Yvan Vander Heyden

List of Publications by Year
in descending order

103 papers	2,097 citations	236612 25 h-index	315357 38 g-index
107 all docs	107 docs citations	107 times ranked	2918 citing authors

#	Article	IF	Citations
1	Analytical techniques for metabolomic studies: a review. Bioanalysis, 2019, 11, 2297-2318.	0.6	129
2	Rapid screening for chiral separations by short-end injection capillary electrophoresis using highly sulfated cyclodextrins as chiral selectors. Electrophoresis, 2001, 22, 3203-3215.	1.3	88
3	Enantioseparations of pharmaceuticals with capillary electrochromatography: A review. Journal of Pharmaceutical and Biomedical Analysis, 2016, 130, 81-99.	1.4	64
4	Chiral separations of cathinone and amphetamine-derivatives: Comparative study between capillary electrochromatography, supercritical fluid chromatography and three liquid chromatographic modes. Journal of Pharmaceutical and Biomedical Analysis, 2016, 121, 232-243.	1.4	64
5	Recent advances in untargeted and targeted approaches applied in herbal-extracts and essential-oils fingerprinting - A review. Journal of Pharmaceutical and Biomedical Analysis, 2020, 177, 112849.	1.4	62
6	Characterization and classification of stationary phases in HPLC and SFC â€“ a review. Analytica Chimica Acta, 2015, 886, 1-15.	2.6	57
7	Xanthones and Cancer: from Natural Sources to Mechanisms of Action. Chemistry and Biodiversity, 2020, 17, e1900499.	1.0	57
8	Set-up and evaluation of interlaboratory studies. Journal of Chromatography A, 2007, 1158, 158-167.	1.8	53
9	Antioxidant activity of Vitis vinifera, Punica granatum, Citrus aurantium and Opuntia ficus indica fruits cultivated in Algeria. Heliyon, 2019, 5, e01575.	1.4	51
10	Generic chiral method development in supercritical fluid chromatography and ultra-performance supercritical fluid chromatography. Journal of Chromatography A, 2014, 1363, 311-322.	1.8	47
11	First inter-laboratory study of a Supercritical Fluid Chromatography method for the determination of pharmaceutical impurities. Journal of Pharmaceutical and Biomedical Analysis, 2018, 161, 414-424.	1.4	47
12	Characterization and classification of PGI Moroccan Argan oils based on their FTIR fingerprints and chemical composition. Chemometrics and Intelligent Laboratory Systems, 2017, 162, 182-190.	1.8	46
13	Seasonal, gender and regional variations in total phenolic, flavonoid, and condensed tannins contents and in antioxidant properties fromPistacia atlanticassp. leaves. Pharmaceutical Biology, 2017, 55, 1185-1194.	1.3	43
14	Improved sensitivity of the nano ultra-high performance liquid chromatography-tandem mass spectrometric analysis of low-concentrated neuropeptides by reducing aspecific adsorption and optimizing the injection solvent. Journal of Chromatography A, 2014, 1360, 217-228.	1.8	42
15	Selected-ion flow-tube mass-spectrometry (SIFT-MS) fingerprinting versus chemical profiling for geographic traceability of Moroccan Argan oils. Food Chemistry, 2018, 263, 8-17.	4.2	41
16	Pharmaceutical-enantiomers resolution using immobilized polysaccharide-based chiral stationary phases in supercritical fluid chromatography. Journal of Chromatography A, 2014, 1328, 85-97.	1.8	40
17	Exploration and classification of chromatographic fingerprints as additional tool for identification and quality control of several Artemisia species. Journal of Pharmaceutical and Biomedical Analysis, 2014, 95, 34-46.	1.4	39
18	Geographical classification of olive oils by the application of CART and SVM to their FTâ€IR. Journal of Chemometrics, 2007, 21, 324-334.	0.7	37

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19	Determination of optimal extraction conditions for phenolic compounds from Pistacia atlantica leaves using the response surface methodology. Analytical Methods, 2016, 8, 6107-6114.	1.3	37
20	Antioxidant activities of Pistacia atlantica extracts modeled as a function of chromatographic fingerprints in order to identify antioxidant markers. Microchemical Journal, 2016, 128, 208-217.	2.3	32
