Axel Zeitler

List of Publications by Year in Descending Order

228 papers	7,739 citations	47 h-index	79 g-index
318 ext. papers	9,244 ext. citations	5 avg, IF	6.18 L-index

#	Paper	IF	Citations
228	Investigating the role of excipients on the physical stability of directly compressed tablets.. *International Journal of Pharmaceutics: X*, **2022**, 4, 100106	3.2	0
227	Optimising Terahertz Waveform Selection of a Pharmaceutical Film Coating Process Using Recurrent Network. *IEEE Transactions on Terahertz Science and Technology*, **2022**, 1-1	3.4	1
226	Polymer Pellet Fabrication for Accurate THz-TDS Measurements. *Applied Sciences (Switzerland)*, **2022**, 12, 3475	2.6	0
225	Visualising liquid transport through coated pharmaceutical tablets using Terahertz pulsed imaging.. *International Journal of Pharmaceutics*, **2022**, 619, 121703	6.5	0
224	Flow cell to study crystallisation processes in-situ using terahertz time-domain spectroscopy. *IEEE Transactions on Terahertz Science and Technology*, **2021**, 1-1	3.4	0
223	Exploring the performance-controlling tablet disintegration mechanisms for direct compression formulations. *International Journal of Pharmaceutics*, **2021**, 599, 120221	6.5	10
222	Short hydrogen bonds enhance nonaromatic protein-related fluorescence. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	6
221	Tablet disintegration performance: Effect of compression pressure and storage conditions on surface liquid absorption and swelling kinetics. *International Journal of Pharmaceutics*, **2021**, 601, 120382	6.5	4
220	Development of 3D printed rapid tooling for micro-injection moulding. *Chemical Engineering Science*, **2021**, 235, 116498	4.4	3
219	Insights into the Control of Drug Release from Complex Immediate Release Formulations. *Pharmaceutics*, **2021**, 13,	6.4	2
218	Advances in terahertz time-domain spectroscopy of pharmaceutical solids: A review. *TrAC - Trends in Analytical Chemistry*, **2021**, 139, 116272	14.6	15
217	A Fast and Non-destructive Terahertz Dissolution Assay for Immediate Release Tablets. *Journal of Pharmaceutical Sciences*, **2021**, 110, 2083-2092	3.9	5
216	Terahertz pulsed imaging as a new method for investigating the liquid transport kinetics of □alumina powder compacts. *Chemical Engineering Research and Design*, **2021**, 165, 386-397	5.5	5
215	3D Bioelectronic Model of the Human Intestine. *Advanced Biology*, **2021**, 5, 2000306		12
214	Sensing Water Absorption in Hygrothermally Aged Epoxies with Terahertz Time-Domain Spectroscopy. *Analytical Chemistry*, **2021**, 93, 2449-2455	7.8	8
213	Understanding the Metastability of Theophylline FIII by Means of Low-Frequency Vibrational Spectroscopy. *Molecular Pharmaceutics*, **2021**, 18, 3578-3587	5.6	2
212	Microwave-Induced in Situ Drug Amorphization Using a Mixture of Polyethylene Glycol and Polyvinylpyrrolidone. *Journal of Pharmaceutical Sciences*, **2021**, 110, 3221-3229	3.9	2

211	Formulating a heat- and shear-labile drug in an amorphous solid dispersion: Balancing drug degradation and crystallinity.. *International Journal of Pharmaceutics: X*, **2021**, 3, 100092	3.2	3
210	Terahertz time-domain spectroscopy for powder compact porosity and pore shape measurements: An error analysis of the anisotropic bruggeman model. *International Journal of Pharmaceutics: X*, **2021**, 3, 100079	3.2	1
209	Simultaneous investigation of the liquid transport and swelling performance during tablet disintegration. *International Journal of Pharmaceutics*, **2020**, 584, 119380	6.5	16
208	Measuring Open Porosity of Porous Materials Using THz-TDS and an Index-Matching Medium. *Sensors*, **2020**, 20,	3.8	5
