

# Sergei G Kazarian

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

261 papers	12,270 citations	55 h-index	97 g-index
271 ext. papers	13,210 ext. citations	5 avg, IF	6.74 L-index

#	Paper	IF	Citations
261	Effect of T <sub>m</sub> of blend components on the isothermal melt-crystallization process of PHB/PLLA blends investigated using spectroscopic imaging and DSC. <i>Polymer</i> , <b>2022</b> , 124820	3.9	
260	FTIR Spectroscopy and Spectroscopic Imaging for the Analysis of Polymers and Multicomponent Polymer Systems <b>2021</b> , 45-74		0
259	Time-Resolved ATR-FTIR Spectroscopy and Macro ATR-FTIR Spectroscopic Imaging of Inorganic Treatments for Stone Conservation. <i>Analytical Chemistry</i> , <b>2021</b> , 93, 14635-14642	7.8	1
258	Analysis of spatial orientation distribution of highly oriented polyimide film using micro ATR-FTIR spectroscopic imaging method. <i>Polymer</i> , <b>2021</b> , 221, 123616	3.9	3
257	Perspectives on infrared spectroscopic imaging from cancer diagnostics to process analysis. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , <b>2021</b> , 251, 119413	4.4	10
256	Visualization of Inter- and Intramolecular Interactions in Poly(3-hydroxybutyrate)/Poly(L-lactic acid) (PHB/PLLA) Blends During Isothermal Melt Crystallization Using Attenuated Total Reflection Fourier Transform infrared (ATR FT-IR) Spectroscopic Imaging. <i>Applied Spectroscopy</i> , <b>2021</b> , 75, 980-987	3.1	1
255	Nanoscale Sensing Vitrification of 3D Confined Glassy Polymers Through Refractory Thermoplasmonics. <i>ACS Photonics</i> , <b>2021</b> , 8, 1477-1488	6.3	2
254	In situ ATR-FTIR spectroscopic imaging of PVC, plasticizer and water in solvent-polymeric ion-selective membrane containing Cd <sup>2+</sup> -selective neutral ionophore. <i>Journal of Membrane Science</i> , <b>2021</b> , 619, 118798	9.6	4
253	Intermolecular Interactions in the Polymer Blends Under High-Pressure CO Studied Using Two-Dimensional Correlation Analysis and Two-Dimensional Disrelation Mapping. <i>Applied Spectroscopy</i> , <b>2021</b> , 75, 250-258	3.1	6
252	Insight into the effects of moisture and layer build-up on the formation of lead soaps using micro-ATR-FTIR spectroscopic imaging of complex painted stratigraphies. <i>Analytical and Bioanalytical Chemistry</i> , <b>2021</b> , 413, 455-467	4.4	8
251	Collagen maturity and mineralization in mesenchymal stem cells cultured on the hydroxyapatite-based bone scaffold analyzed by ATR-FTIR spectroscopic imaging. <i>Materials Science and Engineering C</i> , <b>2021</b> , 119, 111634	8.3	9
250	Fourier Transform Infrared Polarization Contrast Imaging Recognizes Proteins Degradation in Lungs upon Metastasis from Breast Cancer. <i>Cancers</i> , <b>2021</b> , 13,	6.6	3
249	ATR-FTIR spectroscopy and spectroscopic imaging to investigate the behaviour of proteins subjected to freeze-thaw cycles in droplets, wells, and under flow. <i>Analyst, The</i> , <b>2021</b> , 146, 2902-2909	5	2
248	Insight into purification of monoclonal antibodies in industrial columns studies of Protein A binding capacity by ATR-FTIR spectroscopy. <i>Analyst, The</i> , <b>2021</b> , 146, 5177-5185	5	2
247	High throughput study of ionic liquids in controlled environments with FTIR spectroscopic imaging. <i>Journal of Molecular Liquids</i> , <b>2021</b> , 337, 116412	6	2
246	New DRIFT spectroscopic methodology for acquiring infrared spectra of fiberglass materials. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , <b>2021</b> , 260, 119995	4.4	1
245	New Insight into Titanium-Magnesium Ziegler-Natta Catalysts Using Photoluminescence Spectroscopy. <i>Applied Spectroscopy</i> , <b>2020</b> , 74, 1209-1218	3.1	2