21	Four Pistacia atlantica subspecies (atlantica, cabulica, kurdica and mutica): A review of their botany, ethnobotany, phytochemistry and pharmacology. Journal of Ethnopharmacology, 2021, 265, 113329.	2.0	32
22	Improved variable reduction in partial least squares modelling by Global-Minimum Error Uninformative-Variable Elimination. Analytica Chimica Acta, 2017, 982, 37-47.	2.6	31
23	Targeted Isolation of Monoterpene Indole Alkaloids from Palicourea sessilis. Journal of Natural Products, 2017, 80, 3032-3037.	1.5	31
24	Method development for impurity profiling in SFC: The selection of a dissimilar set of stationary phases. Journal of Pharmaceutical and Biomedical Analysis, 2015, 111, 333-343.	1.4	30
25	Quality Control of Herbal Medicines: From Traditional Techniques to State-of-the-art Approaches. Planta Medica, 2021, 87, 964-988.	0.7	28
26	Potentially antidiabetic and antihypertensive compounds identified from Pistacia atlantica leaf extracts by LC fingerprinting. Journal of Pharmaceutical and Biomedical Analysis, 2018, 149, 547-556.	1.4	26
27	Elucidation and visualization of solid-state transformation and mixing in a pharmaceutical mini hot melt extrusion process using in-line Raman spectroscopy. International Journal of Pharmaceutics, 2017, 517, 119-127.	2.6	25
28	Modelling approaches for chiral chromatography on polysaccharide-based and macrocyclic antibiotic chiral selectors: A review. Analytica Chimica Acta, 2022, 1198, 338861.	2.6	25
29	First characterizations by capillary electrophoresis of human Chorionic Gonadotropin at the intact level. Talanta, 2019, 193, 77-86.	2.9	24
30	In vitro antileishmanial and cytotoxicity activities of essential oils from Haplophyllum tuberculatum A. Juss leaves, stems and aerial parts. BMC Complementary and Alternative Medicine, 2018, 18, 60.	3.7	23
31	An improved microbore UHPLC method with electrochemical detection for the simultaneous determination of low monoamine levels in in vivo brain microdialysis samples. Journal of Pharmaceutical and Biomedical Analysis, 2016, 127, 136-146.	1.4	22
32	Antiplasmodial Activity, Cytotoxicity and Structure-Activity Relationship Study of Cyclopeptide Alkaloids. Molecules, 2017, 22, 224.	1.7	22
33	Polyphenolic contents, antioxidant activities and UPLCâ€“ESIâ€“MS analysis of Haplophyllum tuberculatum A. Juss leaves extracts. International Journal of Biological Macromolecules, 2018, 106, 1071-1079.	3.6	21
34	Identification of some Bioactive Metabolites in a Fractionated Methanol Extract from <scp>Ipomoea aquatica</scp> (Aerial Parts) through TLC, HPLC, UPLCâ€ESIâ€QTOFâ€MS and LCâ€SPEâ€NMR Fingerprints Analyses. Phytochemical Analysis, 2018, 29, 5-15.	1.2	20
35	In vivo antiâ€inflammatory response and bioactive compoundsâ€™ profile of polyphenolic extracts from edible Argan oil (Argania spinosa ÂL.),Âobtained by two extraction methods. Journal of Food Biochemistry, 2019, 43, e13066.	1.2	20
36	Assessing the suitability of capillary electrophoresisâ€mass spectrometry for biomarker discovery in plasmaâ€based metabolomics. Electrophoresis, 2019, 40, 2309-2320.	1.3	20

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37	Ultrasound-assisted extraction optimization and validation of an HPLC-DAD method for the quantification of polyphenols in leaf extracts of Cecropia species. Scientific Reports, 2019, 9, 2028.	1.6	19
38	The use of chemometrics to study multifunctional indole alkaloids from Psychotria nemorosa (Palicourea comb. nov.). Part II: Indication of peaks related to the inhibition of butyrylcholinesterase and monoamine oxidase-A. Journal of Chromatography A, 2016, 1463, 71-80.	1.8	18
39	Fatty Acids-Based Quality Index to Differentiate Worldwide Commercial Pistachio Cultivars. Molecules, 2019, 24, 58.	1.7	18
40	Investigation of the effect of mobile phase composition on selectivity using a solvent-triangle based approach in achiral SFC. Journal of Pharmaceutical and Biomedical Analysis, 2017, 132, 247-257.	1.4	17
41	New insights into the Argan oil categories characterization: Chemical descriptors, FTIR fingerprints, and chemometric approaches. Talanta, 2021, 225, 122073.	2.9	17
42	Natural plant toxins in honey: An ignored threat to human health. Journal of Hazardous Materials, 2022, 424, 127682.	6.5	17