207	Review of Terahertz Pulsed Imaging for Pharmaceutical Film Coating Analysis. *Sensors*, **2020**, 20,	3.8	13
206	Development and Validation of an In-Line API Quantification Method Using AQbD Principles Based on UV-Vis Spectroscopy to Monitor and Optimise Continuous Hot Melt Extrusion Process. *Pharmaceutics*, **2020**, 12,	6.4	5
205	Advancing predictions of protein stability in the solid state. *Physical Chemistry Chemical Physics*, **2020**, 22, 17247-17254	3.6	9
204	The influence of drug and polymer particle size on the in situ amorphization using microwave irradiation. *European Journal of Pharmaceutics and Biopharmaceutics*, **2020**, 149, 77-84	5.7	11
203	Review of real-time release testing of pharmaceutical tablets: State-of-the art, challenges and future perspective. *International Journal of Pharmaceutics*, **2020**, 582, 119353	6.5	17
202	Terahertz-Based Porosity Measurement of Pharmaceutical Tablets: a Tutorial. *Journal of Infrared, Millimeter, and Terahertz Waves*, **2020**, 41, 450-469	2.2	15
201	An investigation into the formations of the internal microstructures of solid dispersions prepared by hot melt extrusion. *European Journal of Pharmaceutics and Biopharmaceutics*, **2020**, 155, 147-161	5.7	7
200	Non-destructive quantification of fragmentation within tablets after compression from scattering analysis of terahertz transmission measurements. *International Journal of Pharmaceutics*, **2020**, 588, 119769	6.5	11
199	Quantification of swelling characteristics of pharmaceutical particles. *International Journal of Pharmaceutics*, **2020**, 590, 119903	6.5	10
198	Effect of particle size and deformation behaviour on water ingress into tablets. *International Journal of Pharmaceutics*, **2020**, 587, 119645	6.5	7
197	Resolving Anharmonic Lattice Dynamics in Molecular Crystals with X-Ray Diffraction and Terahertz Spectroscopy. *Physical Review Letters*, **2020**, 125, 103001	7.4	2
196	Chasing the "Killer" Phonon Mode for the Rational Design of Low-Disorder, High-Mobility Molecular Semiconductors. *Advanced Materials*, **2019**, 31, e1902407	24	73
195	Observation of high-temperature macromolecular confinement in lyophilised protein formulations using terahertz spectroscopy. *International Journal of Pharmaceutics: X*, **2019**, 1, 100022	3.2	6
194	Insights into the structural dynamics of poly lactic-co-glycolic acid at terahertz frequencies. *Polymer Chemistry*, **2019**, 10, 351-361	4.9	20

193	Hot-melt extrusion process impact on polymer choice of glyburide solid dispersions: The effect of wettability and dissolution. *International Journal of Pharmaceutics*, **2019**, 559, 245-254	6.5	17
192	Terahertz Spectroscopy: An Investigation of the Structural Dynamics of Freeze-Dried Poly Lactic-co-glycolic Acid Microspheres. *Pharmaceutics*, **2019**, 11,	6.4	3
191	Quantification of Inkjet-Printed Pharmaceuticals on Porous Substrates Using Raman Spectroscopy and Near-Infrared Spectroscopy. *AAPS PharmSciTech*, **2019**, 20, 207	3.9	15
190	Predicting capsule fill weight from in-situ powder density measurements using terahertz reflection technology. *International Journal of Pharmaceutics: X*, **2019**, 1, 100004	3.2	2
189	A predictive integrated framework based on the radial basis function for the modelling of the flow of pharmaceutical powders. *International Journal of Pharmaceutics*, **2019**, 568, 118542	6.5	10
188	At-line validation of optical coherence tomography as in-line/at-line coating thickness measurement method. *International Journal of Pharmaceutics*, **2019**, 572, 118766	6.5	8
