Rodolfo J Romanach

List of Publications by Year
in descending order

76	1,822	236925 25	289244 40
papers	citations	h-index	g-index

98	98	98	1263
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Real-time monitoring of drug concentration in a continuous powder mixing process using NIR spectroscopy. Chemical Engineering Science, 2010, 65, 5728-5733.	3.8	182
2	Preparation and characterization of hydroxypropyl methyl cellulose films containing stable BCS Class II drug nanoparticles for pharmaceutical applications. International Journal of Pharmaceutics, 2012, 423, 496-508.	5.2	138
3	Process analytical technology in continuous manufacturing of a commercial pharmaceutical product. International Journal of Pharmaceutics, 2018, 538, 167-178.	5.2	92
4	Determination of aqueous solubility by heating and equilibration: A technical note. AAPS PharmSciTech, 2006, 7, E29-E32.	3.3	85
5	Analysis of powder phenomena inside a Fette 3090 feed frame using in-line NIR spectroscopy. Journal of Pharmaceutical and Biomedical Analysis, 2014, 100, 40-49.	2.8	66
6	Real time monitoring of powder blend bulk density for coupled feed-forward/feed-back control of a continuous direct compaction tablet manufacturing process. International Journal of Pharmaceutics, 2015, 495, 612-625.	5.2	64
7	Prediction of dissolution profiles by non-destructive near infrared spectroscopy in tablets subjected to different levels of strain. Journal of Pharmaceutical and Biomedical Analysis, 2016, 117, 568-576.	2.8	54
8	Near infrared spectroscopic calibration models for real time monitoring of powder density. International Journal of Pharmaceutics, 2016, 512, 61-74.	5.2	53
9	Assessment of blend uniformity in a continuous tablet manufacturing process. International Journal of Pharmaceutics, 2019, 560, 322-333.	5.2	52
10	Analysis of low content drug tablets by transmission near infrared spectroscopy: Selection of calibration ranges according to multivariate detection and quantitation limits of PLS models. Journal of Pharmaceutical Sciences, 2008, 97, 5318-5327.	3.3	49
11	Fast drying of biocompatible polymer films loaded with poorly water-soluble drug nano-particles via low temperature forced convection. International Journal of Pharmaceutics, 2013, 455, 93-103.	5.2	46
12	Effects of stabilizers on particle redispersion and dissolution from polymer strip films containing liquid antisolvent precipitated griseofulvin particles. Powder Technology, 2013, 236, 37-51.	4.2	45
13	Adequacy and verifiability of pharmaceutical mixtures and dose units by variographic analysis (Theory) Tj ETQq1 1 0.784314 rgBT /Ov 499, 156-174.	5.2	44
14	Quantitation of drug content in a low dosage formulation by transmission near infrared spectroscopy. AAPS PharmSciTech, 2006, 7, E206-E214.	3.3	41
15	Near Infrared Method Development for a Continuous Manufacturing Blending Process. Journal of Pharmaceutical Innovation, 2014, 9, 291-301.	2.4	41
16	Evaluation of Three Approaches for Real-Time Monitoring of Roller Compaction with Near-Infrared Spectroscopy. AAPS PharmSciTech, 2012, 13, 1005-1012.	3.3	40
17	Near-Infrared Spectroscopic Method for Real-Time Monitoring of Pharmaceutical Powders during Voiding. Applied Spectroscopy, 2007, 61, 490-496.	2.2	38
18	Near-infrared spectroscopic applications in pharmaceutical particle technology. Drug Development and Industrial Pharmacy, 2019, 45, 1565-1589.	2.0	35