43	Support Vector Regression Based QSPR for the Prediction of Retention Time of Peptides in Reversed-Phase Liquid Chromatography. Chromatographia, 2015, 78, 7-19.	0.7	16
44	The use of chemometrics to study multifunctional indole alkaloids from Psychotria nemorosa (Palicourea comb. nov.). Part I: Extraction and fractionation optimization based on metabolic profiling. Journal of Chromatography A, 2016, 1463, 60-70.	1.8	16
45	Comparison of a triple-quadrupole and a quadrupole time-of-flight mass analyzer to quantify 16 opioids in human plasma. Journal of Pharmaceutical and Biomedical Analysis, 2016, 127, 49-59.	1.4	16
46	Sensitive targeted methods for brain metabolomic studies in microdialysis samples. Journal of Pharmaceutical and Biomedical Analysis, 2018, 161, 192-205.	1.4	16
47	Bioactive Azepine-Indole Alkaloids from Psychotria nemorosa. Journal of Natural Products, 2020, 83, 852-863.	1.5	16
48	Aqueous sizeâ€exclusion chromatographic separations of intact proteins under native conditions: Effect of pressure on selectivity and efficiency. Journal of Separation Science, 2016, 39, 689-695.	1.3	15
49	LC-MS analysis combined with principal component analysis and soft independent modelling by class analogy for a better detection of changes in N-glycosylation profiles of therapeutic glycoproteins. Analytical and Bioanalytical Chemistry, 2017, 409, 477-485.	1.9	15
50	Method optimization for drug impurity profiling in supercritical fluid chromatography: Application to a pharmaceutical mixture. Journal of Chromatography A, 2017, 1526, 128-136.	1.8	15
51	Exploratory data analysis as a tool for similarity assessment and clustering of chiral polysaccharide-based systems used to separate pharmaceuticals in supercritical fluid chromatography. Journal of Chromatography A, 2014, 1326, 110-124.	1.8	14
52	Investigation of the effect of column temperature and back-pressure in achiral supercritical fluid chromatography within the context of drug impurity profiling. Journal of Chromatography A, 2017, 1518, 78-88.	1.8	14
53	Evaluation of boosted regression trees (BRTs) and twoâ€step BRT procedures to model and predict bloodâ€brain barrier passage. Journal of Chemometrics, 2007, 21, 280-291.	0.7	13
54	Resolution of spectrally rankâ€deficient multivariate curve resolution: alternating least squares components in comprehensive twoâ€dimensional liquid chromatographic analysis. Journal of Chemometrics, 2012, 26, 474-486.	0.7	13

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55	Is the solvation parameter model or its adaptations adequate to account for ionic interactions when characterizing stationary phases for drug impurity profiling with supercritical fluid chromatography?. Analytica Chimica Acta, 2016, 924, 9-20.	2.6	13
56	Pharmacological activities of the organic extracts and fatty acid composition of the petroleum ether extract from Haplophyllum tuberculatum leaves. Journal of Ethnopharmacology, 2018, 216, 97-103.	2.0	13
57	Precision evaluation of chiral capillary electrophoretic methods in the context of inter-instrumental transfer: Constant current versus constant voltage application. Journal of Chromatography A, 2014, 1353, 140-147.	1.8	12
58	Characterizing and optimizing magnetosome production ofMagnetospirillumsp. XM-1 isolated from Xi'an City Moat, China. FEMS Microbiology Letters, 2015, 362, fnv167.	0.7	12
59	A comprehensive strategy using chromatographic profiles combined with chemometric methods: Application to quality control of Polygonum cuspidatum Sieb. et Zucc. Journal of Chromatography A, 2016, 1466, 67-75.	1.8	12
60	Three promising antimycobacterial medicinal plants reviewed as potential sources of drug hit candidates against multidrug-resistant tuberculosis. Tuberculosis, 2020, 124, 101987.	0.8	12
61	Feasibility study on exhaled-breath analysis by untargeted Selected-Ion Flow-Tube Mass Spectrometry in children with cystic fibrosis, asthma, and healthy controls: Comparison of data pretreatment and classification techniques. Talanta, 2021, 225, 122080.	2.9	12