187	Bladder Augmentation Using Lyoplant: First Experimental Results in Rats. *Tissue Engineering and Regenerative Medicine*, **2019**, 16, 645-652	4.5	1
186	Tracking solid state dynamics in spray-dried protein powders at infrared and terahertz frequencies. *European Journal of Pharmaceutics and Biopharmaceutics*, **2019**, 144, 244-251	5.7	6
185	Studying Mechanical Properties and Phase Transitions of Aspirin Polymorphs with Terahertz Spectroscopy and ab Initio Simulations **2019**,		2
184	Measurements of effective porosity of pharmaceutical tablets using THz TDS **2019**,		2
183	Measuring bulk density variations in a moving powder bed via terahertz in-line sensing. *Powder Technology*, **2019**, 344, 152-160	5.2	6
182	Unraveling the Interfacial Structure-Performance Correlation of Flexible Metal-Organic Framework Membranes on Polymeric Substrates. *ACS Applied Materials & Interfaces*, **2019**, 11, 5570-5577	9.5	20
181	Freezing of Aqueous Solutions and Chemical Stability of Amorphous Pharmaceuticals: Water Clusters Hypothesis. *Journal of Pharmaceutical Sciences*, **2019**, 108, 36-49	3.9	13
180	Glass-Transition Temperature of the Relaxation as the Major Predictive Parameter for Recrystallization of Neat Amorphous Drugs. *Journal of Physical Chemistry B*, **2018**, 122, 2803-2808	3.4	58
179	Predicting the structures and associated phase transition mechanisms in disordered crystals via a combination of experimental and theoretical methods. *Faraday Discussions*, **2018**, 211, 425-439	3.6	11
178	Characterisation of pore structures of pharmaceutical tablets: A review. *International Journal of Pharmaceutics*, **2018**, 538, 188-214	6.5	60
177	Zinc delivery from non-woven fibres within a therapeutic nipple shield. *International Journal of Pharmaceutics*, **2018**, 537, 290-299	6.5	3
176	Characterization of the coating and tablet core roughness by means of 3D optical coherence tomography. *International Journal of Pharmaceutics*, **2018**, 536, 459-466	6.5	7

175	Fast and non-destructive pore structure analysis using terahertz time-domain spectroscopy. *International Journal of Pharmaceutics*, **2018**, 537, 102-110	6.5	19
174	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	5.5	16
173	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	6.5	3
172	Terahertz absorption spectra of commonly used antimalarial drugs. *Optical Review*, **2018**, 25, 444-449	0.9	4
171	A non-destructive method for quality control of the pellet distribution within a MUPS tablet by terahertz pulsed imaging. *European Journal of Pharmaceutical Sciences*, **2018**, 111, 549-555	5.1	15
170	Steps towards numerical verification of the terahertz in-line measurement of tablet mixing by means of discrete element modelling. *IET Microwaves, Antennas and Propagation*, **2018**, 12, 1775-1779	1.6	3
169	A quantitative comparison of in-line coating thickness distributions obtained from a pharmaceutical tablet mixing process using discrete element method and terahertz pulsed imaging. *Chemical Engineering Science*, **2018**, 192, 34-45	4.4	14
168	Uncovering the Connection Between Low-Frequency Dynamics and Phase Transformation Phenomena in Molecular Solids. *Physical Review Letters*, **2018**, 120, 196002	7.4	25
167	Graphene-loaded metal wire grating for deep and broadband THz modulation in total internal reflection geometry. *Photonics Research*, **2018**, 6, 1151	6	13
166	In-situ Monitoring of Powder Density Using Terahertz Pulsed Imaging **2018**,		1
165	Probing the Mechanochemistry of Metal□Organic Frameworks with Low-Frequency Vibrational Spectroscopy. *Journal of Physical Chemistry C*, **2018**, 122, 27442-27450	3.8	25
