

# Vincent Mazel

## List of Publications by Year in descending order

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56  
papers

983  
citations

361413  
20  
h-index

501196  
28  
g-index

56  
all docs

56  
docs citations

56  
times ranked

759  
citing authors

#	ARTICLE	IF	CITATIONS
1	Finite Element Method (FEM) modeling of the powder compaction of cosmetic products: Comparison between simulated and experimental results. Powder Technology, 2012, 224, 233-240.	4.2	63
2	Identification of Ritual Blood in African Artifacts Using TOF-SIMS and Synchrotron Radiation Microspectroscopies. Analytical Chemistry, 2007, 79, 9253-9260.	6.5	50
3	Chemical imaging techniques for the analysis of complex mixtures: New application to the characterization of ritual matters on African wooden statuettes. Analytica Chimica Acta, 2006, 570, 34-40.	5.4	49
4	Measurements of Elastic Moduli of Pharmaceutical Compacts: A New Methodology Using Double Compaction on a Compaction Simulator. Journal of Pharmaceutical Sciences, 2012, 101, 2220-2228.	3.3	45
5	FEM simulation of the die compaction of pharmaceutical products: Influence of visco-elastic phenomena and comparison with experiments. International Journal of Pharmaceutics, 2013, 453, 389-394.	5.2	42
6	Identification of Different Copper Green Pigments in Renaissance Paintings by Cluster-TOF-SIMS Imaging Analysis. Journal of the American Society for Mass Spectrometry, 2011, 22, 1729-1736.	2.8	40
7	Investigating the effect of tablet thickness and punch curvature on density distribution using finite elements method. International Journal of Pharmaceutics, 2015, 493, 121-128.	5.2	36
8	Lamination of pharmaceutical tablets due to air entrapment: Direct visualization and influence of the compact thickness. International Journal of Pharmaceutics, 2015, 478, 702-704.	5.2	33
9	On the Links Between Elastic Constants and Effective Elastic Behavior of Pharmaceutical Compacts: Importance of Poisson's Ratio and Use of Bulk Modulus. Journal of Pharmaceutical Sciences, 2013, 102, 4009-4014.	3.3	31
10	Reevaluation of the diametral compression test for tablets using the flattened disc geometry. International Journal of Pharmaceutics, 2016, 513, 669-677.	5.2	31
11	Confocal micro-X-ray fluorescence analysis as a new tool for the non-destructive study of the elemental distributions in pharmaceutical tablets. Talanta, 2011, 85, 556-561.	5.5	27
12	Original predictive approach to the compressibility of pharmaceutical powder mixtures based on the Kawakita equation. International Journal of Pharmaceutics, 2011, 410, 92-98.	5.2	27
13	Role of the elasticity of pharmaceutical materials on the interfacial mechanical strength of bilayer tablets. International Journal of Pharmaceutics, 2013, 457, 260-267.	5.2	27
14	Study of the Lactobacillus rhamnosus Lcr35® properties after compression and proposition of a model to predict tablet stability. European Journal of Pharmaceutics and Biopharmaceutics, 2014, 88, 787-794.	4.3	27
15	Evolution of the Die-Wall Pressure during the Compression of Biconvex Tablets: Experimental Results and Comparison with FEM Simulation. Journal of Pharmaceutical Sciences, 2015, 104, 4339-4344.	3.3	22
16	Animal urine as painting materials in African rock art revealed by cluster ToF-SIMS mass spectrometry imaging. Journal of Mass Spectrometry, 2010, 45, 944-950.	1.6	21
17	Polymorphism of Irganox 1076®: Discovery of new forms and direct characterization of the polymorphs on a medical device by Raman microspectroscopy. European Journal of Pharmaceutics and Biopharmaceutics, 2010, 75, 443-450.	4.3	21
18	Comparative study between Drucker-Prager/Cap and modified Cam-Clay models for the numerical simulation of die compaction of pharmaceutical powders. Powder Technology, 2017, 320, 530-539.	4.2	21

