Clare J Strachan

List of Publications by Year
in descending order

125 papers	6,659 citations	57631 44 h-index	69108 77 g-index
127 all docs	127 docs citations	127 times ranked	4657 citing authors

#	Article	IF	Citations
1	Emerging trends in the stabilization of amorphous drugs. International Journal of Pharmaceutics, 2013, 453, 65-79.	2.6	360
2	Using Terahertz Pulsed Spectroscopy to Quantify Pharmaceutical Polymorphism and Crystallinity. Journal of Pharmaceutical Sciences, 2005, 94, 837-846.	1.6	326
3	Coamorphous Drug Systems: Enhanced Physical Stability and Dissolution Rate of Indomethacin and Naproxen. Molecular Pharmaceutics, 2011, 8, 1919-1928.	2.3	302
4	Amino acids as co-amorphous stabilizers for poorly water soluble drugs â€“ Part 1: Preparation, stability and dissolution enhancement. European Journal of Pharmaceutics and Biopharmaceutics, 2013, 85, 873-881.	2.0	246
5	Using terahertz pulsed spectroscopy to study crystallinity of pharmaceutical materials. Chemical Physics Letters, 2004, 390, 20-24.	1.2	217
6	Co-amorphous simvastatin and glipizide combinations show improved physical stability without evidence of intermolecular interactions. European Journal of Pharmaceutics and Biopharmaceutics, 2012, 81, 159-169.	2.0	197
7	Raman spectroscopy for quantitative analysis of pharmaceutical solidsâ€. Journal of Pharmacy and Pharmacology, 2010, 59, 179-192.	1.2	196
8	Analysis of solid-state transformations of pharmaceutical compounds using vibrational spectroscopy. Journal of Pharmacy and Pharmacology, 2010, 61, 971-988.	1.2	179
9	Amino acids as co-amorphous stabilizers for poorly water-soluble drugs â€“ Part 2: Molecular interactions. European Journal of Pharmaceutics and Biopharmaceutics, 2013, 85, 882-888.	2.0	153
10	Analysis of sustained-release tablet film coats using terahertz pulsed imaging. Journal of Controlled Release, 2007, 119, 253-261.	4.8	145
11	Drug hydrate systems and dehydration processes studied by terahertz pulsed spectroscopy. International Journal of Pharmaceutics, 2007, 334, 78-84.	2.6	134
12	Characterization of Temperature-Induced Phase Transitions in Five Polymorphic Forms of Sulfathiazole by Terahertz Pulsed Spectroscopy and Differential Scanning Calorimetry. Journal of Pharmaceutical Sciences, 2006, 95, 2486-2498.	1.6	126
13	Investigation of properties and recrystallisation behaviour of amorphous indomethacin samples prepared by different methods. International Journal of Pharmaceutics, 2011, 417, 94-100.	2.6	124
14	Indomethacin: New Polymorphs of an Old Drug. Molecular Pharmaceutics, 2013, 10, 4472-4480.	2.3	120
15	Quantifying ternary mixtures of different solid-state forms of indomethacin by Raman and near-infrared spectroscopy. European Journal of Pharmaceutical Sciences, 2007, 32, 182-192.	1.9	115
16	Screening for differences in the amorphous state of indomethacin using multivariate visualization. European Journal of Pharmaceutical Sciences, 2007, 30, 113-123.	1.9	101
17	Characterizing the conversion kinetics of carbamazepine polymorphs to the dihydrate in aqueous suspension using Raman spectroscopy. Journal of Pharmaceutical and Biomedical Analysis, 2006, 40, 271-280.	1.4	99
18	A theoretical and spectroscopic study of co-amorphous naproxen and indomethacin. International Journal of Pharmaceutics, 2013, 453, 80-87.	2.6	95

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19	Supersaturating drug delivery systems: The potential of co-amorphous drug formulations. International Journal of Pharmaceutics, 2017, 532, 1-12.	2.6	93
20	Perspectives in the use of spectroscopy to characterise pharmaceutical solids. International Journal of Pharmaceutics, 2008, 364, 159-169.	2.6	90
