

# Jarkko Ketolainen

## List of Publications by Year in descending order

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94  
papers

2,245  
citations

201674

27  
h-index

276875

41  
g-index

94  
all docs

94  
docs citations

94  
times ranked

1878  
citing authors

#	ARTICLE	IF	CITATIONS
1	Faster to First-time-in-Human: Prediction of the liquid solid ratio for continuous wet granulation. European Journal of Pharmaceutical Sciences, 2022, 172, 106151.	4.0	2
2	Effect of shape on the physical properties of pharmaceutical tablets. International Journal of Pharmaceutics, 2022, 624, 121993.	5.2	7
3	Preparation and characterization of hot-melt extruded polycaprolactone-based filaments intended for 3D-printing of tablets. European Journal of Pharmaceutical Sciences, 2021, 158, 105619.	4.0	33
4	Comparison between twin-screw and high-shear granulation - The effect of filler and active pharmaceutical ingredient on the granule and tablet properties. Powder Technology, 2020, 376, 187-198.	4.2	16
5	Simultaneous investigation of the liquid transport and swelling performance during tablet disintegration. International Journal of Pharmaceutics, 2020, 584, 119380.	5.2	27
6	Converting a batch based high-shear granulation process to a continuous dry granulation process; a demonstration with ketoprofen tablets. European Journal of Pharmaceutical Sciences, 2020, 151, 105381.	4.0	4
7	The Comparison of Two Challenging Low Dose APIs in a Continuous Direct Compression Process. Pharmaceutics, 2020, 12, 279.	4.5	11
8	Comparison between integrated continuous direct compression line and batch processing – The effect of raw material properties. European Journal of Pharmaceutical Sciences, 2019, 133, 40-53.	4.0	26
9	Measurement of residence time distributions and material tracking on three continuous manufacturing lines. International Journal of Pharmaceutics, 2019, 563, 184-197.	5.2	19
10	The effects of unintentional and intentional process disturbances on tablet quality during long continuous manufacturing runs. European Journal of Pharmaceutical Sciences, 2019, 129, 10-20.	4.0	8
11	Lubricant based determination of design space for continuously manufactured high dose paracetamol tablets. European Journal of Pharmaceutical Sciences, 2018, 115, 1-10.	4.0	15
12	Fast and non-destructive pore structure analysis using terahertz time-domain spectroscopy. International Journal of Pharmaceutics, 2018, 537, 102-110.	5.2	27
13	Resolving the rapid water absorption of porous functionalised calcium carbonate powder compacts by terahertz pulsed imaging. Chemical Engineering Research and Design, 2018, 132, 1082-1090.	5.6	28
14	Investigating elastic relaxation effects on the optical properties of functionalised calcium carbonate compacts using optics-based Heckel analysis. International Journal of Pharmaceutics, 2018, 544, 278-284.	5.2	5
15	Terahertz absorption spectra of commonly used antimalarial drugs. Optical Review, 2018, 25, 444-449.	2.0	6
16	Efficient production of solid dispersions by spray drying solutions of high solid content using a 3-fluid nozzle. European Journal of Pharmaceutics and Biopharmaceutics, 2018, 123, 50-58.	4.3	17
17	On the role of API in determining porosity, pore structure and bulk modulus of the skeletal material in pharmaceutical tablets formed with MCC as sole excipient. International Journal of Pharmaceutics, 2017, 526, 321-331.	5.2	17
18	Optics-based compressibility parameter for pharmaceutical tablets obtained with the aid of the terahertz refractive index. International Journal of Pharmaceutics, 2017, 525, 85-91.	5.2	7