164	A Review of the Applications of OCT for Analysing Pharmaceutical Film Coatings. *Applied Sciences (Switzerland)*, **2018**, 8, 2700	2.6	17
163	Revisiting the Thermodynamic Stability of Indomethacin Polymorphs with Low-Frequency Vibrational Spectroscopy and Quantum Mechanical Simulations. *Crystal Growth and Design*, **2018**, 18, 6513-6520	3.5	22
162	Methyl-rotation dynamics in metal-organic frameworks probed with terahertz spectroscopy. *Chemical Communications*, **2018**, 54, 5776-5779	5.8	19
161	Characterization of Heterogeneity and Spatial Distribution of Phases in Complex Solid Dispersions by Thermal Analysis by Structural Characterization and X-ray Micro Computed Tomography. *Pharmaceutical Research*, **2017**, 34, 971-989	4.5	15
160	Measurement of the Intertablet Coating Uniformity of a Pharmaceutical Pan Coating Process With Combined Terahertz and Optical Coherence Tomography In-Line Sensing. *Journal of Pharmaceutical Sciences*, **2017**, 106, 1075-1084	3.9	47
159	Analysis of 3D Prints by X-ray Computed Microtomography and□Terahertz Pulsed Imaging. *Pharmaceutical Research*, **2017**, 34, 1037-1052	4.5	58
158	Non-destructive Determination of Disintegration Time and Dissolution in Immediate Release Tablets by Terahertz Transmission Measurements. *Pharmaceutical Research*, **2017**, 34, 1012-1022	4.5	35

157	Intermolecular anharmonicity in molecular crystals: interplay between experimental low-frequency dynamics and quantum quasi-harmonic simulations of solid purine. *Chemical Communications*, **2017**, 53, 3781-3784	5.8	46
156	Multispectral UV Imaging for Determination of the Tablet Coating Thickness. *Journal of Pharmaceutical Sciences*, **2017**, 106, 1560-1569	3.9	4
155	A Review of Disintegration Mechanisms and Measurement Techniques. *Pharmaceutical Research*, **2017**, 34, 890-917	4.5	132
154	Mathematical modelling of liquid transport in swelling pharmaceutical immediate release tablets. *International Journal of Pharmaceutics*, **2017**, 526, 1-10	6.5	31
153	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	6.5	14
152	A comprehensive spectroscopic study of the polymorphs of diflunisal and their phase transformations. *International Journal of Pharmaceutics*, **2017**, 528, 312-321	6.5	10
151	Optics-based compressibility parameter for pharmaceutical tablets obtained with the aid of the terahertz refractive index. *International Journal of Pharmaceutics*, **2017**, 525, 85-91	6.5	6
150	Characterization of the Pore Structure of Functionalized Calcium Carbonate Tablets by Terahertz Time-Domain Spectroscopy and X-Ray Computed Microtomography. *Journal of Pharmaceutical Sciences*, **2017**, 106, 1586-1595	3.9	44
149	The 2017 terahertz science and technology roadmap. *Journal Physics D: Applied Physics*, **2017**, 50, 043001	3	724
148	Quantification of cation-anion interactions in crystalline monopotassium and monosodium glutamate salts. *Physical Chemistry Chemical Physics*, **2017**, 19, 28647-28652	3.6	4
147	Concomitant polymorphism and the martensitic-like transformation of an organic crystal. *Physical Chemistry Chemical Physics*, **2017**, 19, 28502-28506	3.6	20
146	The significance of the amorphous potential energy landscape for dictating glassy dynamics and driving solid-state crystallisation. *Physical Chemistry Chemical Physics*, **2017**, 19, 30039-30047	3.6	41
145	Terahertz spectroscopy theory **2017**, 439-443		
144	Tracking Dehydration Mechanisms in Crystalline Hydrates with Molecular Dynamics Simulations. *Crystal Growth and Design*, **2017**, 17, 5017-5022	3.5	17
143	Thermal Gradient Mid- and Far-Infrared Spectroscopy as Tools for Characterization of Protein Carbohydrate Lyophilizates. *Molecular Pharmaceutics*, **2017**, 14, 3550-3557	5.6	8