21	Chemical Imaging of Oral Solid Dosage Forms and Changes upon Dissolution Using Coherent Anti-Stokes Raman Scattering Microscopy. Analytical Chemistry, 2009, 81, 2085-2091.	3.2	89
22	Amino Acids as Co-amorphous Excipients for Simvastatin and Glibenclamide: Physical Properties and Stability. Molecular Pharmaceutics, 2014, 11, 2381-2389.	2.3	88
23	Temperature dependent terahertz pulsed spectroscopy of carbamazepine. Thermochimica Acta, 2005, 436, 71-77.	1.2	85
24	Physicochemical Properties and Stability of Two Differently Prepared Amorphous Forms of Simvastatin. Crystal Growth and Design, 2008, 8, 128-135.	1.4	85
25	Understanding the solid-state forms of fenofibrate â€“ A spectroscopic and computational study. European Journal of Pharmaceutics and Biopharmaceutics, 2009, 71, 100-108.	2.0	85
26	Quantitative analysis of polymorphic mixtures of carbamazepine by Raman spectroscopy and principal components analysis. Journal of Raman Spectroscopy, 2004, 35, 347-352.	1.2	68
27	Understanding the solid-state behaviour of triglyceride solid lipid extrudates and its influence on dissolution. European Journal of Pharmaceutics and Biopharmaceutics, 2009, 71, 80-87.	2.0	68
28	A theoretical and spectroscopic study of Î³-crystalline and amorphous indometacin. Journal of Pharmacy and Pharmacology, 2010, 59, 261-269.	1.2	68
29	Amorphous solid dispersions of piroxicam and SoluplusÂ®: Qualitative and quantitative analysis of piroxicam recrystallization during storage. International Journal of Pharmaceutics, 2015, 486, 306-314.	2.6	60
30	Influence of Polymorphic Form, Morphology, and Excipient Interactions on the Dissolution of Carbamazepine Compacts. Journal of Pharmaceutical Sciences, 2007, 96, 584-594.	1.6	57
31	Amorphous drugs and dosage forms. Journal of Drug Delivery Science and Technology, 2013, 23, 403-408.	1.4	57
32	Tissueâ€specific study across the stem reveals the chemistry and transcriptome dynamics of birch bark. New Phytologist, 2019, 222, 1816-1831.	3.5	56
33	Pharmaceutical applications of non-linear imaging. International Journal of Pharmaceutics, 2011, 417, 163-172.	2.6	55
34	Establishing quantitative in-line analysis of multiple solid-state transformations during dehydration. Journal of Pharmaceutical Sciences, 2008, 97, 4983-4999.	1.6	54
35	The influence of various excipients on the conversion kinetics of carbamazepine polymorphs in aqueous suspension. Journal of Pharmacy and Pharmacology, 2010, 59, 193-201.	1.2	53
36	Investigation of the Formation Process of Two Piracetam Cocrystals during Grinding. Pharmaceutics, 2011, 3, 706-722.	2.0	53

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37	Visualizing the conversion of carbamazepine in aqueous suspension with and without the presence of excipients: A single crystal study using SEM and Raman microscopy. European Journal of Pharmaceutics and Biopharmaceutics, 2006, 64, 326-335.	2.0	52
38	Qualitative in situ analysis of multiple solidâ€state forms using spectroscopy and partial least squares discriminant modeling. Journal of Pharmaceutical Sciences, 2007, 96, 1802-1820.	1.6	51
39	In-line monitoring of solid-state transitions during fluidisation. Chemical Engineering Science, 2007, 62, 408-415.	1.9	48
40	Chemical analysis using 3D printed glass microfluidics. Analytical Methods, 2019, 11, 1802-1810.	1.3	48
41	An insight into water of crystallization during processing using vibrational spectroscopy. Journal of Pharmaceutical Sciences, 2009, 98, 3903-3932.	1.6	45
