Eric M Ziémons

List of Publications by Year in descending order

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103 papers 2,922 citations

30 h-index 197535 49 g-index

104 all docs

104 docs citations

104 times ranked 2751 citing authors

#	Article	IF	Citations
1	Critical review on recent trends in cannabinoid determination on cannabis herbal samples: From chromatographic to vibrational spectroscopic techniques. Analytica Chimica Acta, 2022, 1209, 339184.	2.6	13
2	Generic SFC-MS methodology for the quality control of vitamin D3 oily formulations. Journal of Pharmaceutical and Biomedical Analysis, 2022, 209, 114492.	1.4	4
3	Influence of API physico-chemical properties on amorphization capacity of several mesoporous silica loading methods. International Journal of Pharmaceutics, 2022, 613, 121372.	2.6	2
4	Evaluation of distributional homogeneity of pharmaceutical formulation using laser direct infrared imaging. International Journal of Pharmaceutics, 2022, 612, 121373.	2.6	8
5	Selection of essential spectra to improve the multivariate curve resolution of minor compounds in complex pharmaceutical formulations. Analytica Chimica Acta, 2022, 1198, 339532.	2.6	9
6	A new alternative tool to analyse glycosylation in pharmaceutical proteins based on infrared spectroscopy combined with nonlinear support vector regression. Analyst, The, 2022, 147, 1086-1098.	1.7	5
7	Interpretable One-Class Classification of Raman Spectra Using Prediction Bands Estimated by Wavelet Regression. Analytical Chemistry, 2022, 94, 4183-4191.	3.2	1
8	Comparison of several strategies for the deployment of a multivariate regression model on several handheld NIR instruments. Application to the quality control of medicines. Journal of Pharmaceutical and Biomedical Analysis, 2022, 215, 114755.	1.4	7
9	A New Alternative Tool to Analyse Glycosylation in Monoclonal Antibodies Based on Drop-Coating Deposition Raman imaging: A Proof of Concept. Molecules, 2022, 27, 4405.	1.7	O
10	The analysis of cannabinoids in cannabis samples by supercritical fluid chromatography and ultraâ€highâ€performance liquid chromatography: A comparison study. Analytical Science Advances, 2021, 2, 2-14.	1.2	9
11	A probabilistic class-modelling method based on prediction bands for functional spectral data: Methodological approach and application to near-infrared spectroscopy. Analytica Chimica Acta, 2021, 1144, 130-149.	2.6	5
12	Composition analysis of falsified chloroquine phosphate samples seized during the COVID-19 pandemic. Journal of Pharmaceutical and Biomedical Analysis, 2021, 194, 113761.	1.4	15
13	Development of a prototype device for near real-time surface-enhanced Raman scattering monitoring of biological samples. Talanta, 2021, 224, 121866.	2.9	6
14	Development of a sensitive MEKCâ€LIF method for synthetic cathinones analysis. Electrophoresis, 2021, 42, 1127-1134.	1.3	6
15	Classification of polymorphic forms of fluconazole in pharmaceuticals by FT-IR and FT-NIR spectroscopy. Journal of Pharmaceutical and Biomedical Analysis, 2021, 196, 113922.	1.4	12
16	Development of a highly persistent silicone-based sprayable emulsion containing essential oils for treatment of skin infections. International Journal of Pharmaceutics, 2021, 596, 120214.	2.6	5
17	Pixel-based Raman hyperspectral identification of complex pharmaceutical formulations. Analytica Chimica Acta, 2021, 1155, 338361.	2.6	15
18	Design of experiments and design space approaches in the pharmaceutical bioprocess optimization. European Journal of Pharmaceutics and Biopharmaceutics, 2021, 166, 144-154.	2.0	25