244	ATR-FTIR spectroscopy and spectroscopic imaging for the analysis of biopharmaceuticals. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , <b>2020</b> , 241, 118636	4.4	33
243	Effect of Controlled Humidity and Tissue Hydration on Colon Cancer Diagnostic via FTIR Spectroscopic Imaging. <i>Analytical Chemistry</i> , <b>2020</b> , 92, 9691-9698	7.8	7
242	Insight into Heterogeneous Distribution of Protein Aggregates at the Surface Layer Using Attenuated Total Reflection-Fourier Transform Infrared Spectroscopic Imaging. <i>Analytical Chemistry</i> , <b>2020</b> , 92, 4760-4764	7.8	7
241	ATR-FTIR spectroscopy and spectroscopic imaging of proteins <b>2020</b> , 1-22		2
240	Interactions of CO <sub>2</sub> with the homologous series of BMIMBF <sub>4</sub> ionic liquids studied in situ ATR-FTIR spectroscopy: spectral characteristics, thermodynamic parameters and their correlation. <i>Journal of Molecular Liquids</i> , <b>2020</b> , 315, 113694	6	7
239	Transmission Fourier Transform Infrared Spectroscopic Imaging, Mapping, and Synchrotron Scanning Microscopy with Zinc Sulfide Hemispheres on Living Mammalian Cells at Sub-Cellular Resolution. <i>Applied Spectroscopy</i> , <b>2020</b> , 74, 544-552	3.1	11
238	Micro ATR-FTIR spectroscopic imaging of colon biopsies with a large area Ge crystal. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , <b>2020</b> , 228, 117695	4.4	9
237	Disordered Nonlinear Metalens for Raman Spectral Nanoimaging. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 3862-3872	9.5	3
236	Simultaneous Visualization of Phase Separation and Crystallization in PHB/PLLA Blends with In Situ ATR-FTIR Spectroscopic Imaging. <i>Macromolecules</i> , <b>2020</b> , 53, 9074-9085	5.5	11
235	How does high-pressure CO affect the morphology of PCL/PLA blends? Visualization of phase separation using in situ ATR-FTIR spectroscopic imaging. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , <b>2020</b> , 243, 118760	4.4	7
234	Three-dimensional depth profiling of prostate tissue by micro ATR-FTIR spectroscopic imaging with variable angles of incidence. <i>Analyst, The</i> , <b>2019</b> , 144, 2954-2964	5	16
233	Spectroscopic imaging of deposition of asphaltenes from crude oil under flow. <i>Journal of Petroleum Science and Engineering</i> , <b>2019</b> , 181, 106205	4.4	12
232	Superresolution stimulated Raman scattering microscopy using 2-ENZ nano-composites. <i>Nanoscale</i> , <b>2019</b> , 11, 7710-7719	7.7	12
231	Fourier transform infrared spectroscopic imaging of colon tissues: evaluating the significance of amide I and C-H stretching bands in diagnostic applications with machine learning. <i>Analytical and Bioanalytical Chemistry</i> , <b>2019</b> , 411, 6969-6981	4.4	15
230	Tip-Enhanced Raman Spectroscopy <b>2019</b> , 1-33		
229	Analysis of molecular orientation in polymeric spherulite using polarized micro attenuated total reflection Fourier transform infrared (ATR-FTIR) spectroscopic imaging. <i>Analytica Chimica Acta</i> , <b>2019</b> , 1065, 79-89	6.6	7
228	Clinical applications of infrared and Raman spectroscopy: state of play and future challenges. <i>Analyst, The</i> , <b>2018</b> , 143, 1735-1757	5	114
227	Recent advances in the applications of vibrational spectroscopic imaging and mapping to pharmaceutical formulations. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , <b>2018</b> , 197, 10-29	4.4	38

226	Fluorescence-based Artemisinin Sensing Using a Pyronin B-doped Cellulose Film Reconstituted from Ionic Liquid. <i>Analytical Letters</i> , <b>2018</b> , 51, 870-891	2.2	4
225	Pluronic L121, BMIM BF <sub>4</sub> and PEG-400 comparison to identify the best solvent for CO <sub>2</sub> sorption. <i>Journal of Molecular Liquids</i> , <b>2018</b> , 258, 85-88	6	7