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19	Lamination of biconvex tablets: Numerical and experimental study. <i>International Journal of Pharmaceutics</i> , 2018, 542, 66-71.	5.2	21
20	The patinas of the Dogonâ€™Tellem statuery: A new vision through physico-chemical analyses. <i>Journal of Cultural Heritage</i> , 2008, 9, 347-353.	3.3	20
21	Comparison of different failure tests for pharmaceutical tablets: Applicability of the Druckerâ€™Prager failure criterion. <i>International Journal of Pharmaceutics</i> , 2014, 470, 63-69.	5.2	20
22	Aging of a medical device surface following cold plasma treatment: Influence of low molecular weight compounds on surface recovery. <i>European Polymer Journal</i> , 2011, 47, 2403-2413.	5.4	18
23	Prediction of the compressibility of complex mixtures of pharmaceutical powders. <i>International Journal of Pharmaceutics</i> , 2012, 436, 862-868.	5.2	17
24	The microscopic (optical and SEM) examination of putrefaction fluid deposits (PFD). Potential interest in forensic anthropology. <i>Virchows Archiv Fur Pathologische Anatomie Und Physiologie Und Fur Klinische Medizin</i> , 2008, 453, 377-386.	2.8	16
25	Image Analysis Quantification of Sticking and Picking Events of Pharmaceutical Powders Compressed on a Rotary Tablet Press Simulator. <i>Pharmaceutical Research</i> , 2013, 30, 2303-2314.	3.5	15
26	The surface layer of pharmaceutical compacts: The role of the punch surface and its impact on the mechanical properties of the compacts. <i>International Journal of Pharmaceutics</i> , 2013, 442, 42-48.	5.2	13
27	Development of a new test for the easy characterization of the adhesion at the interface of bilayer tablets: Proof-of-concept study by experimental design. <i>International Journal of Pharmaceutics</i> , 2014, 477, 476-484.	5.2	13
28	Influence of the Punch Speed on the Die Wall/Powder Kinematic Friction During Tableting. <i>Journal of Pharmaceutical Sciences</i> , 2019, 108, 3359-3365.	3.3	13
29	Mechanistic Approach to Stability Studies as a Tool for the Optimization and Development of New Products Based on L. rhamnosus Lcr35Â® in Compliance with Current Regulations. <i>PLoS ONE</i> , 2013, 8, e79041.	2.5	12
30	Comparison of breaking tests for the characterization of the interfacial strength of bilayer tablets. <i>International Journal of Pharmaceutics</i> , 2016, 513, 709-716.	5.2	12
31	Sensitivity of elastic parameters during the numerical simulation of pharmaceutical die compaction process with Drucker-Prager/Cap model. <i>Powder Technology</i> , 2018, 332, 150-157.	4.2	12
32	Lamination of Pharmaceutical Tablets: Classification and Influence of Process Parameters. <i>Journal of Pharmaceutical Sciences</i> , 2022, 111, 1480-1485.	3.3	12
33	Blooming of Irganox 3114Â® antioxidant onto a medical grade elastomer. Impact of the recrystallization conditions on the antioxidant polymorphism, on the film wettability and on the antioxidant leachability. <i>International Journal of Pharmaceutics</i> , 2012, 437, 89-99.	5.2	11
34	Breaking pharmaceutical tablets with a hole: Reevaluation of the stress concentration factor and influence of the hole size. <i>Powder Technology</i> , 2017, 317, 126-132.	4.2	11
35	Influence of the unloading conditions on capping and lamination: Study on a compaction simulator. <i>International Journal of Pharmaceutics</i> , 2019, 567, 118468.	5.2	10
36	Beyond Brittle/Ductile Classification: Applying Proper Constitutive Mechanical Metrics to Understand the Compression Characteristics of Pharmaceutical Materials. <i>Journal of Pharmaceutical Sciences</i> , 2022, 111, 1984-1991.	3.3	10