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19	Application of NIR handheld transmission spectroscopy and chemometrics to assess the quality of locally produced antimalarial medicines in the Democratic Republic of Congo. Talanta Open, 2021, 3, 100025.	1.7	9
20	New perspective for the in-field analysis of cannabis samples using handheld near-infrared spectroscopy: A case study focusing on the determination of î"9-tetrahydrocannabinol. Journal of Pharmaceutical and Biomedical Analysis, 2021, 202, 114150.	1.4	24
21	Optimization of a robust and reliable FITC labeling process for CE-LIF analysis of pharmaceutical compounds using design of experiments strategy. Journal of Pharmaceutical and Biomedical Analysis, 2021, 205, 114304.	1.4	5
22	Quantitation of active pharmaceutical ingredient through the packaging using Raman handheld spectrophotometers: A comparison study. Talanta, 2020, 207, 120306.	2.9	24
23	Near-Infrared Spectroscopy to Determine Residual Moisture in Freeze-Dried Products: Model Generation by Statistical Design of Experiments. Journal of Pharmaceutical Sciences, 2020, 109, 719-729.	1.6	12
24	Detection of low dose of piroxicam polymorph in pharmaceutical tablets by surface-enhanced Raman chemical imaging (SER-CI) and multivariate analysis. International Journal of Pharmaceutics, 2020, 574, 118913.	2.6	6
25	Providing illicit drugs results in five seconds using ultra-portable NIR technology: An opportunity for forensic laboratories to cope with the trend toward the decentralization of forensic capabilities. Forensic Science International, 2020, 317, 110498.	1.3	37
26	Effect of the functionalisation agent on the surface-enhanced Raman scattering (SERS) spectrum: Case study of pyridine derivatives. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2020, 233, 118180.	2.0	8
27	Evaluation of the analytical performances of two Raman handheld spectrophotometers for pharmaceutical solid dosage form quantitation. Talanta, 2020, 214, 120888.	2.9	16
28	Raman imaging as a new analytical tool for the quality control of the monitoring of osteogenic differentiation in forming 3D bone tissue. Journal of Pharmaceutical and Biomedical Analysis, 2020, 186, 113319.	1.4	7
29	Comparing the qualitative performances of handheld NIR and Raman spectrophotometers for the detection of falsified pharmaceutical products. Talanta, 2019, 202, 469-478.	2.9	47
30	Vibrational spectroscopy in analysis of pharmaceuticals: Critical review of innovative portable and handheld NIR and Raman spectrophotometers. TrAC - Trends in Analytical Chemistry, 2019, 114, 251-259.	5.8	130
31	Comparison of hyperspectral imaging techniques for the elucidation of falsified medicines composition. Talanta, 2019, 198, 457-463.	2.9	20
32	Development of a SERS strategy to overcome the nanoparticle stabilisation effect in serum-containing samples: Application to the quantification of dopamine in the culture medium of PC-12 cells. Talanta, 2018, 186, 8-16.	2.9	15
33	Development and validation of an in-line NIR spectroscopic method for continuous blend potency determination in the feed frame of a tablet press. Journal of Pharmaceutical and Biomedical Analysis, 2018, 151, 274-283.	1.4	72
34	Breakage and drying behaviour of granules in a continuous fluid bed dryer: Influence of process parameters and wet granule transfer. European Journal of Pharmaceutical Sciences, 2018, 115, 223-232.	1.9	49
35	Critical review of surface-enhanced Raman spectroscopy applications in the pharmaceutical field. Journal of Pharmaceutical and Biomedical Analysis, 2018, 147, 458-472.	1.4	71
36	Process Analysis Maintenance, Reliability, and Training. , 2018, , .		0