224	Molecular-level insight into hot-melt loading and drug release from mesoporous silica carriers. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , <b>2018</b> , 130, 327-335	5.7	11
223	Study of the Degradation and Conservation of Historical Leather Book Covers with Macro Attenuated Total Reflection-Fourier Transform Infrared Spectroscopic Imaging. <i>ACS Omega</i> , <b>2018</b> , 3, 7150-7157	3.9	14
222	Thermal effect on dispersive infrared spectroscopic imaging of prostate cancer tissue. <i>Journal of Biophotonics</i> , <b>2018</b> , 11, e201800187	3.1	4
221	Current trends and opportunities for the applications of in situ vibrational spectroscopy to investigate the supercritical fluid processing of polymers. <i>Journal of Supercritical Fluids</i> , <b>2018</b> , 134, 88-95	4.2	16
220	Near-field depolarization of tip-enhanced Raman scattering by single azo-chromophores. <i>Physical Chemistry Chemical Physics</i> , <b>2018</b> , 20, 24088-24098	3.6	6
219	Electron Spin Resonance of Slowly Rotating Vanadyls: Effective Tool to Quantify the Sizes of Asphaltenes in Situ. <i>Energy &amp; Fuels</i> , <b>2017</b> , 31, 387-394	4.1	25
218	Fourier Transform Infrared (FT-IR) Spectroscopic Imaging Analysis of Partially Miscible PMMA-PEG Blends Using Two-Dimensional Disrelation Mapping. <i>Applied Spectroscopy</i> , <b>2017</b> , 71, 1189-1197	3.1	29
217	Protein hydration in living cells probed by Fourier transform infrared (FT-IR) spectroscopic imaging. <i>Analyst, The</i> , <b>2017</b> , 142, 2475-2483	5	22
216	Infrared spectroscopy and spectroscopic imaging in forensic science. <i>Analyst, The</i> , <b>2017</b> , 142, 257-272	5	63
215	Revealing the Nature and Distribution of Metal Carboxylates in Jackson Pollock's Alchemy (1947) by Micro-Attenuated Total Reflection FT-IR Spectroscopic Imaging. <i>Analytical Chemistry</i> , <b>2017</b> , 89, 1283-1289	7.8	48
214	Spectroscopic imaging of biomaterials and biological systems with FTIR microscopy or with quantum cascade lasers. <i>Analytical and Bioanalytical Chemistry</i> , <b>2017</b> , 409, 5813-5820	4.4	47
213	Nonlinear Raman Effects Enhanced by Surface Plasmon Excitation in Planar Refractory Nanoantennas. <i>Nano Letters</i> , <b>2017</b> , 17, 5533-5539	11.5	23
212	Non-equilibrium behavior of polyethylene glycol (PEG)/polypropylene glycol (PPG) mixture studied by Fourier transform infrared (FTIR) spectroscopy. <i>Vibrational Spectroscopy</i> , <b>2017</b> , 88, 49-55	2.1	18
211	Structural transformation of synthetic hydroxyapatite under simulated in vivo conditions studied with ATR-FTIR spectroscopic imaging. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , <b>2017</b> , 171, 155-161	4.4	40
210	The Combined Use of Imaging Approaches to Assess Drug Release from Multicomponent Solid Dispersions. <i>Pharmaceutical Research</i> , <b>2017</b> , 34, 990-1001	4.5	18
209	Applications of Ionic Liquids for the Development of Optical Chemical Sensors and Biosensors. <i>Analytical Sciences</i> , <b>2017</b> , 33, 261-274	1.7	40

208	Attenuated total reflection Fourier-transform infrared (ATR-FTIR) imaging of tissues and live cells. <i>Chemical Society Reviews</i> , <b>2016</b> , 45, 1850-64	58.5	144
207	Evaluation of novel applications of cellulose hydrogel films reconstituted from acetate and chloride of 1-butyl-3-methylimidazolium by comparing their optical, mechanical, and adsorption properties. <i>Materials Today Communications</i> , <b>2016</b> , 8, 108-117	2.5	10
206	FTIR Imaging of Polymeric Materials <b>2016</b> , 118-130		