142	Contactless graphene conductivity mapping on a wide range of substrates with terahertz time-domain reflection spectroscopy. *Scientific Reports*, **2017**, 7, 10625	4.9	19
141	Pharmaceutical Film Coating Catalog for Spectral Domain Optical Coherence Tomography. *Journal of Pharmaceutical Sciences*, **2017**, 106, 3171-3176	3.9	19
140	Investigating Intra-Tablet Coating Uniformity With Spectral-Domain Optical Coherence Tomography. *Journal of Pharmaceutical Sciences*, **2017**, 106, 546-553	3.9	17

139	Validating terahertz in-line measurement of tablet mixing with discrete element modelling **2017**,		1
138	Analysis of anisotropic pore structures using terahertz spectroscopy and imaging **2017**,		1
137	Approach for the production chain of printed polymer optical waveguides-an overview. *Applied Optics*, **2017**, 56, 8607-8617	1.7	5
136	Supercritical impregnation of polymer matrices spatially confined in microcontainers for oral drug delivery: Effect of temperature, pressure and time. *Journal of Supercritical Fluids*, **2016**, 107, 145-152	4.2	23
135	Examination of l-Glutamic Acid Polymorphs by Solid-State Density Functional Theory and Terahertz Spectroscopy. *Journal of Physical Chemistry A*, **2016**, 120, 7490-5	2.8	35
134	Resolving the Origins of Crystalline Anharmonicity Using Terahertz Time-Domain Spectroscopy and ab Initio Simulations. *Journal of Physical Chemistry B*, **2016**, 120, 11733-11739	3.4	26
133	On the Correlation of Effective Terahertz Refractive Index and Average Surface Roughness of Pharmaceutical Tablets. *Journal of Infrared, Millimeter, and Terahertz Waves*, **2016**, 37, 776-785	2.2	13
132	Terahertz study on porosity and mass fraction of active pharmaceutical ingredient of pharmaceutical tablets. *European Journal of Pharmaceutics and Biopharmaceutics*, **2016**, 105, 122-33	5.7	26
131	Noninvasive porosity measurement of biconvex tablets using terahertz pulses. *International Journal of Pharmaceutics*, **2016**, 509, 439-443	6.5	14
130	Innentitelbild: Measuring the Elasticity of Poly-l-Proline Helices with Terahertz Spectroscopy (Angew. Chem. 24/2016). *Angewandte Chemie*, **2016**, 128, 6908-6908	3.6	
129	Measuring the Elasticity of Poly-l-Proline Helices with Terahertz Spectroscopy. *Angewandte Chemie - International Edition*, **2016**, 55, 6877-81	16.4	35
128	Direct measurement of molecular mobility and crystallisation of amorphous pharmaceuticals using terahertz spectroscopy. *Advanced Drug Delivery Reviews*, **2016**, 100, 147-57	18.5	56
127	Fast Modulation of Terahertz Quantum Cascade Lasers Using Graphene Loaded Plasmonic Antennas. *ACS Photonics*, **2016**, 3, 464-470	6.3	30
126	High-birefringence nematic liquid crystal for broadband THz applications. *Liquid Crystals*, **2016**, 43, 955-963	2.5	40
125	Terahertz response of organic amorphous systems: experimental concerns and perspectives. *Philosophical Magazine*, **2016**, 96, 842-853	1.6	17
124	The enhancement of the catalytic performance of CrOx/Al2O3 catalysts for ethylbenzene dehydrogenation through tailored coke deposition. *Catalysis Science and Technology*, **2016**, 6, 1120-1133	5.5	13
123	Terahertz correlation spectroscopy infers particle velocity and rheological properties. *Optics Letters* , **2016**, 41, 3289-92	3	
122	19F NMR Spectroscopy as a Highly Sensitive Method for the Direct Monitoring of Confined Crystallization within Nanoporous Materials. *Angewandte Chemie*, **2016**, 128, 9050-9054	3.6	8

121	(19) F NMR Spectroscopy as a Highly Sensitive Method for the Direct Monitoring of Confined Crystallization within Nanoporous Materials. *Angewandte Chemie - International Edition*, **2016**, 55, 8904-8	16.4	25