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37	Process Analysis—Overview. , 2018, , 396-396.		O
38	Raman chemical imaging, a new tool in kidney stone structure analysis: Case-study and comparison to Fourier Transform Infrared spectroscopy. PLoS ONE, 2018, 13, e0201460.	1.1	30
39	Towards a spray-coating method for the detection of low-dose compounds in pharmaceutical tablets using surface-enhanced Raman chemical imaging (SER-CI). Talanta, 2018, 188, 584-592.	2.9	16
40	Implementation of a generic SFC-MS method for the quality control of potentially counterfeited medicinal cannabis with synthetic cannabinoids. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2018, 1092, 332-342.	1.2	15
41	Optimization and validation of a fast supercritical fluid chromatography method for the quantitative determination of vitamin D3 and its related impurities. Journal of Chromatography A, 2017, 1491, 171-181.	1.8	41
42	Global approach for the validation of an in-line Raman spectroscopic method to determine the API content in real-time during a hot-melt extrusion process. Talanta, 2017, 171, 45-52.	2.9	16
43	Global regression model for moisture content determination using near-infrared spectroscopy. European Journal of Pharmaceutics and Biopharmaceutics, 2017, 119, 343-352.	2.0	32
44	Development of an analytical method for crystalline content determination in amorphous solid dispersions produced by hot-melt extrusion using transmission Raman spectroscopy: A feasibility study. International Journal of Pharmaceutics, 2017, 530, 249-255.	2.6	27
45	Is supercritical fluid chromatography hyphenated to mass spectrometry suitable for the quality control of vitamin D3 oily formulations?. Journal of Chromatography A, 2017, 1515, 209-217.	1.8	15
46	A simple calibration approach based on film-casting for confocal Raman microscopy to support the development of a hot-melt extrusion process. Talanta, 2016, 154, 392-399.	2.9	5
47	Monitoring of anatabine release by methyl jasmonate elicited BY-2 cells using surface-enhanced Raman scattering. Talanta, 2016, 160, 754-760.	2.9	1
48	Continuous production of itraconazole-based solid dispersions by hot melt extrusion: Preformulation, optimization and design space determination. International Journal of Pharmaceutics, 2016, 515, 114-124.	2.6	62
49	Poplar–Root Knot Nematode Interaction: A Model for Perennial Woody Species. Molecular Plant-Microbe Interactions, 2016, 29, 560-572.	1.4	9
50	Moisture content determination in an antibody-drug conjugate freeze-dried medicine by near-infrared spectroscopy: A case study for release testing. Journal of Pharmaceutical and Biomedical Analysis, 2016, 131, 380-390.	1.4	12
51	From near-infrared and Raman to surface-enhanced Raman spectroscopy: progress, limitations and perspectives in bioanalysis. Bioanalysis, 2016, 8, 1077-1103.	0.6	24
52	Vibrational spectroscopy and microspectroscopy analyzing qualitatively and quantitatively pharmaceutical hot melt extrudates. Journal of Pharmaceutical and Biomedical Analysis, 2015, 113, 21-33.	1.4	16
53	Determination of Arsenic(III) at a Nanogold Modified Solid Carbon Paste Electrode. Electroanalysis, 2015, 27, 309-316.	1.5	25
54	Thorough characterization of a Self-Emulsifying Drug Delivery System with Raman hyperspectral imaging: A case study. International Journal of Pharmaceutics, 2015, 484, 85-94.	2.6	7