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37	Anisotropic Porous Structure of Pharmaceutical Compacts Evaluated by PGSTE-NMR in Relation to Mechanical Property Anisotropy. <i>Pharmaceutical Research</i> , 2010, 27, 2221-2233.	3.5	9
38	Quantification of tablet sensitivity to a stress concentration: Generalization of Hiestand's approach and link with the microstructure. <i>Powder Technology</i> , 2020, 369, 176-183.	4.2	9
39	On the complexity of predicting tablet capping. <i>International Journal of Pharmaceutics</i> , 2022, 623, 121949.	5.2	9
40	Study of the Validity of the Three-Point Bending Test for Pharmaceutical Round Tablets Using Finite Element Method Modeling. <i>Journal of Pharmaceutical Sciences</i> , 2014, 103, 1305-1308.	3.3	8
41	Characterization and modeling of the viscoelasticity of pharmaceutical tablets. <i>International Journal of Pharmaceutics</i> , 2020, 587, 119695.	5.2	8
42	Use of impulse excitation technique for the characterization of the elastic anisotropy of pharmaceutical tablets. <i>International Journal of Pharmaceutics</i> , 2021, 605, 120797.	5.2	8
43	Applicability of impulse excitation technique as a tool to characterize the elastic properties of pharmaceutical tablets: Experimental and numerical study. <i>International Journal of Pharmaceutics</i> , 2020, 590, 119892.	5.2	7
44	Shear strength of pharmaceutical tablets: Theoretical considerations, evaluation and relation with the capping tendency of biconvex tablets. <i>International Journal of Pharmaceutics</i> , 2017, 532, 421-426.	5.2	6
45	Role of Precompression in the Mitigation of Capping: A Case Study. <i>Journal of Pharmaceutical Sciences</i> , 2020, 109, 3210-3213.	3.3	6
46	Development and pre-clinical evaluation in the swine model of a mucosal vaccine tablet for human influenza viruses: A proof-of-concept study. <i>International Journal of Pharmaceutics</i> , 2018, 538, 87-96.	5.2	5
47	Effect of friction between powder and tooling on the die-wall pressure evolution during tableting: Experimental and numerical results for flat and concave punches. <i>International Journal of Pharmaceutics</i> , 2019, 554, 116-124.	5.2	5
48	Effect of the compaction parameters on the final structure and properties of a press-coated tablet (Tab-in-Tab): Experimental and numerical study of the influence of core and shell dimensions. <i>International Journal of Pharmaceutics</i> , 2021, 596, 120260.	5.2	5
49	Dynamic fracture analysis in Brazilian test: application to pharmaceutical tablets. <i>International Journal of Fracture</i> , 2021, 229, 113.	2.2	5
50	Breaking patterns of press-coated tablets during the diametral compression test: Influence of the product, geometry and process parameters. <i>International Journal of Pharmaceutics</i> , 2022, 612, 121371.	5.2	5
51	DISCOVERY AND CHARACTERIZATION OF AN UNKNOWN BLUE-GREEN MAYA PIGMENT: VESZELYITE*. <i>Archaeometry</i> , 2008, 50, 658-667.	1.3	4
52	Effect of the Curvature of the Punches on the Shape of the Interface and the Delamination Tendency of Bilayer Tablets. <i>Journal of Pharmaceutical Sciences</i> , 2017, 106, 1331-1338.	3.3	4
53	Characterization of the viscoelasticity of pharmaceutical tablets using impulse excitation technique. <i>International Journal of Pharmaceutics</i> , 2022, 613, 121410.	5.2	4
54	Impact of unloading kinematics on the occurrence of capping during the production of pharmaceutical tablets. <i>International Journal of Pharmaceutics</i> , 2022, 621, 121818.	5.2	4

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55	Use of jump-tests for the characterization of the viscoplastic behavior of pharmaceutical powders during compaction. Powder Technology, 2022, 404, 117406.	4.2	3
56	Influence of the punch shape on the core and shell structure of press-coated tablets. International Journal of Pharmaceutics, 2022, 623, 121930.	5.2	0