120	Measuring the Elasticity of Poly-l-Proline Helices with Terahertz Spectroscopy. *Angewandte Chemie*, **2016**, 128, 6991-6995	3.6	1
119	Graphene based plasmonic terahertz amplitude modulator operating above 100 MHz. *Applied Physics Letters*, **2016**, 108, 171101	3.4	60
118	Studying the pharmaceutical film coating process with terahertz sensing, optical coherence tomography and numerical modelling **2016**,		2
117	Fast terahertz optoelectronic amplitude modulator based on plasmonic metamaterial antenna arrays and graphene **2016**,		2
116	A structure parameter for porous pharmaceutical tablets obtained with the aid of Wiener bounds for effective permittivity and terahertz time-delay measurement. *International Journal of Pharmaceutics*, **2016**, 506, 87-92	6.5	15
115	Pharmaceutical Terahertz Spectroscopy and Imaging. *Advances in Delivery Science and Technology*, **2016**, 171-222		12
114	Fast Room-Temperature Detection of Terahertz Quantum Cascade Lasers with Graphene-Loaded Bow-Tie Plasmonic Antenna Arrays. *ACS Photonics*, **2016**, 3, 1747-1753	6.3	29
113	Study of Disordered Materials by Terahertz Spectroscopy **2016**, 393-426		1
112	Terahertz time-domain and low-frequency Raman spectroscopy of organic materials. *Applied Spectroscopy*, **2015**, 69, 1-25	3.1	113
111	Calendering as a direct shaping tool for the continuous production of fixed-dose combination products via co-extrusion. *European Journal of Pharmaceutics and Biopharmaceutics*, **2015**, 96, 125-31	5.7	11
110	Predicting Crystallization of Amorphous Drugs with Terahertz Spectroscopy. *Molecular Pharmaceutics*, **2015**, 12, 3062-8	5.6	78
109	Comparisons of intra-tablet coating variability using DEM simulations, asymptotic limit models, and experiments. *Chemical Engineering Science*, **2015**, 131, 197-212	4.4	35
108	Estimation of Young's modulus of pharmaceutical tablet obtained by terahertz time-delay measurement. *International Journal of Pharmaceutics*, **2015**, 489, 100-5	6.5	13
107	Investigation of the terahertz vibrational modes of ZIF-8 and ZIF-90 with terahertz time-domain spectroscopy. *Chemical Communications*, **2015**, 51, 16037-40	5.8	39
106	Structure and dynamics of aqueous 2-propanol: a THz-TDS, NMR and neutron diffraction study. *Physical Chemistry Chemical Physics*, **2015**, 17, 30481-91	3.6	24
105	Calibration-free in-line monitoring of pellet coating processes via optical coherence tomography. *Chemical Engineering Science*, **2015**, 125, 200-208	4.4	39
104	In-Line Monitoring of a Pharmaceutical Pan Coating Process by Optical Coherence Tomography. *Journal of Pharmaceutical Sciences*, **2015**, 104, 2531-40	3.9	27

103	Modulation of the Hydration Water Around Monoclonal Antibodies on Addition of Excipients Detected by Terahertz Time-Domain Spectroscopy. *Journal of Pharmaceutical Sciences*, **2015**, 104, 4025-4033	3.9	10
102	The Disintegration Process in Microcrystalline Cellulose Based Tablets, Part 1: Influence of Temperature, Porosity and Superdisintegrants. *Journal of Pharmaceutical Sciences*, **2015**, 104, 3440-50	3.9	59
101	A new perspective on catalytic dehydrogenation of ethylbenzene: the influence of side-reactions on catalytic performance. *Catalysis Science and Technology*, **2015**, 5, 3782-3797	5.5	20
100	Quantifying Pharmaceutical Film Coating with Optical Coherence Tomography and Terahertz Pulsed Imaging: An Evaluation. *Journal of Pharmaceutical Sciences*, **2015**, 104, 3377-85	3.9	42
99	Diffusion and swelling measurements in pharmaceutical powder compacts using terahertz pulsed imaging. *Journal of Pharmaceutical Sciences*, **2015**, 104, 1658-67	3.9	35