42	Terahertz pulsed imaging as an advanced characterisation tool for film coatingsâ€"A review. International Journal of Pharmaceutics, 2013, 457, 510-520.	2.6	45
43	Use of low-frequency Raman spectroscopy and chemometrics for the quantification of crystallinity in amorphous griseofulvin tablets. Vibrational Spectroscopy, 2015, 77, 10-16.	1.2	45
44	Investigations on the effect of different cooling rates on the stability of amorphous indomethacin. European Journal of Pharmaceutical Sciences, 2011, 44, 341-350.	1.9	44
45	Influence of sample characteristics on quantification of carbamazepine hydrate formation by X-ray powder diffraction and Raman spectroscopy. European Journal of Pharmaceutics and Biopharmaceutics, 2007, 66, 466-474.	2.0	43
46	Hyphenated spectroscopy as a polymorph screening tool. Journal of Pharmaceutical and Biomedical Analysis, 2007, 44, 477-483.	1.4	43
47	Quantification of binary polymorphic mixtures of ranitidine hydrochloride using NIR spectroscopy. Vibrational Spectroscopy, 2006, 41, 225-231.	1.2	42
48	Application of terahertz pulsed imaging to analyse film coating characteristics of sustained-release coated pellets. International Journal of Pharmaceutics, 2013, 457, 521-526.	2.6	41
49	Assessment of crystalline disorder in cryo-milled samples of indomethacin using atomic pair-wise distribution functions. International Journal of Pharmaceutics, 2011, 417, 112-119.	2.6	40
50	Fluorescence-suppressed time-resolved Raman spectroscopy of pharmaceuticals using complementary metal-oxide semiconductor (CMOS) single-photon avalanche diode (SPAD) detector. Analytical and Bioanalytical Chemistry, 2016, 408, 761-774.	1.9	40
51	A minitablet formulation made from electrospun nanofibers. European Journal of Pharmaceutics and Biopharmaceutics, 2017, 114, 213-220.	2.0	40
52	In situ amorphisation of indomethacin with EudragitÂ® E during dissolution. European Journal of Pharmaceutics and Biopharmaceutics, 2013, 85, 1259-1265.	2.0	39
53	In situ dissolution analysis using coherent anti-Stokes Raman scattering (CARS) and hyperspectral CARS microscopy. European Journal of Pharmaceutics and Biopharmaceutics, 2013, 85, 1141-1147.	2.0	39
54	A theoretical and spectroscopic study of carbamazepine polymorphs. Journal of Raman Spectroscopy, 2004, 35, 401-408.	1.2	38

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55	Prediction of Tablet Film-coating Thickness Using a Rotating Plate Coating System and NIR Spectroscopy. AAPS PharmSciTech, 2008, 9, 1047-1053.	1.5	38
56	Investigating the Principles of Recrystallization from Glyceride Melts. AAPS PharmSciTech, 2009, 10, 1224-33.	1.5	38
57	Effect of different preparation methods on the dissolution behaviour of amorphous indomethacin. European Journal of Pharmaceutics and Biopharmaceutics, 2012, 80, 459-464.	2.0	38
58	Rational formulation development and in vitro assessment of SMEDDS for oral delivery of poorly water soluble drugs. European Journal of Pharmaceutical Sciences, 2012, 46, 508-515.	1.9	38
59	Polymer incorporation method affects the physical stability of amorphous indomethacin in aqueous suspension. European Journal of Pharmaceutics and Biopharmaceutics, 2015, 96, 32-43.	2.0	37
60	Direct comparison of low- and mid-frequency Raman spectroscopy for quantitative solid-state pharmaceutical analysis. Journal of Pharmaceutical and Biomedical Analysis, 2018, 149, 343-350.	1.4	37
61	Investigating Dehydration from Compacts Using Terahertz Pulsed, Raman, and Near-Infrared Spectroscopy. Applied Spectroscopy, 2007, 61, 1265-1274.	1.2	33
62	Understanding Critical Quality Attributes for Nanocrystals from Preparation to Delivery. Molecules, 2015, 20, 22286-22300.	1.7	32