62	Chemical Analysis and Antioxidant Activity of the Essential Oils of Three Piperaceae Species Growing in the Central Region of Cuba. Natural Product Communications, 2013, 8, 1934578X1300800.	0.2	10
63	Raman model development for the protein conformational state classification in different freeze-dried formulations. Analytica Chimica Acta, 2014, 825, 42-50.	2.6	10
64	CE-MS metabolic profiling of volume-restricted plasma samples from an acute mouse model for epileptic seizures to discover potentially involved metabolomic features. Talanta, 2020, 217, 121107.	2.9	10
65	Improved multi-class discrimination by Common-Subset-of-Independent-Variables Partial-Least-Squares Discriminant Analysis. Talanta, 2021, 234, 122595.	2.9	10
66	Chemical Composition, Antioxidant Properties and Antimicrobial Activity of the Essential Oil of Murraya Paniculata Leaves from the Mountains of Central Cuba. Natural Product Communications, 2012, 7, 1934578X1200701.	0.2	9
67	Study of the antioxidant activity of Pistacia atlantica Desf. Gall extracts and evaluation of the responsible compounds. Biochemical Systematics and Ecology, 2022, 100, 104358.	0.6	9
68	Experimental Design Methodologies for the Optimization of Chiral Separations: An Overview. Methods in Molecular Biology, 2019, 1985, 453-478.	0.4	8
69	Defining a standardized methodology for the determination of the antioxidant capacity: case study of Pistacia atlantica leaves. Analyst, The, 2020, 145, 557-571.	1.7	8
70	Improvement of quantitative structureâ€“retention relationship models for chromatographic retention prediction of peptides applying individual local partial least squares models. Talanta, 2020, 219, 121266.	2.9	8
71	Cytotoxicity and Antiviral Activities of Haplophyllum tuberculatum Essential Oils, Pure Compounds, and Their Combinations against Coxsackievirus B3 and B4. Planta Medica, 2021, 87, 827-835.	0.7	8
72	Improved modelling for low-correlated multiple responses by common-subset-of-independent-variables partial-least-squares. Talanta, 2022, 239, 123140.	2.9	8

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73	Fabrication of a molecularly imprinted monolithic column via the epitope approach for the selective capillary microextraction of neuropeptides in human plasma. Talanta, 2022, 243, 123397.	2.9	8
74	A Study of the Effects of pH and Water Activity on the N-Nitrosopiperidine Formation in a Protein-Based Liquid System. Food and Bioprocess Technology, 2014, 7, 2978-2985.	2.6	7
75	Fast and Simultaneous Analysis of Combined Anti-Diabetic Drugs by Capillary Zone Electrophoresis. Journal of Chromatographic Science, 2015, 53, 993-999.	0.7	7
76	A new potential antiâ€cancer betaâ€carboline derivative decreases the expression levels of key proteins involved in glioma aggressiveness: A proteomic investigation. Drug Development Research, 2020, 81, 32-42.	1.4	7
77	Application of Rank Annihilation Factor Analysis for Antibacterial Drugs Determination by Means of pH Gradual Change-UV Spectral Data. Antibiotics, 2020, 9, 383.	1.5	7
78	In Vitro & In Vivo Anti-Hyperglycemic Potential of Saponins Cake and Argan Oil from Argania spinosa. Foods, 2021, 10, 1078.	1.9	7
79	Inter-instrumental method transfer of chiral capillary electrophoretic methods using robustness test information. Journal of Chromatography A, 2014, 1353, 148-159.	1.8	6
80	Interinstrumental method transfer of a capillary electrophoretic separation of angiotensin II and five derivatives: Evaluation and update of earlier developed guidelines. Electrophoresis, 2015, 36, 2658-2664.	1.3	6
81	LC-method development for the quantification of neuromedin-like peptides. Emphasis on column choice and mobile phase composition. Journal of Pharmaceutical and Biomedical Analysis, 2017, 137, 104-112.	1.4	6
82	Kinetic study of niobium and tantalum hexameric forms and their substituted ions by capillary electrophoresis in alkaline medium. Talanta, 2017, 175, 127-134.	2.9	6
83	Assessing mixtures of supercharging agents to increase the abundance of a specific charge state of Neuromedin U. Talanta, 2019, 198, 206-214.	2.9	6
