Rodolfo J Romanach

List of Publications by Year in Descending Order

91 papers	1,513 citations	22 h-index	37 g-index
98 ext. papers	1,649 ext. citations	3.6 avg, IF	4.63 L-index

#	Paper	IF	Citations
91	Continuous dry granulation **2022**, 93-118		
90	Residence Time Distribution as a Traceability Method for Lot Changes in A Pharmaceutical Continuous Manufacturing System. *International Journal of Pharmaceutics*, **2021**, 121313	6.5	
89	Quantitative Analysis of Blend Uniformity within a Three-Chamber Feed Frame using Simultaneously Raman and Near-Infrared Spectroscopy.. *International Journal of Pharmaceutics*, **2021**, 613, 121417	6.5	
88	Fractal and Polarization Properties of Light Scattering Using Microcrystalline Pharmaceutical Aggregates. *Applied Spectroscopy*, **2021**, 75, 94-106	3.1	
87	An innovative sampling interface for monitoring flowing pharmaceutical powder mixtures. *Journal of Pharmaceutical and Biomedical Analysis*, **2021**, 194, 113785	3.5	0
86	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	3.5	
85	Monitoring of high-load dose formulations based on co-processed and non co-processed excipients. *International Journal of Pharmaceutics*, **2021**, 606, 120910	6.5	1
84	In-line monitoring of low drug concentration of flowing powders in a new sampler device. *International Journal of Pharmaceutics*, **2020**, 583, 119358	6.5	3
83	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	0.5	0
82	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	3.5	3
81	A sampling system for flowing powders based on the theory of sampling. *International Journal of Pharmaceutics*, **2020**, 574, 118874	6.5	5
80	Real-time quantification of low-dose cohesive formulations within a sampling interface for flowing powders. *International Journal of Pharmaceutics*, **2020**, 588, 119726	6.5	4
79	Process Analytical Chemistry and Nondestructive Analytical Methods: The Green Chemistry Approach for Reaction Monitoring, Control, and Analysis **2019**, 257-288		1
78	Near-infrared spectroscopic applications in pharmaceutical particle technology. *Drug Development and Industrial Pharmacy*, **2019**, 45, 1565-1589	3.6	15
77	Feed frame: The last processing step before the tablet compaction in pharmaceutical manufacturing. *International Journal of Pharmaceutics*, **2019**, 572, 118728	6.5	13
76	Assessment of blend uniformity in a continuous tablet manufacturing process. *International Journal of Pharmaceutics*, **2019**, 560, 322-333	6.5	36
75	Variographic analysis: A new methodology for quality assurance of pharmaceutical blending processes. *Computers and Chemical Engineering*, **2019**, 124, 109-123	4	13

74	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	3.5	21
73	Process analytical technology in continuous manufacturing of a commercial pharmaceutical product. *International Journal of Pharmaceutics*, **2018**, 538, 167-178	6.5	66
72	Determining the number of significant figures for reporting NIR results. *NIR News*, **2018**, 29, 15-17	0.8	2
71	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	3.5	28
70	Theory of Sampling (TOS) **2018**, 53-91		3
69	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	1.8	21
68	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	7
67	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	1.8	8
66	A Procedure for Developing Quantitative Near Infrared (NIR) Methods for Pharmaceutical Products. *Methods in Pharmacology and Toxicology*, **2016**, 133-158	1.1	3
65	Near infrared spectroscopic calibration models for real time monitoring of powder density. *International Journal of Pharmaceutics*, **2016**, 512, 61-74	6.5	42
64	Effect of Shear Applied During a Pharmaceutical Process on Near Infrared Spectra. *Applied Spectroscopy*, **2016**, 70, 455-66	3.1	6
63	Linear and Nonlinear Calibration Methods for Predicting Mechanical Properties of Polypropylene Pellets Using Raman Spectroscopy. *Applied Spectroscopy*, **2016**, 70, 1118-27	3.1	2
62	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, 568-76	3.5	44
61	Near infrared spectroscopic transmittance measurements for pharmaceutical powder mixtures. *Journal of Pharmaceutical and Biomedical Analysis*, **2016**, 123, 120-7	3.5	15
60	Adequacy and verifiability of pharmaceutical mixtures and dose units by variographic analysis (Theory of Sampling) - A call for a regulatory paradigm shift. *International Journal of Pharmaceutics*, **2016**, 499, 156-174	6.5	40
59	Near-infrared chemical imaging and its correlation with the mechanical properties of chitosan-gelatin edible films. *Carbohydrate Polymers*, **2016**, 136, 409-17	10.3	12
58	Near Infrared Spectroscopy: From Feasibility to Implementation in the Pharmaceutical Industry. *NIR News*, **2016**, 27, 33-38	0.8	1
57	Characterization of resonant acoustic mixing using near-infrared chemical imaging. *Powder Technology*, **2016**, 297, 349-356	5.2	18

56	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	6.5	58
55	Mixing Theory **2015**, 1-25		1
54	Powder Blending Equipment **2015**, 287-310		
53	Particles and Blending **2015**, 79-100		1
52	Continuous Powder Mixing **2015**, 101-127		14
51	Mixing of Pharmaceutical Solid-Liquid Suspensions **2015**, 233-285		
50	Fluid Mixing Equipment Design **2015**, 311-344		3
49	Turbulent Mixing Fundamentals **2015**, 27-41		2
48	Laminar Mixing Fundamentals **2015**, 43-56		1
47	Dispersion of Fine Powders in Liquids **2015**, 129-151		
46	Wet Granulation and Mixing **2015**, 153-182		
45	Emulsions **2015**, 183-232		
44	Discrete Element Method (DEM) Simulation of Powder Mixing Process **2015**, 459-477		
43	Sampling and Determination of Adequacy of Mixing **2015**, 57-78		4
42	Scale-Up **2015**, 345-368		0
41	Process Analytical Technology for Blending **2015**, 401-430		
40	Equipment Qualification, Process and Cleaning Validation **2015**, 369-399		
39	Imaging Fluid Mixing **2015**, 431-457		