63	Analysis of solid-state transformations of pharmaceutical compounds using vibrational spectroscopy. Journal of Pharmacy and Pharmacology, 2009, 61, 971-988.	1.2	32
64	Solid lipid extrudates as sustained-release matrices: The effect of surface structure on drug release properties. European Journal of Pharmaceutical Sciences, 2008, 35, 335-343.	1.9	31
65	Determination of amorphous content in the pharmaceutical process environment. Journal of Pharmacy and Pharmacology, 2010, 59, 161-170.	1.2	31
66	The effect of surfactants on the dissolution behavior of amorphous formulations. European Journal of Pharmaceutics and Biopharmaceutics, 2016, 103, 13-22.	2.0	31
67	Investigating the relationship between drug distribution in solid lipid matrices and dissolution behaviour using raman spectroscopy and mapping**Maike Windbergs and Miriam Haaser contributed equally to this work.. Journal of Pharmaceutical Sciences, 2010, 99, 1464-1475.	1.6	30
68	Evaluating the effect of coating equipment on tablet film quality using terahertz pulsed imaging. European Journal of Pharmaceutics and Biopharmaceutics, 2013, 85, 1095-1102.	2.0	30
69	Evaluation of vibrational spectroscopic methods to identify and quantify multiple adulterants in herbal medicines. Talanta, 2015, 138, 77-85.	2.9	30
70	Production, applications and inÂvivo fate of drug nanocrystals. Journal of Drug Delivery Science and Technology, 2016, 34, 21-31.	1.4	30
71	Probing Pharmaceutical Mixtures during Milling: The Potency of Low-Frequency Raman Spectroscopy in Identifying Disorder. Molecular Pharmaceutics, 2017, 14, 4675-4684.	2.3	30
72	Direct Measurement of Amorphous Solubility. Analytical Chemistry, 2019, 91, 7411-7417.	3.2	30

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73	Biopharmaceutics of Topical Ophthalmic Suspensions: Importance of Viscosity and Particle Size in Ocular Absorption of Indomethacin. Pharmaceutics, 2021, 13, 452.	2.0	30
74	The impact of surface- and nano-crystallisation on the detected amorphous content and the dissolution behaviour of amorphous indomethacin. European Journal of Pharmaceutics and Biopharmaceutics, 2012, 82, 187-193.	2.0	28
75	Degrees of order: A comparison of nanocrystal and amorphous solids for poorly soluble drugs. International Journal of Pharmaceutics, 2020, 586, 119492.	2.6	28
76	Tailor-made dissolution profiles by extruded matrices based on lipid polyethylene glycol mixtures. Journal of Controlled Release, 2009, 137, 211-216.	4.8	26
77	Analysis of matrix dosage forms during dissolution testing using raman microscopy. Journal of Pharmaceutical Sciences, 2011, 100, 4452-4459.	1.6	25
78	Characterization of chitosanâ€“magnesium aluminum silicate nanocomposite films for buccal delivery of nicotine. International Journal of Biological Macromolecules, 2013, 55, 24-31.	3.6	25
79	Inhibition of surface crystallisation of amorphous indomethacin particles in physical drugâ€“polymer mixtures. International Journal of Pharmaceutics, 2013, 456, 301-306.	2.6	25
80	Unravelling the Relationship between Degree of Disorder and the Dissolution Behavior of Milled Glibenclamide. Molecular Pharmaceutics, 2014, 11, 234-242.	2.3	25
81	Time-Gated Raman Spectroscopy for Quantitative Determination of Solid-State Forms of Fluorescent Pharmaceuticals. Analytical Chemistry, 2018, 90, 4832-4839.	3.2	25
82	Understanding Dissolution and Crystallization with Imaging: A Surface Point of View. Molecular Pharmaceutics, 2018, 15, 5361-5373.	2.3	24
83	Characterizing an Amorphous System Exhibiting Trace Crystallinity: A Case Study with Saquinavir. Crystal Growth and Design, 2008, 8, 119-127.	1.4	23