205	Near-field Raman dichroism of azo-polymers exposed to nanoscale dc electrical and optical poling. <i>Nanoscale</i> , <b>2016</b> , 8, 19867-19875	7.7	14
204	Clinical Spectroscopy: general discussion. <i>Faraday Discussions</i> , <b>2016</b> , 187, 429-60	3.6	6
203	New insights into the mechanism of interaction between CO <sub>2</sub> and polymers from thermodynamic parameters obtained by in situ ATR-FTIR spectroscopy. <i>Physical Chemistry Chemical Physics</i> , <b>2016</b> , 18, 6465-75	3.6	33
202	In-column ATR-FTIR spectroscopy to monitor affinity chromatography purification of monoclonal antibodies. <i>Scientific Reports</i> , <b>2016</b> , 6, 30526	4.9	28
201	Attenuated total reflection-Fourier transform infrared spectroscopic imaging of pharmaceuticals in microfluidic devices. <i>Biomicrofluidics</i> , <b>2016</b> , 10, 024125	3.2	32
200	Electrostatically-guided inhibition of Curli amyloid nucleation by the CsgC-like family of chaperones. <i>Scientific Reports</i> , <b>2016</b> , 6, 24656	4.9	39
199	FTIR spectroscopic imaging and mapping with correcting lenses for studies of biological cells and tissues. <i>Faraday Discussions</i> , <b>2016</b> , 187, 69-85	3.6	26
198	Behavior of Asphaltenes in Crude Oil at High-Pressure CO <sub>2</sub> Conditions: In Situ Attenuated Total Reflection-Fourier Transform Infrared Spectroscopic Imaging Study. <i>Energy &amp; Fuels</i> , <b>2016</b> , 30, 4750-4757	4.1	21
197	Analyses of trace amounts of dyes with a new enhanced sensitivity FTIR spectroscopic technique: MU-ATR (metal underlayer ATR spectroscopy). <i>Analytica Chimica Acta</i> , <b>2016</b> , 941, 67-79	6.6	13
196	ATR-FTIR spectroscopic imaging to study the drying and dissolution of pharmaceutical polymer-based films. <i>International Journal of Pharmaceutics</i> , <b>2016</b> , 515, 57-68	6.5	32
195	High-speed monitoring of the crystallinity change in poly(lactic acid) during photodegradation by using a newly developed wide area NIR imaging system (Compovision). <i>Analytical and Bioanalytical Chemistry</i> , <b>2015</b> , 407, 397-403	4.4	12
194	Cleaning-in-place of immunoaffinity resins monitored by in situ ATR-FTIR spectroscopy. <i>Analytical and Bioanalytical Chemistry</i> , <b>2015</b> , 407, 7111-22	4.4	14
193	Evaluating drug delivery with salt formation: Drug disproportionation studied in situ by ATR-FTIR imaging and Raman mapping. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , <b>2015</b> , 111, 248-56	3.5	20
192	Comparison of pharmaceutical formulations: ATR-FTIR spectroscopic imaging to study drug-carrier interactions. <i>International Journal of Pharmaceutics</i> , <b>2015</b> , 495, 112-121	6.5	21
191	Effect of Temperature and Composition on the Stability of Crude Oil Blends Studied with Chemical Imaging in Situ. <i>Energy &amp; Fuels</i> , <b>2015</b> , 29, 7114-7123	4.1	15

190	The biocompatibility of carbon hydroxyapatite/β-glucan composite for bone tissue engineering studied with Raman and FTIR spectroscopic imaging. <i>Analytical and Bioanalytical Chemistry</i> , <b>2015</b> , 407, 7775-85	4.4	32
189	Analyzing the impact of different excipients on drug release behavior in hot-melt extrusion formulations using FTIR spectroscopic imaging. <i>European Journal of Pharmaceutical Sciences</i> , <b>2015</b> , 67, 21-31	5.1	23
188	Micro-Attenuated Total Reflection Fourier Transform Infrared (Micro ATR FT-IR) Spectroscopic Imaging with Variable Angles of Incidence. <i>Applied Spectroscopy</i> , <b>2015</b> , 69, 1170-4	3.1	18
187	Assessing dysplasia of a bronchial biopsy with FTIR spectroscopic imaging <b>2015</b> ,		4
186	Polarization of near-field light induced with a plasmonic nanoantenna. <i>Physical Review B</i> , <b>2015</b> , 92,	3.3	12