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19	Characterization of the Pore Structure of Functionalized Calcium Carbonate Tablets by Terahertz Time-Domain Spectroscopy and X-Ray Computed Microtomography. <i>Journal of Pharmaceutical Sciences</i> , 2017, 106, 1586-1595.	3.3	59
20	Effect of storage on the physical stability of thin polymethacrylate-perphenazine films. <i>European Journal of Pharmaceutical Sciences</i> , 2017, 104, 293-301.	4.0	4
21	Reflectometric monitoring of the dissolution process of thin polymeric films. <i>International Journal of Pharmaceutics</i> , 2017, 523, 127-132.	5.2	3
22	Provoking an end-to-end continuous direct compression line with raw materials prone to segregation. <i>European Journal of Pharmaceutical Sciences</i> , 2017, 109, 514-524.	4.0	28
23	Analysis of anisotropic pore structures using terahertz spectroscopy and imaging. , 2017, , .		1
24	Effects of cooling rate in microscale and pilot scale freeze-drying " Variations in excipient polymorphs and protein secondary structure. <i>European Journal of Pharmaceutical Sciences</i> , 2016, 95, 72-81.	4.0	31
25	Strategic framework for education and training in Quality by Design (QbD) and process analytical technology (PAT). <i>European Journal of Pharmaceutical Sciences</i> , 2016, 90, 2-7.	4.0	15
26	A structure parameter for porous pharmaceutical tablets obtained with the aid of Wiener bounds for effective permittivity and terahertz time-delay measurement. <i>International Journal of Pharmaceutics</i> , 2016, 506, 87-92.	5.2	16
27	Achieving a robust drug release from extended release tablets using an integrated continuous mixing and direct compression line. <i>International Journal of Pharmaceutics</i> , 2016, 511, 659-668.	5.2	11
28	On the Correlation of Effective Terahertz Refractive Index and Average Surface Roughness of Pharmaceutical Tablets. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , 2016, 37, 776-785.	2.2	17
29	Terahertz study on porosity and mass fraction of active pharmaceutical ingredient of pharmaceutical tablets. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2016, 105, 122-133.	4.3	30
30	Noninvasive porosity measurement of biconvex tablets using terahertz pulses. <i>International Journal of Pharmaceutics</i> , 2016, 509, 439-443.	5.2	18
31	Systematic evaluation of a spraying method for preparing thin Eudragit-drug films by Design of Experiments. <i>Journal of Drug Delivery Science and Technology</i> , 2016, 35, 241-251.	3.0	5
32	Continuous manufacturing of tablets with PROMIS-line " Introduction and case studies from continuous feeding, blending and tableting. <i>European Journal of Pharmaceutical Sciences</i> , 2016, 90, 38-46.	4.0	42
33	Linking granulation performance with residence time and granulation liquid distributions in twin-screw granulation: An experimental investigation. <i>European Journal of Pharmaceutical Sciences</i> , 2016, 90, 25-37.	4.0	61
34	Impact of Microscale and Pilot-Scale Freeze-Drying on Protein Secondary Structures: Sucrose Formulations of Lysozyme and Catalase. <i>Journal of Pharmaceutical Sciences</i> , 2015, 104, 3710-3721.	3.3	4
35	Estimation of Young's modulus of pharmaceutical tablet obtained by terahertz time-delay measurement. <i>International Journal of Pharmaceutics</i> , 2015, 489, 100-105.	5.2	18
36	Theophylline-nicotinamide cocrystal formation in physical mixture during storage. <i>International Journal of Pharmaceutics</i> , 2015, 486, 121-130.	5.2	36

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37	Continuous manufacturing of extended release tablets via powder mixing and direct compression. <i>International Journal of Pharmaceutics</i> , 2015, 495, 290-301.	5.2	53
38	Monitoring of drug release kinetics from thin polymer films by multi-parametric surface plasmon resonance. <i>International Journal of Pharmaceutics</i> , 2015, 494, 531-536.	5.2	13
39	Near-Infrared Imaging for High-Throughput Screening of Moisture Induced Changes in Freeze-Dried Formulations. <i>Journal of Pharmaceutical Sciences</i> , 2014, 103, 2839-2846.	3.3	13
40	Detection of porosity of pharmaceutical compacts by terahertz radiation transmission and light reflection measurement techniques. <i>International Journal of Pharmaceutics</i> , 2014, 465, 70-76.	5.2	56
41	Influence of raw material properties upon critical quality attributes of continuously produced granules and tablets. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2014, 87, 252-263.	4.3	70
42	Validation of a multipoint near-infrared spectroscopy method for in-line moisture content analysis during freeze-drying. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2014, 95, 229-237.	2.8	29
43	Phase Separation in Coamorphous Systems: <i>in Silico</i> Prediction and the Experimental Challenge of Detection. <i>Molecular Pharmaceutics</i> , 2014, 11, 2271-2279.	4.6	36
44	Visualization and understanding of the granulation liquid mixing and distribution during continuous twin screw granulation using NIR chemical imaging. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2014, 86, 383-392.	4.3	65
45	Non-contact weight measurement of flat-faced pharmaceutical tablets using terahertz transmission pulse delay measurements. <i>International Journal of Pharmaceutics</i> , 2014, 476, 16-22.	5.2	31
46	Structural attributes of model protein formulations prepared by rapid freeze-drying cycles in a microscale heating stage. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2014, 87, 347-356.	4.3	9
47	Real-time tablet formation monitoring with ultrasound measurements in eccentric single station tablet press. <i>International Journal of Pharmaceutics</i> , 2013, 442, 27-34.	5.2	11
48	In-Line Multipoint Near-Infrared Spectroscopy for Moisture Content Quantification during Freeze-Drying. <i>Analytical Chemistry</i> , 2013, 85, 2377-2384.	6.5	48
49	Microscale Freeze-Drying with Raman Spectroscopy as a Tool for Process Development. <i>Analytical Chemistry</i> , 2013, 85, 2109-2116.	6.5	24
50	A Study on the Resolution of a Terahertz Spectrometer for the Assessment of the Porosity of Pharmaceutical Tablets. <i>Applied Spectroscopy</i> , 2012, 66, 319-323.	2.2	26
51	Computational Approach for Fast Screening of Small Molecular Candidates To Inhibit Crystallization in Amorphous Drugs. <i>Molecular Pharmaceutics</i> , 2012, 9, 2844-2855.	4.6	19
52	Strategic funding priorities in the pharmaceutical sciences allied to Quality by Design (QbD) and Process Analytical Technology (PAT). <i>European Journal of Pharmaceutical Sciences</i> , 2012, 47, 402-405.	4.0	49
53	Predicting granule size distribution of a fluidized bed spray granulation process by regime based PLS modeling of acoustic emission data. <i>Powder Technology</i> , 2012, 228, 149-157.	4.2	26
54	Kramers-Kronig analysis on the real refractive index of porous media in the terahertz spectral range. <i>Optics Letters</i> , 2011, 36, 778.	3.3	21