84	Analysis of lecithinâ€“cholesterol mixtures using Raman spectroscopy. Journal of Pharmaceutical and Biomedical Analysis, 2006, 41, 476-484.	1.4	22
85	Simultaneous qualitative and quantitative analysis of counterfeit and unregistered medicines using Raman spectroscopy. Journal of Raman Spectroscopy, 2013, 44, 1172-1180.	1.2	22
86	Theoretical Considerations in Developing Amorphous Solid Dispersions. Advances in Delivery Science and Technology, 2014, , 35-90.	0.4	22
87	Distribution of binder in granules produced by means of twin screw granulation. International Journal of Pharmaceutics, 2014, 462, 8-10.	2.6	21
88	Investigation of the phase separation of PNIPAM using infrared spectroscopy together with multivariate data analysis. Polymer, 2013, 54, 6947-6953.	1.8	20
89	Differential scanning calorimetry predicts the critical quality attributes of amorphous glibenclamide. European Journal of Pharmaceutical Sciences, 2015, 80, 74-81.	1.9	20
90	Multimodal Nonlinear Optical Imaging for Sensitive Detection of Multiple Pharmaceutical Solid-State Forms and Surface Transformations. Analytical Chemistry, 2017, 89, 11460-11467.	3.2	20

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91	Influence of the composition of glycerides on the solid-state behaviour and the dissolution profiles of solid lipid extrudates. International Journal of Pharmaceutics, 2009, 381, 184-191.	2.6	19
92	Two-Step Solid Lipid Extrusion as a Process to Modify Dissolution Behavior. AAPS PharmSciTech, 2010, 11, 2-8.	1.5	19
93	Investigation of protein distribution in solid lipid particles and its impact on protein release using coherent anti-Stokes Raman scattering microscopy. Journal of Controlled Release, 2015, 197, 111-120.	4.8	19
94	Towards characterization and identification of solid state pharmaceutical mixtures through second harmonic generation. Journal of Pharmaceutical Sciences, 2006, 95, 761-768.	1.6	18
95	Preparation and characterization of multi-component tablets containing co-amorphous salts: Combining multimodal non-linear optical imaging with established analytical methods. European Journal of Pharmaceutics and Biopharmaceutics, 2018, 132, 112-126.	2.0	18
96	Surface Stabilization and Dissolution Rate Improvement of Amorphous Compacts with Thin Polymer Coatings: Can We Have It All?. Molecular Pharmaceutics, 2020, 17, 1248-1260.	2.3	18
97	Coherent anti-Stokes Raman scattering microscopy driving the future of loaded mesoporous silica imaging. Acta Biomaterialia, 2014, 10, 4870-4877.	4.1	17
98	The formation and physical stability of two-phase solid dispersion systems of indomethacin in supercooled molten mixtures with different matrix formers. European Journal of Pharmaceutical Sciences, 2017, 97, 237-246.	1.9	17
99	Image-Based Investigation: Biorelevant Solubility of Î± and Î³ Indomethacin. Analytical Chemistry, 2019, 91, 3997-4003.	3.2	17
100	Multimodal non-linear optical imaging for the investigation of drug nano-/microcrystalâ€“cell interactions. European Journal of Pharmaceutics and Biopharmaceutics, 2015, 96, 338-348.	2.0	16
101	Determination of the optical second harmonic response of pharmaceutical solidâ€“solid mixtures. Optics and Lasers in Engineering, 2005, 43, 209-220.	2.0	15
102	Elucidation of Compression-Induced Surface Crystallization in Amorphous Tablets Using Sum Frequency Generation (SFG) Microscopy. Pharmaceutical Research, 2017, 34, 957-970.	1.7	15
103	The Influence of Milling on the Dissolution Performance of Simvastatin. Pharmaceutics, 2010, 2, 419-431.	2.0	14
