somatic Variants of Grapevines. Horticulturae, 2022, 8, 22.	1.2	1
113	EscapeWine!. Advances in Game-based Learning Book Series, 2022, , 356-375.	0.2	0