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19	Characterization of resonant acoustic mixing using near-infrared chemical imaging. Powder Technology, 2016, 297, 349-356.	4.2	32
20	In line monitoring of the powder flow behavior and drug content in a Fette 3090 feed frame at different operating conditions using Near Infrared spectroscopy. Journal of Pharmaceutical and Biomedical Analysis, 2018, 154, 384-396.	2.8	31
21	Complementary Nearâ€Infrared and Raman Chemical Imaging of Pharmaceutical Thin Films. Journal of Pharmaceutical Sciences, 2011, 100, 4888-4895.	3.3	30
22	Blend uniformity analysis using stream sampling and near infrared spectroscopy. AAPS PharmSciTech, 2002, 3, 61-71.	3.3	29
23	Atomic force measurements of 16-mercaptohexadecanoic acid and its salt with CH3, OH, and CONHCH3 functionalized self-assembled monolayers. Applied Surface Science, 2005, 241, 371-383.	6.1	28
24	Raman spectroscopy for in-line and off-line quantification of poorly soluble drugs in strip films. International Journal of Pharmaceutics, 2014, 475, 428-437.	5.2	28
25	Evaluation of Analytical and Sampling Errors in the Prediction of the Active Pharmaceutical Ingredient Concentration in Blends From a Continuous Manufacturing Process. Journal of Pharmaceutical Innovation, 2017, 12, 155-167.	2.4	27
26	Development of near infrared spectroscopic calibration models for in-line determination of low drug concentration, bulk density, and relative specific void volume within a feed frame. Journal of Pharmaceutical and Biomedical Analysis, 2019, 164, 211-222.	2.8	25
27	Near-Infrared Spectroscopy for the In-Line Characterization of Powder Voiding Part II: Quantification of Enhanced Flow Properties of Surface Modified Active Pharmaceutical Ingredients. Journal of Pharmaceutical Innovation, 2010, 5, 1-13.	2.4	24
28	Near-infrared Spectroscopy for the In-line Characterization of Powder Voiding Part I: Development of the Methodology. Journal of Pharmaceutical Innovation, 2009, 4, 187-197.	2.4	23
29	MIA and NIR Chemical Imaging for pharmaceutical product characterization. Chemometrics and Intelligent Laboratory Systems, 2012, 117, 240-249.	3.5	23
30	Blend uniformity analysis using stream sampling and near infrared spectroscopy. AAPS PharmSciTech, 2002, 3, 61-71.	3.3	20
31	Feed frame: The last processing step before the tablet compaction in pharmaceutical manufacturing. International Journal of Pharmaceutics, 2019, 572, 118728.	5.2	19
32	Near infrared spectroscopic transmittance measurements for pharmaceutical powder mixtures. Journal of Pharmaceutical and Biomedical Analysis, 2016, 123, 120-127.	2.8	18
33	Variographic analysis: A new methodology for quality assurance of pharmaceutical blending processes. Computers and Chemical Engineering, 2019, 124, 109-123.	3.8	18
34	A novel method for analyzing thick tablets by near infrared spectroscopy. AAPS PharmSciTech, 2001, 2, 15-24.	3.3	17
35	In-Line Near-Infrared (NIR) and Raman Spectroscopy Coupled with Principal Component Analysis (PCA) for in Situ Evaluation of the Transesterification Reaction. Applied Spectroscopy, 2013, 67, 1142-1149.	2.2	17
36	Deconvolution of Chemical Physical Information from Intact Tablets NIR Spectra: Two-Three-Way Multivariate Calibration Strategies for Drug Quantitation. Journal of Pharmaceutical Sciences, 2009, 98, 2747-2758.	3.3	16

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37	Near-Infrared Chemical Imaging Slope as a New Method to Study Tablet Compaction and Tablet Relaxation. Applied Spectroscopy, 2011, 65, 459-465.	2.2	15
38	Pharmaceutical Application of Fast Raman Hyperspectral Imaging with Compressive Detection Strategy. Journal of Pharmaceutical Innovation, 2014, 9, 1-4.	2.4	15
39	Near-infrared chemical imaging and its correlation with the mechanical properties of chitosanâ€“gelatin edible films. Carbohydrate Polymers, 2016, 136, 409-417.	10.2	14
40	Assessment of Robustness for a Near-Infrared Concentration Model for Real-Time Release Testing in a Continuous Manufacturing Process. Journal of Pharmaceutical Innovation, 2017, 12, 14-25.	2.4	12
41	Design and In-line Raman Spectroscopic Monitoring of a Protein Batch Crystallization Process. Journal of Pharmaceutical Innovation, 2008, 3, 271-279.	2.4	8
42	Collagen abundance in mechanically stimulated osteoblast cultures using near infrared microscopy. Journal of Biomechanics, 2013, 46, 2442-2450.	2.1	8
43	Study of near infrared chemometric models with low heterogeneity films: The role of optical sampling and spectral preprocessing on partial least squares errors. Journal of Near Infrared Spectroscopy, 2017, 25, 103-115.	1.5	8
44	Method transfer of a near-infrared spectroscopic method for blend uniformity in a poorly flowing and hygroscopic blend. Journal of Pharmaceutical and Biomedical Analysis, 2020, 180, 113054.	2.8	8
45	Sampling in pharmaceutical manufacturingâ€”Many opportunities to improve todayâ€™s practice through the Theory of Sampling (TOS). TOS Forum, 2013, 2013, 5.	0.1	8
46	Preliminary Studies for Interfacing Countercurrent Chromatography (CCC) with Fourier Transform Infrared (FT-IR) Spectrometry. Journal of Liquid Chromatography and Related Technologies, 1985, 8, 2209-2219.	1.0	7
47	Flow Cell CCC/FT-IR Spectrometry. Journal of Liquid Chromatography and Related Technologies, 1988, 11, 133-152.	1.0	7
48	A sampling system for flowing powders based on the theory of sampling. International Journal of Pharmaceutics, 2020, 574, 118874.	5.2	7
49	Effect of Shear Applied During a Pharmaceutical Process on Near Infrared Spectra. Applied Spectroscopy, 2016, 70, 455-466.	2.2	6
50	In-line monitoring of low drug concentration of flowing powders in a new sampler device. International Journal of Pharmaceutics, 2020, 583, 119358.	5.2	6
51	Monitoring of high-load dose formulations based on co-processed and non co-processed excipients. International Journal of Pharmaceutics, 2021, 606, 120910.	5.2	6
52	When â€œhomogeneityâ€•is expectedâ€”Theory of Sampling in pharmaceutical manufacturing. TOS Forum, 2013, 2013, 67.	0.1	5
53	Proper sampling, total measurement uncertainty, variographic analysis & fit-for-purpose acceptance levels for pharmaceutical mixing monitoring. TOS Forum, 2013, 2013, 25.	0.1	5
54	Real-time quantification of low-dose cohesive formulations within a sampling interface for flowing powders. International Journal of Pharmaceutics, 2020, 588, 119726.	5.2	5