104	Partial Characterization of Different Mixtures of Solids by Measuring the Optical Nonlinear Response. Journal of Pharmaceutical Sciences, 2004, 93, 733-742.	1.6	13
105	Stabilized Amorphous Solid Dispersions with Small Molecule Excipients. Advances in Delivery Science and Technology, 2014, , 613-636.	0.4	13
106	Crystallization Kinetics of an Amorphous Pharmaceutical Compound Using Fluorescence-Lifetime-Imaging Microscopy. Molecular Pharmaceutics, 2018, 15, 1964-1971.	2.3	13
107	The use of quantum chemistry in pharmaceutical research as illustrated by case studies of indometacin and carbamazepine. Journal of Pharmacy and Pharmacology, 2010, 59, 271-277.	1.2	11
108	Characterization of the bulk properties of pharmaceutical solids using nonlinear optics - a review. Journal of Pharmacy and Pharmacology, 2010, 59, 241-250.	1.2	9

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109	Studies on the lipase-induced degradation of lipid-based drug delivery systems. Part II â€“ Investigations on the mechanisms leading to collapse of the lipid structure. European Journal of Pharmaceutics and Biopharmaceutics, 2013, 84, 456-463.	2.0	9
110	Physical Stability of Freeze-Dried Isomalt Diastereomer Mixtures. Pharmaceutical Research, 2016, 33, 1752-1768.	1.7	6
111	Interdependence of particle properties and bulk powder behavior of indomethacin in quench-cooled molten two-phase solid dispersions. International Journal of Pharmaceutics, 2018, 541, 188-197.	2.6	6
112	Machine-Vision-Enabled Salt Dissolution Analysis. Analytical Chemistry, 2020, 92, 9730-9738.	3.2	6
113	Combined Effect of the Preparation Method and Compression on the Physical Stability and Dissolution Behavior of Melt-Quenched Amorphous Celecoxib. Molecular Pharmaceutics, 2021, 18, 1408-1418.	2.3	6
114	Vibrational Spectroscopic Imaging. Advances in Delivery Science and Technology, 2016, , 523-589.	0.4	5
115	Insights into Caco-2 cell culture structure using coherent anti-Stokes Raman scattering (CARS) microscopy. International Journal of Pharmaceutics, 2017, 523, 270-280.	2.6	5
116	Isomalt and its diastereomer mixtures as stabilizing excipients with freeze-dried lactate dehydrogenase. International Journal of Pharmaceutics, 2018, 538, 287-295.	2.6	5
117	Cellâ€Nanoparticle Interactions at (Sub)â€“Nanometer Resolution Analyzed by Electron Microscopy and Correlative Coherent Antiâ€Stokes Raman Scattering. Biotechnology Journal, 2019, 14, 1800413.	1.8	5
118	Coherent anti-Stokes Raman Scattering (CARS) Microscopy Visualizes Pharmaceutical Tablets During Dissolution. Journal of Visualized Experiments, 2014, , .	0.2	3
119	Low- versus Mid-frequency Raman Spectroscopy for in Situ Analysis of Crystallization in Slurries. Molecular Pharmaceutics, 2022, 19, 2316-2326.	2.3	3
120	Influence of postharvest processing and storage conditions on key antioxidants in pÅ«hÄ•(S onchus) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	1.2	2
121	Effect of trehalose and melibiose on crystallization of amorphous paracetamol. International Journal of Pharmaceutics, 2020, 590, 119878.	2.6	2
122	Nonresonant CARS Imaging of Porous and Solid Silicon Nanoparticles in Human Cells. ACS Biomaterials Science and Engineering, 2022, 8, 4185-4195.	2.6	2
123	Fast imaging-based single particle analysis method for solubility determination. International Journal of Pharmaceutics, 2022, 624, 121976.	2.6	2
124	Image-based dissolution analysis for tracking the surface stability of amorphous powders. ADMET and DMPK, 2020, 8, 401-409.	1.1	1
125	Measuring Particle Size Distributions via the Polarization Dependence of Second Harmonic Generation. , 2009, , .		0