98	Non-destructive characterization of automobile car paints using terahertz pulsed imaging and infrared optical coherence tomography **2015**,		2
97	Impact of Processing Conditions on Inter-tablet Coating Thickness Variations Measured by Terahertz In-Line Sensing. *Journal of Pharmaceutical Sciences*, **2015**, 104, 2513-22	3.9	31
96	Combined infrared and terahertz analysis of amorphous sorbitol **2015**,		1
95	Automated pharmaceutical tablet coating layer evaluation of optical coherence tomography images. *Measurement Science and Technology*, **2015**, 26, 035701	2	13
94	Probing phase transitions in simvastatin with terahertz time-domain spectroscopy. *Molecular Pharmaceutics*, **2015**, 12, 810-5	5.6	24
93	Probing hydrogen-bonding in binary liquid mixtures with terahertz time-domain spectroscopy: a comparison of Debye and absorption analysis. *Physical Chemistry Chemical Physics*, **2015**, 17, 5999-6008	3.6	32
92	Determination of Water Content in Dehydrated Mammalian Cells Using Terahertz Pulsed Imaging: A Feasibility Study. *Current Pharmaceutical Biotechnology*, **2015**, 17, 200-7	2.6	10
91	Optical coherence tomography as a novel tool for in-line monitoring of a pharmaceutical film-coating process. *European Journal of Pharmaceutical Sciences*, **2014**, 55, 58-67	5.1	38
90	Low-bias terahertz amplitude modulator based on split-ring resonators and graphene. *ACS Nano*, **2014**, 8, 2548-54	16.7	106
89	Evaluation of critical process parameters for inter-tablet coating uniformity of active-coated GITS using Terahertz Pulsed Imaging. *European Journal of Pharmaceutics and Biopharmaceutics*, **2014**, 88, 434-42	5.7	15
88	Direct evidence to support the restriction of intramolecular rotation hypothesis for the mechanism of aggregation-induced emission: temperature resolved terahertz spectra of tetraphenylethene. *Materials Horizons*, **2014**, 1, 251-258	14.4	101
87	Thermal Decoupling of Molecular-Relaxation Processes from the Vibrational Density of States at Terahertz Frequencies in Supercooled Hydrogen-Bonded Liquids. *Journal of Physical Chemistry Letters*, **2014**, 5, 1968-72	6.4	49
86	Analysis of the hydration water around bovine serum albumin using terahertz coherent synchrotron radiation. *Journal of Physical Chemistry A*, **2014**, 118, 83-8	2.8	61

85	Non-contact weight measurement of flat-faced pharmaceutical tablets using terahertz transmission pulse delay measurements. *International Journal of Pharmaceutics*, **2014**, 476, 16-22	6.5	28
84	Mesoscopic structuring and dynamics of alcohol/water solutions probed by terahertz time-domain spectroscopy and pulsed field gradient nuclear magnetic resonance. *Journal of Physical Chemistry B*, **2014**, 118, 10156-66	3.4	89
83	In-line quality control of moving objects by means of spectral-domain OCT. *Optics and Lasers in Engineering*, **2014**, 59, 1-10	4.6	12
82	Terahertz car paint thickness sensor: Out of the lab and into the factory **2014**,		6
81	Non-destructive evaluation of polymer coating structures on pharmaceutical pellets using full-field optical coherence tomography. *Journal of Pharmaceutical Sciences*, **2014**, 103, 161-6	3.9	31
80	Terahertz Sensor for Non-Contact Thickness and Quality Measurement of Automobile Paints of Varying Complexity. *IEEE Transactions on Terahertz Science and Technology*, **2014**, 4, 432-439	3.4	75
79	Terahertz optical modulator based on metamaterial split-ring resonators and graphene. *Optical Engineering*, **2014**, 53, 057108	1.1	14