185	Chemical Visualization of Asphaltenes Aggregation Processes Studied in Situ with ATR-FTIR Spectroscopic Imaging and NMR Imaging. <i>Journal of Physical Chemistry C</i> , <b>2015</b> , 119, 2646-2660	3.8	37
184	Fullerene oxidation and clustering in solution induced by light. <i>Journal of Colloid and Interface Science</i> , <b>2015</b> , 446, 24-30	9.3	32
183	How Do Intermolecular Interactions Affect Swelling of Polyketones with a Differing Number of Carbonyl Groups? An In Situ ATR-FTIR Spectroscopic Study of CO <sub>2</sub> Sorption in Polymers. <i>Journal of Physical Chemistry C</i> , <b>2015</b> , 119, 431-440	3.8	20
182	Identifying the mechanisms of drug release from amorphous solid dispersions using MRI and ATR-FTIR spectroscopic imaging. <i>International Journal of Pharmaceutics</i> , <b>2015</b> , 483, 256-67	6.5	43
181	Combined study of biphasic and zero-order release formulations with dissolution tests and ATR-FTIR spectroscopic imaging. <i>Journal of Pharmaceutical Sciences</i> , <b>2014</b> , 103, 1995-2004	3.9	6
180	In Situ Chemical Imaging of Asphaltene Precipitation from Crude Oil Induced by n-Heptane. <i>Energy &amp; Fuels</i> , <b>2014</b> , 28, 964-971	4.1	24
179	Mononuclear Phenolate Diamine Zinc Hydride Complexes and Their Reactions With CO. <i>Organometallics</i> , <b>2014</b> , 33, 1112-1119	3.8	36
178	In Situ Electron Spin Resonance Study of Molecular Dynamics of Asphaltenes at Elevated Temperature and Pressure. <i>Energy &amp; Fuels</i> , <b>2014</b> , 28, 6315-6321	4.1	28
177	High-throughput thermal stability analysis of a monoclonal antibody by attenuated total reflection FT-IR spectroscopic imaging. <i>Analytical Chemistry</i> , <b>2014</b> , 86, 9786-93	7.8	39
176	Electrochemical nanoprobe for single-cell analysis. <i>ACS Nano</i> , <b>2014</b> , 8, 875-84	16.7	158
175	Experimental Evidence for Axial Anisotropy beyond the Diffraction Limit Induced with a Bias Voltage Plasmonic Nanoantenna and Longitudinal Optical Near-Fields in Photoreactive Polymer Thin Films. <i>ACS Photonics</i> , <b>2014</b> , 1, 1025-1032	6.3	12
174	Highly selective separation of carbon dioxide from nitrogen and methane by nitrile/glycol-difunctionalized ionic liquids in supported ionic liquid membranes (SILMs). <i>Journal of Physical Chemistry B</i> , <b>2014</b> , 118, 7440-9	3.4	37
173	Stability of indomethacin with relevance to the release from amorphous solid dispersions studied with ATR-FTIR spectroscopic imaging. <i>European Journal of Pharmaceutical Sciences</i> , <b>2014</b> , 60, 64-71	5.1	45



172	Swellable, water- and acid-tolerant polymer sponges for chemoselective carbon dioxide capture. <i>Journal of the American Chemical Society</i> , <b>2014</b> , 136, 9028-35	16.4	175
171	Tip-enhanced Raman Spectroscopy <b>2014</b> , 1-30		1
170	Recent progress of near-infrared (NIR) imaging--development of novel instruments and their applicability for practical situations--. <i>Analytical Sciences</i> , <b>2014</b> , 30, 143-50	1.7	24
169	Microspectroscopy in the Mid-Infrared <b>2014</b> , 1-26		0
168	FT-IR Imaging in ATR and Transmission Modes: Practical Considerations and Emerging Applications <b>2014</b> , 397-444		5
167	An attenuated total reflection Fourier transform infrared (ATR FT-IR) spectroscopic study of gas adsorption on colloidal stearate-capped ZnO catalyst substrate. <i>Applied Spectroscopy</i> , <b>2014</b> , 68, 88-94	3.1	7
166	Fast drying and film formation of latex dispersions studied with FTIR spectroscopic imaging. <i>Langmuir</i> , <b>2014</b> , 30, 13588-95	4	15
165	Correlation between Asphaltene Stability in n-Heptane and Crude Oil Composition Revealed with In Situ Chemical Imaging. <i>Adsorption Science and Technology</i> , <b>2014</b> , 32, 243-255	3.6	24