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55	Development, validation and comparison of NIR and Raman methods for the identification and assay of poor-quality oral quinine drops. Journal of Pharmaceutical and Biomedical Analysis, 2015, 111, 21-27.	1.4	23
56	Optimization of a pharmaceutical tablet formulation based on a design space approach and using vibrational spectroscopy as PAT tool. International Journal of Pharmaceutics, 2015, 486, 13-20.	2.6	28
57	A simple approach for ultrasensitive detection of bisphenols by multiplexed surface-enhanced Raman scattering. Analytica Chimica Acta, 2015, 888, 118-125.	2.6	18
58	Active content determination of pharmaceutical tablets using near infrared spectroscopy as Process Analytical Technology tool. Talanta, 2015, 144, 1352-1359.	2.9	29
59	Towards a real time release approach for manufacturing tablets using NIR spectroscopy. Journal of Pharmaceutical and Biomedical Analysis, 2014, 98, 60-67.	1.4	33
60	Development of a quantitative approach using surface-enhanced Raman chemical imaging: First step for the determination of an impurity in a pharmaceutical model. Journal of Pharmaceutical and Biomedical Analysis, 2014, 90, 111-118.	1.4	23
61	Improvement of a stability-indicating method by Quality-by-Design versus Quality-by-Testing: A case of a learning process. Journal of Pharmaceutical and Biomedical Analysis, 2014, 88, 401-409.	1.4	54
62	Evaluation of the quantitative performances of supercritical fluid chromatography: From method development to validation. Journal of Chromatography A, 2014, 1353, 78-88.	1.8	42
63	A new criterion to assess distributional homogeneity in hyperspectral images of solid pharmaceutical dosage forms. Analytica Chimica Acta, 2014, 818, 7-14.	2.6	44
64	Data processing of vibrational chemical imaging for pharmaceutical applications. Journal of Pharmaceutical and Biomedical Analysis, 2014, 101, 123-140.	1.4	95
65	Methodology for the validation of analytical methods involved in uniformity of dosage units tests. Analytica Chimica Acta, 2013, 760, 46-52.	2.6	8
66	PAT tools for the control of co-extrusion implants manufacturing process. International Journal of Pharmaceutics, 2013, 458, 15-24.	2.6	36
67	Determination of 4-aminophenol in a pharmaceutical formulation using surface enhanced Raman scattering: From development to method validation. Talanta, 2013, 116, 899-905.	2.9	46
68	Usefulness of Information Criteria for the Selection of Calibration Curves. Analytical Chemistry, 2013, 85, 6327-6335.	3.2	13
69	Validation of analytical methods involved in dissolution assays: Acceptance limits and decision methodologies. Analytica Chimica Acta, 2012, 751, 44-51.	2.6	9
70	Innovative green supercritical fluid chromatography development for the determination of polar compounds. Journal of Chromatography A, 2012, 1256, 253-260.	1.8	33
71	Comments on "Uncertainty profiles for the validation of analytical methods―by Saffaj and Ihssane. Talanta, 2012, 88, 769-771.	2.9	8
72	Quality by Design Compliant Analytical Method Validation. Analytical Chemistry, 2012, 84, 106-112.	3.2	50

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73	Usefulness of capability indices in the framework of analytical methods validation. Analytica Chimica Acta, 2012, 714, 47-56.	2.6	13
74	Critical review of near-infrared spectroscopic methods validations in pharmaceutical applications. Journal of Pharmaceutical and Biomedical Analysis, 2012, 69, 125-132.	1.4	101
75	Reply to the responses on the comments on "Uncertainty profiles for the validation of analytical methods―by Saffaj and Ihssane. Talanta, 2012, 100, 290-292.	2.9	5
76	Evaluating the reliability of analytical results using a probability criterion: A Bayesian perspective. Analytica Chimica Acta, 2011, 705, 193-206.	2.6	11
77	Models to estimate overall analytical measurements uncertainty: Assumptions, comparisons and applications. Analytica Chimica Acta, 2011, 702, 160-171.	2.6	27
78	Determination of binary polymorphic mixtures of fluconazole using near infrared spectroscopy and X-ray powder diffraction: A comparative study based on the pre-validation stage results. Journal of Pharmaceutical and Biomedical Analysis, 2011, 55, 1208-1212.	1.4	17
79	Near infrared and Raman spectroscopy as Process Analytical Technology tools for the manufacturing of silicone-based drug reservoirs. Analytica Chimica Acta, 2011, 699, 96-106.	2.6	30
80	Optimisation and validation of a fast HPLC method for the quantification of sulindac and its related impurities. Journal of Pharmaceutical and Biomedical Analysis, 2011, 54, 694-700.	1.4	24
81	Advances in validation, risk and uncertainty assessment of bioanalytical methods. Journal of Pharmaceutical and Biomedical Analysis, 2011, 55, 848-858.	1.4	121
82	Do placebo based validation standards mimic real batch products behaviour? Case studies. Journal of Pharmaceutical and Biomedical Analysis, 2011, 55, 583-590.	1.4	4
83	Total error and uncertainty: Friends or foes?. TrAC - Trends in Analytical Chemistry, 2011, 30, 797-806.	5.8	29
84	Acetaminophen determination in low-dose pharmaceutical syrup by NIR spectroscopy. Journal of Pharmaceutical and Biomedical Analysis, 2010, 53, 510-516.	1.4	65
85	Critical analysis of several analytical method validation strategies in the framework of the fit for purpose concept. Journal of Chromatography A, 2010, 1217, 3180-3192.	1.8	56
86	Development and validation of a quantitative method for the selective determination of tin species in tin octoate by differential pulse polarography. Talanta, 2010, 80, 1413-1420.	2.9	8
87	Active content determination of non-coated pharmaceutical pellets by near infrared spectroscopy: Method development, validation and reliability evaluation. Talanta, 2010, 80, 1750-1757.	2.9	55
88	Building the quality into pellet manufacturing environment – Feasibility study and validation of an in-line quantitative near infrared (NIR) method. Talanta, 2010, 83, 305-311.	2.9	36
89	Moisture content determination of pharmaceutical pellets by near infrared spectroscopy: Method development and validation. Analytica Chimica Acta, 2009, 642, 186-192.	2.6	88
90	Methodologies for the transfer of analytical methods: A review. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2009, 877, 2214-2223.	1.2	32