78	Detection of porosity of pharmaceutical compacts by terahertz radiation transmission and light reflection measurement techniques. *International Journal of Pharmaceutics*, **2014**, 465, 70-6	6.5	51
77	Crystallization and phase changes in paracetamol from the amorphous solid to the liquid phase. *Molecular Pharmaceutics*, **2014**, 11, 1326-34	5.6	47
76	Evaluating the effect of coating equipment on tablet film quality using terahertz pulsed imaging. *European Journal of Pharmaceutics and Biopharmaceutics*, **2013**, 85, 1095-102	5.7	21
75	Intrinsic terahertz plasmon signatures in chemical vapour deposited graphene. *Applied Physics Letters*, **2013**, 103, 121110	3.4	11
74	Glassy dynamics of sorbitol solutions at terahertz frequencies. *Physical Chemistry Chemical Physics*, **2013**, 15, 11931-42	3.6	27
73	Dispersion relations for evaluating the complex refractive index of medium without the information of its thickness. *Applied Physics Letters*, **2013**, 102, 181110	3.4	10
72	Evaluation of critical process parameters for intra-tablet coating uniformity using terahertz pulsed imaging. *European Journal of Pharmaceutics and Biopharmaceutics*, **2013**, 85, 1122-9	5.7	21
71	Terahertz sensor for non-contact thickness measurement of car paints **2013**,		2
70	Remote-steering launchers for the ECRH system on the stellarator W7-X **2013**,		2
69	Hardness and density distributions of pharmaceutical tablets measured by terahertz pulsed imaging. *Journal of Pharmaceutical Sciences*, **2013**, 102, 2179-86	3.9	55
68	Critical factors in the measurement of tablet film coatings using terahertz pulsed imaging. *Journal of Pharmaceutical Sciences*, **2013**, 102, 1813-1824	3.9	12

67	Terahertz pulsed imaging and magnetic resonance imaging as tools to probe formulation stability. *Pharmaceutics*, **2013**, 5, 591-608	6.4	6
66	Solvent effects in the hydrogenation of 2-butanone. *Journal of Catalysis*, **2012**, 289, 30-41	7.3	119
65	Terahertz Spectroscopy of Crystalline and Non-Crystalline Solids. *Springer Series in Optical Sciences*, **2012**, 191-227	0.5	3
64	Validation of Terahertz coating thickness measurements using X-ray microtomography. *Molecular Pharmaceutics*, **2012**, 9, 3551-9	5.6	47
63	Industrial Applications of Terahertz Imaging. *Springer Series in Optical Sciences*, **2012**, 451-489	0.5	21
62	A comparison of quality control methods for active coating processes. *International Journal of Pharmaceutics*, **2012**, 439, 289-95	6.5	29
61	Prediction of dissolution time and coating thickness of sustained release formulations using Raman spectroscopy and terahertz pulsed imaging. *European Journal of Pharmaceutics and Biopharmaceutics*, **2012**, 80, 690-7	5.7	48
60	Indirect Modulation of a Terahertz Quantum Cascade Laser Using Gate Tunable Graphene. *IEEE Photonics Journal*, **2012**, 4, 1776-1782	1.8	5
59	Three-mirror resonator reflectivity measurement of plane and grooved surfaces: Setup, options, results **2012**,		4
58	Terahertz near-field imaging using subwavelength plasmonic apertures and a quantum cascade laser source. *Optics Letters*, **2011**, 36, 2393-5	3	7
57	Non-destructive quantification of pharmaceutical tablet coatings using terahertz pulsed imaging and optical coherence tomography. *Optics and Lasers in Engineering*, **2011**, 49, 361-365	4.6	102
56	Terahertz in-line sensor for direct coating thickness measurement of individual tablets during film coating in real-time. *Journal of Pharmaceutical Sciences*, **2011**, 100, 1535-44	3.9	99
55	Terahertz spectroscopy of inorganic glasses and carbon nanotubes. *Spectroscopic Properties of Inorganic and Organometallic Compounds*, **2011**, 157-183		2
54	**2010**,		3
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