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55	Ultrasound transmission measurements for tensile strength evaluation of tablets. <i>International Journal of Pharmaceutics</i> , 2011, 409, 104-110.	5.2	23
56	Surface-Active Derivative of Inulin (Inutec® SP1) Is a Superior Carrier for Solid Dispersions with a High Drug Load. <i>Journal of Pharmaceutical Sciences</i> , 2011, 100, 2333-2342.	3.3	27
57	Evolution of Granule Structure and Drug Content During Fluidized Bed Granulation by X-Ray Microtomography and Confocal Raman Spectroscopy. <i>Journal of Pharmaceutical Sciences</i> , 2011, 100, 5254-5269.	3.3	18
58	In-line ultrasound measurement system for detecting tablet integrity. <i>International Journal of Pharmaceutics</i> , 2010, 400, 104-113.	5.2	32
59	Measuring tablet porosity using multispectral imaging system. <i>Optical Review</i> , 2010, 17, 323-326.	2.0	1
60	Electrical impedance tomography for three-dimensional drug release monitoring. <i>European Journal of Pharmaceutical Sciences</i> , 2010, 41, 407-413.	4.0	12
61	Estimation of granule size distribution for batch fluidized bed granulation process using acoustic emission and <i>in vitro</i> PLS. <i>Journal of Chemometrics</i> , 2010, 24, 464-471.	1.3	15
62	An optical method for continuous monitoring of the dissolution rate of pharmaceutical powders. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2010, 52, 181-189.	2.8	14
63	Labscale fluidized bed granulator instrumented with non-invasive process monitoring devices. <i>Chemical Engineering Journal</i> , 2010, 164, 268-274.	12.7	15
64	Perphenazine solid dispersions for orally fast-disintegrating tablets: physical stability and formulation. <i>Drug Development and Industrial Pharmacy</i> , 2010, 36, 601-613.	2.0	24
65	Predicting the Formation and Stability of Amorphous Small Molecule Binary Mixtures from Computationally Determined Flory-Huggins Interaction Parameter and Phase Diagram. <i>Molecular Pharmaceutics</i> , 2010, 7, 795-804.	4.6	145
66	Wiener Bounds for Complex Permittivity in Terahertz Spectroscopy: Case Study of Two-Phase Pharmaceutical Tablets. <i>Applied Spectroscopy</i> , 2010, 64, 127-131.	2.2	19
67	Fast-dissolving sublingual solid dispersion and cyclodextrin complex increase the absorption of perphenazine in rabbits. <i>Journal of Pharmacy and Pharmacology</i> , 2010, 63, 19-25.	2.4	15
68	Effect of formulation parameters and drug-polymer interactions on drug release from starch acetate matrix tablets. <i>Journal of Pharmaceutical Sciences</i> , 2009, 98, 3676-3690.	3.3	7
69	The feasibility of using acoustic emissions for monitoring of fluidized bed granulation. <i>Chemometrics and Intelligent Laboratory Systems</i> , 2009, 97, 75-81.	3.5	46
70	Monitoring the wetting phase of fluidized bed granulation process using multi-way methods: The separation of successful from unsuccessful batches. <i>Chemometrics and Intelligent Laboratory Systems</i> , 2009, 96, 88-93.	3.5	17
71	Intraorally fast-dissolving particles of a poorly soluble drug: Preparation and <i>in vitro</i> characterization. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2009, 71, 271-281.	4.3	31
72	An electrical impedance tomography-based approach to monitor <i>in vitro</i> sodium chloride dissolution from pharmaceutical tablets. <i>Review of Scientific Instruments</i> , 2009, 80, 103706.	1.3	7