164	Nanopatterning and tuning of optical taper antenna apex for tip-enhanced Raman scattering performance. <i>Review of Scientific Instruments</i> , <b>2013</b> , 84, 093106	1.7	18
163	Aberration-free FTIR spectroscopic imaging of live cells in microfluidic devices. <i>Analyst, The</i> , <b>2013</b> , 138, 4040-7	5	53
162	Recent applications of ATR FTIR spectroscopy and imaging to proteins. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , <b>2013</b> , 1834, 2849-58	4	158
161	Formulation design space analysis for drug release from swelling polymer tablets. <i>Powder Technology</i> , <b>2013</b> , 236, 179-187	5.2	16
160	High-pressure carbon dioxide uptake for porous organic cages: comparison of spectroscopic and manometric measurement techniques. <i>Chemical Communications</i> , <b>2013</b> , 49, 9410-2	5.8	39
159	Correcting the effect of refraction and dispersion of light in FT-IR spectroscopic imaging in transmission through thick infrared windows. <i>Analytical Chemistry</i> , <b>2013</b> , 85, 1029-36	7.8	37
158	Bacterial cellulose as source for activated nanosized carbon for electric double layer capacitors. <i>Journal of Materials Science</i> , <b>2013</b> , 48, 367-376	4.3	42
157	DEM simulation of drug release from structurally heterogeneous swelling tablets. <i>Powder Technology</i> , <b>2013</b> , 248, 68-76	5.2	9
156	Dissolution of tablet-in-tablet formulations studied with ATR-FTIR spectroscopic imaging. <i>European Journal of Pharmaceutical Sciences</i> , <b>2013</b> , 48, 748-57	5.1	24
155	ATR-FTIR spectroscopic imaging: recent advances and applications to biological systems. <i>Analyst, The</i> , <b>2013</b> , 138, 1940-51	5	258

154	Applications of Fourier transform infrared spectroscopic imaging to tablet dissolution and drug release. <i>Expert Opinion on Drug Delivery</i> , <b>2013</b> , 10, 1207-21	8	52
153	Application of a newly developed portable NIR imaging device to monitor the dissolution process of tablets. <i>Analytical and Bioanalytical Chemistry</i> , <b>2013</b> , 405, 9401-9	4.4	33
152	Development of a High-Speed Monitoring near Infrared Hyperspectral Camera (Compovision) for Wide Area Imaging and its Applications. <i>NIR News</i> , <b>2013</b> , 24, 6-11	0.8	13
151	Potential of a newly developed high-speed near-infrared (NIR) camera (Compovision) in polymer industrial analyses: monitoring crystallinity and crystal evolution of polylactic acid (PLA) and concentration of PLA in PLA/Poly-(R)-3-hydroxybutyrate (PHB) blends. <i>Applied Spectroscopy</i> , <b>2013</b> , 67, 1441-6	3.1	29
150	Simultaneous monitoring of curing shrinkage and degree of cure of thermosets by attenuated total reflection Fourier transform infrared (ATR FT-IR) spectroscopy. <i>Applied Spectroscopy</i> , <b>2013</b> , 67, 1427-36	3.1	17
149	Micro ATR FTIR imaging of hanging drop protein crystallisation. <i>Vibrational Spectroscopy</i> , <b>2012</b> , 63, 492-498	4.4	18
148	Chemical imaging of protein adsorption and crystallization on a wettability gradient surface. <i>Langmuir</i> , <b>2012</b> , 28, 3174-9	4	26
147	Chemical characterization of latent fingerprints by matrix-assisted laser desorption ionization, time-of-flight secondary ion mass spectrometry, mega electron volt secondary mass spectrometry, gas chromatography/mass spectrometry, X-ray photoelectron spectroscopy, and attenuated total reflection Fourier transform infrared spectroscopic imaging: an inter-comparison. <i>Analytical Chemistry</i> , <b>2012</b> , 84, 4052-6	7.8	73
146	FT-IR spectroscopic imaging of reactions in multiphase flow in microfluidic channels. <i>Analytical Chemistry</i> , <b>2012</b> , 84, 4052-6	7.8	53