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91	Risk-based approach for the transfer of quantitative methods: Bioanalytical applications. Journal of Chromatography A, 2008, 1189, 32-41.	1.8	15
92	Theoretical and experimental investigations of organic acids/cyclodextrin complexes and their consequences upon the formation of miconazole/cyclodextrin/acid ternary inclusion complexes. International Journal of Pharmaceutics, 2008, 347, 62-70.	2.6	19
93	Theoretical and experimental vibrational study of miconazole and its dimers with organic acids: Application to the IR characterization of its inclusion complexes with cyclodextrins. International Journal of Pharmaceutics, 2008, 350, 155-165.	2.6	14
94	Direct determination of tagitinin C in Tithonia diversifolia leaves by on-line coupling of supercritical carbon dioxide extraction to FT-IR spectroscopy by means of optical fibres. Talanta, 2007, 71, 911-917.	2.9	10
95	Using tolerance intervals in pre-study validation of analytical methods to predict in-study results. Journal of Chromatography A, 2007, 1158, 126-137.	1.8	69
96	Analysis of recent pharmaceutical regulatory documents on analytical method validation. Journal of Chromatography A, 2007, 1158, 111-125.	1.8	229
97	Robustness testing of a chiral NACE method for R-timolol determination in S-timolol maleate and uncertainty assessment from quantitative data. Journal of Pharmaceutical and Biomedical Analysis, 2007, 44, 640-651.	1.4	22
98	Study of the physicochemical properties in aqueous medium and molecular modeling of tagitinin C/cyclodextrin complexes. Journal of Pharmaceutical and Biomedical Analysis, 2007, 43, 910-919.	1.4	15
99	Validation of manufacturing process of Diltiazem HCl tablets by NIR spectrophotometry (NIRS). Journal of Pharmaceutical and Biomedical Analysis, 2007, 45, 356-361.	1.4	37
100	FT?IR measurement of tagitinin C after solvent extraction from Tithonia diversifolia. Talanta, 2004, 62, 383-387.	2.9	11
101	Quanti?cation of tagitinin C inTithonia diversifolia by reversed-phase high-performance liquid chromatography. Phytochemical Analysis, 2003, 14, 378-380.	1.2	16
102	In Vitro Antiplasmodial Activity of Tithonia diversifolia and Identification of its Main Active Constituent: Tagitinin C. Planta Medica, 2002, 68, 543-545.	0.7	94
103	Application of the analytical quality by design principles to the development of a qualitative surfaceâ€enhanced Raman scattering method: A proof of concept. Journal of Raman Spectroscopy, 0, , .	1.2	2