38	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	3.5	58
37	Raman spectroscopy for in-line and off-line quantification of poorly soluble drugs in strip films. *International Journal of Pharmaceutics*, **2014**, 475, 428-37	6.5	23
36	Multivariate Image Analysis and near Infrared Chemical Imaging for Characterisation of Micro-Mixing in Polymeric Thin Films. *NIR News*, **2014**, 25, 4-7	0.8	1
35	Near Infrared Method Development for a Continuous Manufacturing Blending Process. *Journal of Pharmaceutical Innovation*, **2014**, 9, 291-301	1.8	39
34	Pharmaceutical Application of Fast Raman Hyperspectral Imaging with Compressive Detection Strategy. *Journal of Pharmaceutical Innovation*, **2014**, 9, 1-4	1.8	12
33	Effects of stabilizers on particle redispersion and dissolution from polymer strip films containing liquid antisolvent precipitated griseofulvin particles. *Powder Technology*, **2013**, 236, 37-51	5.2	42
32	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	6.5	43
31	Collagen abundance in mechanically stimulated osteoblast cultures using near infrared microscopy. *Journal of Biomechanics*, **2013**, 46, 2442-50	2.9	5
30	When Homogeneity Is expected Theory of Sampling in pharmaceutical manufacturing. *TOS Forum*, **2013**, 2013, 67	0.1	5
29	Estimating total sampling error for near infrared spectroscopic analysis of pharmaceutical blends Theory of sampling to the rescue. *TOS Forum*, **2013**, 2013, 71	0.1	3
28	Proper sampling, total measurement uncertainty, variographic analysis & fit-for-purpose acceptance levels for pharmaceutical mixing monitoring. *TOS Forum*, **2013**, 2013, 25	0.1	4
27	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, 1142-9	3.1	13
26	Sampling in pharmaceutical manufacturing Many opportunities to improve today s practice through the Theory of Sampling (TOS). *TOS Forum*, **2013**, 2013, 5	0.1	7
25	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	6.5	125
24	Evaluation of three approaches for real-time monitoring of roller compaction with near-infrared spectroscopy. *AAPS PharmSciTech*, **2012**, 13, 1005-12	3.9	37
23	MIA and NIR Chemical Imaging for pharmaceutical product characterization. *Chemometrics and Intelligent Laboratory Systems*, **2012**, 117, 240-249	3.8	22
22	Near-Infrared Spectroscopy in Laboratory and Process Analysis **2012**,		5
21	Near-infrared chemical imaging slope as a new method to study tablet compaction and tablet relaxation. *Applied Spectroscopy*, **2011**, 65, 459-65	3.1	14

20	Complementary near-infrared and Raman chemical imaging of pharmaceutical thin films. *Journal of Pharmaceutical Sciences*, **2011**, 100, 4888-95	3.9	25
19	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	1.8	21
18	Real-time monitoring of drug concentration in a continuous powder mixing process using NIR spectroscopy. *Chemical Engineering Science*, **2010**, 65, 5728-5733	4.4	163
17	Deconvolution of chemical and physical information from intact tablets NIR spectra: two- and three-way multivariate calibration strategies for drug quantitation. *Journal of Pharmaceutical Sciences*, **2009**, 98, 2747-58	3.9	13
16	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	1.8	21
15	Design and In-line Raman Spectroscopic Monitoring of a Protein Batch Crystallization Process. *Journal of Pharmaceutical Innovation*, **2008**, 3, 271-279	1.8	6
14	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, 5318-27	3.9	43
13	Near-infrared spectroscopic method for real-time monitoring of pharmaceutical powders during voiding. *Applied Spectroscopy*, **2007**, 61, 490-6	3.1	35
12	Quantitation of drug content in a low dosage formulation by transmission near infrared spectroscopy. *AAPS PharmSciTech*, **2006**, 7, E29	3.9	77
11	Quantitation of drug content in a low dosage formulation by transmission near infrared spectroscopy. *AAPS PharmSciTech*, **2006**, 7, E206-E214	3.9	29
10	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	6.7	24
9	Blend uniformity analysis using stream sampling and near infrared spectroscopy. *AAPS PharmSciTech*, **2002**, 3, E24	3.9	28
8	Blend uniformity analysis using stream sampling and near infrared spectroscopy **2002**, 3, E24		18
7	A novel method for analyzing thick tablets by near infrared spectroscopy. *AAPS PharmSciTech*, **2001**, 2, E11	3.9	16
6	Flow Cell CCC/FT-IR Spectrometry. *Journal of Liquid Chromatography and Related Technologies*, **1988**, 11, 133-152		7
5	Comparison of Columns for the Analytical High Speed Countercurrent Chromatograph. *Journal of Liquid Chromatography and Related Technologies*, **1988**, 11, 91-105		4
4	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		7
3	Sampling in pharmaceutical manufacturing: a critical business case element. *Spectroscopy Europe*,67		

2	WHAT are sampling errors and WHAT can we do about them? Part 1. *Spectroscopy Europe*, 36	
1	Development and Application of a Business Case Model for a Stream Sampler in the Pharmaceutical Industry. *Journal of Pharmaceutical Innovation*, 1	1.8