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73	Drug Release Phenomena Within a Hydrophobic Starch Acetate Matrix: FTIR Mapping of Tablets After In Vitro Dissolution Testing. <i>Journal of Pharmaceutical Sciences</i> , 2008, 97, 3367-3378.	3.3	13
74	Estimation of drug release profiles of a heterogeneous set of drugs from a hydrophobic matrix tablet using molecular descriptors. <i>Journal of Chemometrics</i> , 2008, 22, 653-660.	1.3	8
75	Modifying Drug Release and Tablet Properties of Starch Acetate Tablets by Dry Powder Agglomeration. <i>Journal of Pharmaceutical Sciences</i> , 2007, 96, 438-447.	3.3	10
76	Predicting the drug concentration in starch acetate matrix tablets from ATR-FTIR spectra using multi-way methods. <i>Analytica Chimica Acta</i> , 2007, 595, 190-197.	5.4	25
77	Controlled release of saccharides from matrix tablets. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2006, 62, 163-170.	4.3	17
78	Liquid boundary movements in cylindrical and convex hydrophobic matrix tablets: Effects on tablet cracking and drug release. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2006, 64, 167-172.	4.3	8
79	Local and average gloss from flat-faced sodium chloride tablets. <i>AAPS PharmSciTech</i> , 2006, 7, E43-E48.	3.3	7
80	Prediction of Contact Angle for Pharmaceutical Solids from Their Molecular Structure. <i>Journal of Pharmaceutical Sciences</i> , 2005, 94, 745-758.	3.3	10
81	Partial least square projections to latent structures analysis (PLS) in evaluating and predicting drug release from starch acetate matrix tablets. <i>Journal of Pharmaceutical Sciences</i> , 2005, 94, 2716-2730.	3.3	12
82	Starch acetate as a tablet matrix for sustained drug release. <i>Journal of Controlled Release</i> , 2004, 94, 293-302.	9.9	61
83	Evaluation of novel starch acetate diltiazem controlled release tablets in healthy human volunteers. <i>Journal of Controlled Release</i> , 2004, 95, 515-520.	9.9	38
84	Aqueous starch acetate dispersion as a novel coating material for controlled release products. <i>Journal of Controlled Release</i> , 2004, 96, 179-191.	9.9	43
85	Effects of physical properties for starch acetate powders on tableting. <i>AAPS PharmSciTech</i> , 2002, 3, 68-76.	3.3	41
86	Complexation with tolbutamide modifies the physicochemical and tableting properties of hydroxypropyl- $\beta$ -cyclodextrin. <i>International Journal of Pharmaceutics</i> , 2001, 215, 137-145.	5.2	22
87	Dynamic solid-state and tableting properties of four theophylline forms. <i>International Journal of Pharmaceutics</i> , 2001, 217, 225-236.	5.2	46
88	Deformation behaviors of tolbutamide, hydroxypropyl-beta-cyclodextrin, and their dispersions. <i>Pharmaceutical Research</i> , 2000, 17, 942-948.	3.5	7
89	Evaluation of pharmaceutical beam bending tests using double-exposure holographic interferometry. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 1997, 44, 261-267.	4.3	6
90	Dehydration of theophylline monohydrate a two step process. <i>International Journal of Pharmaceutics</i> , 1997, 158, 47-55.	5.2	52

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91	Holographic evaluation of bending and integrity of pharmaceutical powder beams. International Journal of Pharmaceutics, 1996, 131, 209-217.	5.2	8
92	Photoacoustic evaluation of elasticity and integrity of pharmaceutical tablets. International Journal of Pharmaceutics, 1995, 125, 45-53.	5.2	40
93	Changes in solid-state structure of cyclophosphamide monohydrate induced by mechanical treatment and storage. Pharmaceutical Research, 1995, 12, 299-304.	3.5	17
94	Disintegrant properties of an agglomerated cellulose powder. International Journal of Pharmaceutics, 1989, 57, 139-147.	5.2	13