84	All that glitters is not gold: Panning cytotoxic natural products and derivatives with a fused tricyclic backbone by the estimation of their leadlikeness for cancer treatment. European Journal of Medicinal Chemistry, 2019, 166, 1-10.	2.6	6
85	A comparative study of UniSpray and electrospray sources for the ionization of neuropeptides in liquid chromatography tandem mass spectrometry. Journal of Chromatography A, 2020, 1628, 461462.	1.8	6
86	Secondary-metabolites fingerprinting of Argania spinosa kernels using liquid chromatographyâ€“mass spectrometry and chemometrics, for metabolite identification and quantification as well as for geographic classification. Journal of Chromatography A, 2022, 1670, 462972.	1.8	6
87	Interinstrumental Transfer of a Chiral Capillary Electrophoretic Method: The Use of Robustness Test Information to Overcome Differences in Detector and Data-Handling Specifications. Chromatographia, 2018, 81, 335-348.	0.7	5
88	Rendering A Chiral Screening Step In Supercritical Fluid Chromatography Mass-Spectrometry Compatible. Journal of Chromatography A, 2020, 1624, 461201.	1.8	5
89	Development of a capillary electrophoresis method for the separation of flavonolignans in silymarin complex. Electrophoresis, 2022, 43, 930-938.	1.3	5
90	Authentication of extra virgin Argan oil by selected-ion flow-tube mass-spectrometry fingerprinting and chemometrics. Food Chemistry, 2022, 383, 132565.	4.2	5

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91	Comparison of in-silico modelling and reversed-phase liquid chromatographic retention on an octadecyl silica column to predict skin permeability of pharmaceutical and cosmetic compounds. Journal of Pharmaceutical and Biomedical Analysis, 2021, 201, 114095.	1.4	4
92	In vitro antimycobacterial activity of medicinal plants Lantana camara, Cryptolepis sanguinolenta, and Zanthoxylum leprieurii. Journal of Clinical Tuberculosis and Other Mycobacterial Diseases, 2022, 27, 100307.	0.6	4
93	Chemometric modelling of the catalytic hydrogenation of bicarbonate to formate in aqueous media. Reaction Kinetics and Catalysis Letters, 2004, 83, 321-328.	0.6	3
94	Interinstrumental transfer of a fast shortâ€end injection capillary electrophoresis method: Application to the separation of niobium, tantalum, and their substituted ions. Electrophoresis, 2017, 38, 2069-2074.	1.3	3
95	Stationary-phase optimized selectivity in supercritical fluid chromatography using a customized Phase OPtimized Liquid Chromatography kit: comparison of different prediction approaches. Analytical and Bioanalytical Chemistry, 2020, 412, 6553-6565.	1.9	3
96	Gas Chromatographic Fingerprint Analysis for the Comparison of Seized Cannabis Samples. Molecules, 2021, 26, 6643.	1.7	3
97	Evaluating micellar liquid chromatographic methods on octadecyl particle-based and monolithic columns to predict the skin permeation of drug and cosmetic molecules. Journal of Chromatography A, 2022, 1663, 462753.	1.8	3
98	Identification by LC-ESIMS of Flavonoids Responsible for the Antioxidant Properties of Mallotus Species from Vietnam. Natural Product Communications, 2011, 6, 1934578X1100600.	0.2	2
99	Pharmaceutical and Herbal Fingerprinting by Means of Chromatographic Techniques. Chromatography Research International, 2012, 2012, 1-2.	0.4	2
100	Multifunctional Monoamine Oxidases and Cholinesterases Inhibitory Effects, as well as UPLC-DAD-MS Chemical Profile of Alkaloid Fractions Obtained from Species of the Palicoureeae Tribe. Natural Product Communications, 2016, 11, 1934578X1601100.	0.2	2
101	Defining a system suitability limit to decide on column deterioration and to facilitate column transfers in chiral supercritical fluid chromatography. Analytical and Bioanalytical Chemistry, 2020, 412, 6221-6230.	1.9	2
102	Coupling of chiral and achiral stationary phases in supercritical fluid chromatography: Evaluating and improving retention prediction. Journal of Chromatography A, 2022, 1667, 462883.	1.8	2
103	Azepine-Indole Alkaloids From Psychotria nemorosa Modulate 5-HT2A Receptors and Prevent in vivo Protein Toxicity in Transgenic Caenorhabditis elegans. Frontiers in Neuroscience, 2022, 16, 826289.	1.4	2