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55	Comparison of Columns for the Analytical High Speed Countercurrent Chromatograph. Journal of Liquid Chromatography and Related Technologies, 1988, 11, 91-105.	1.0	4
56	Estimating total sampling error for near infrared spectroscopic analysis of pharmaceutical blendsâ€”theory of sampling to the rescue. TOS Forum, 2013, 2013, 71.	0.1	4
57	Linear and Nonlinear Calibration Methods for Predicting Mechanical Properties of Polypropylene Pellets Using Raman Spectroscopy. Applied Spectroscopy, 2016, 70, 1118-1127.	2.2	4
58	A Procedure for Developing Quantitative Near Infrared (NIR) Methods for Pharmaceutical Products. Methods in Pharmacology and Toxicology, 2016, , 133-158.	0.2	3
59	Theory of Sampling (TOS). , 2018, , 53-91.		3
60	Real-time concentration monitoring using a compact composite sensor array for in situ quality control of aqueous formulations. Journal of Pharmaceutical and Biomedical Analysis, 2021, 206, 114386.	2.8	3
61	Determining the number of significant figures for reporting NIR results. NIR News, 2018, 29, 15-17.	0.3	2
62	An innovative sampling interface for monitoring flowing pharmaceutical powder mixtures. Journal of Pharmaceutical and Biomedical Analysis, 2021, 194, 113785.	2.8	2
63	Residence time distribution as a traceability method for lot changes in a pharmaceutical continuous manufacturing system. International Journal of Pharmaceutics, 2022, 611, 121313.	5.2	2
64	Multivariate Image Analysis and near Infrared Chemical Imaging for Characterisation of Micro-Mixing in Polymeric Thin Films. NIR News, 2014, 25, 4-7.	0.3	1
65	Powder Blending Equipment. , 2015, , 287-310.		1
66	Near Infrared Spectroscopy: From Feasibility to Implementation in the Pharmaceutical Industry. NIR News, 2016, 27, 33-38.	0.3	1
67	Statistical Methods in Quality by Design and Process Analytical Technologies for Continuous Processes to Enable Real-Time Release. AAPS Advances in the Pharmaceutical Sciences Series, 2020, , 361-393.	0.6	1
68	Quantitative analysis of blend uniformity within a Three-Chamber feed frame using simultaneously Raman and Near-Infrared spectroscopy. International Journal of Pharmaceutics, 2022, 613, 121417.	5.2	1
69	High Speed Countercurrent Chromatography/Fourier Transform Infrared (HSCCC/FT-IR) Spectrometry. , 1985, 0553, 349.		0
70	TAHITI LIME POSTHARVEST AND NON-DESTRUCTIVE ASSESSMENT OF ESSENTIAL OILS BY NIR SPECTROSCOPY. Acta Horticulturae, 2015, , 1463-1469.	0.2	0
71	Equipment Qualification, Process and Cleaning Validation. , 2015, , 369-399.		0
72	Fractal and Polarization Properties of Light Scattering Using Microcrystalline Pharmaceutical Aggregates. Applied Spectroscopy, 2021, 75, 94-106.	2.2	0

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73	WHAT are sampling errorsâ€"and WHAT can we do about them? Part 1. Spectroscopy Europe, 0, , 36.	0.0	0
74	Sampling in pharmaceutical manufacturing: a critical business case element. Spectroscopy Europe, 0, , 67.	0.0	0
75	Continuous dry granulation. , 2022, , 93-118.		0
76	Development and Application of a Business Case Model for a Stream Sampler in the Pharmaceutical Industry. Journal of Pharmaceutical Innovation, 0, , 1.	2.4	0