145	Modelling of pharmaceutical tablet swelling and dissolution using discrete element method. <i>Chemical Engineering Science</i> , <b>2012</b> , 69, 394-403	4.4	23
144	Ultrafast infrared chemical imaging of live cells. <i>Chemical Science</i> , <b>2011</b> , 2, 107-111	9.4	25
143	Tip-enhanced Raman mapping with top-illumination AFM. <i>Nanotechnology</i> , <b>2011</b> , 22, 175701	3.4	29
142	pH-sensitive polymer hydrogels derived from morpholine to prevent the crystallization of ibuprofen. <i>Journal of Controlled Release</i> , <b>2011</b> , 149, 140-5	11.7	40
141	A fast algorithm for mass transfer on an unstructured grid formed by DEM particles. <i>Powder Technology</i> , <b>2011</b> , 214, 415-422	5.2	5
140	Fabrication of chitosan/poly( $\epsilon$ -caprolactone) composite hydrogels for tissue engineering applications. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2011</b> , 22, 279-88	4.5	45
139	Application of FTIR spectroscopic imaging to study the effects of modifying the pH microenvironment on the dissolution of ibuprofen from HPMC matrices. <i>Journal of Pharmaceutical Sciences</i> , <b>2011</b> , 100, 4745-55	3.9	33
138	Applications of FTIR Spectroscopic Imaging in Pharmaceutical Science <b>2011</b> , 185-204		1
137	Mapping local microstructure and mechanical performance around carbon nanotube grafted silica fibres: methodologies for hierarchical composites. <i>Nanoscale</i> , <b>2011</b> , 3, 4759-67	7.7	40



136	Fouling in Crude Oil Preheat Trains: A Systematic Solution to an Old Problem. <i>Heat Transfer Engineering</i> , <b>2011</b> , 32, 197-215	1.7	48
135	Generation of chemical movies: FT-IR spectroscopic imaging of segmented flows. <i>Analytical Chemistry</i> , <b>2011</b> , 83, 3606-9	7.8	45
134	Blends of cellulose and poly(3-hydroxybutyrate-co-3-hydroxyvalerate) prepared from the ionic liquid 1-butyl-3-methylimidazolium chloride. <i>Carbohydrate Polymers</i> , <b>2011</b> , 86, 94-104	10.3	45
133	Microstructure-based mathematical modelling and spectroscopic imaging of tablet dissolution. <i>Computers and Chemical Engineering</i> , <b>2011</b> , 35, 1328-1339	4	36
132	In situ FTIR spectroscopic study of the effect of CO <sub>2</sub> sorption on H-bonding in PEG-PVP mixtures. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , <b>2011</b> , 78, 1500-6	4.4	17
131	Supercritical CO <sub>2</sub> -assisted preparation of ibuprofen-loaded PEGBVP complexes. <i>Journal of Supercritical Fluids</i> , <b>2011</b> , 57, 190-197	4.2	20
130	Finding a needle in a chemical haystack: tip-enhanced Raman scattering for studying carbon nanotubes mixtures. <i>Nanotechnology</i> , <b>2010</b> , 21, 445704	3.4	17
129	Micro- and macro-attenuated total reflection Fourier transform infrared spectroscopic imaging. Plenary Lecture at the 5th International Conference on Advanced Vibrational Spectroscopy, 2009, Melbourne, Australia. <i>Applied Spectroscopy</i> , <b>2010</b> , 64, 135A-152A	3.1	158
128	ATR-FTIR spectroscopy and spectroscopic imaging of solvent and permeant diffusion across model membranes. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , <b>2010</b> , 74, 413-9	5.7	13
127	Rapid prototyping of microfluidic devices for integrating with FT-IR spectroscopic imaging. <i>Lab on a Chip</i> , <b>2010</b> , 10, 2170-4	7.2	45
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3	ATR-FT-IR Imaging for Pharmaceutical and Polymeric Materials: From Micro to Macro Approaches	347-375	5
2	Multivariate Movies and their Applications in Pharmaceutical and Polymer Dissolution Studies	221-260	9
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