

Bernhard Lendl

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.

316 papers	7,854 citations	43 h-index	72 g-index
356 ext. papers	8,901 ext. citations	5.1 avg, IF	6.23 L-index

#	Paper	IF	Citations
316	Mid-infrared intracavity quartz-enhanced photoacoustic spectroscopy with pptv - Level sensitivity using a T-shaped custom tuning fork.. <i>Photoacoustics</i> , 2022 , 25, 100330	9	3
315	Multisensor hyperspectral imaging approach for the microchemical analysis of ultramarine blue pigments.. <i>Scientific Reports</i> , 2022 , 12, 707	4.9	0
314	Fatty Acid Determination in Human Milk Using Attenuated Total Reflection Infrared Spectroscopy and Solvent-Free Lipid Separation.. <i>Applied Spectroscopy</i> , 2022 , 37028211065502	3.1	0
313	Systematic analysis and nanoscale chemical imaging of polymers using photothermal-induced resonance (AFM-IR) infrared spectroscopy. <i>Polymer Testing</i> , 2022 , 106, 107443	4.5	2
312	Broadband laser-based mid-infrared spectroscopy employing a quantum cascade detector for milk protein analysis. <i>Sensors and Actuators B: Chemical</i> , 2022 , 350, 130873	8.5	4
311	Microbeam bending of hydrated human cortical bone lamellae from the central region of the body of femur shows viscoelastic behaviour. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2022 , 125, 104815	4.1	1
310	AFM investigation of APAC (antiplatelet and anticoagulant heparin proteoglycan). <i>Analytical and Bioanalytical Chemistry</i> , 2021 , 1	4.4	1
309	Polarimetric Balanced Detection: Background-Free Mid-IR Evanescent Field Laser Spectroscopy for Low-Noise, Long-term Stable Chemical Sensing. <i>ACS Sensors</i> , 2021 , 6, 35-42	9.2	5
308	Ultra-sensitive slot-waveguide-enhanced Raman spectroscopy for aqueous solutions of non-polar compounds using a functionalized silicon nitride photonic integrated circuit. <i>Optics Letters</i> , 2021 , 46, 1153-1156	3	1
307	Highly Biaxially Strained Silicene on Au(111). <i>Journal of Physical Chemistry C</i> , 2021 , 125, 9973-9980	3.8	3
306	Fatty Acid Prediction in Bovine Milk by Attenuated Total Reflection Infrared Spectroscopy after Solvent-Free Lipid Separation. <i>Foods</i> , 2021 , 10,	4.9	2
305	Broadband laser-based mid-IR spectroscopy for analysis of proteins and monitoring of enzyme activity. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2021 , 253, 119563	4.4	7
304	Parts-per-billion detection of carbon monoxide: A comparison between quartz-enhanced photoacoustic and photothermal spectroscopy. <i>Photoacoustics</i> , 2021 , 22, 100244	9	17
303	Balanced-detection interferometric cavity-assisted photothermal spectroscopy employing an all-fiber-coupled probe laser configuration. <i>Optics Express</i> , 2021 , 29, 7794-7808	3.3	9
302	Wettability transition of femtosecond laser patterned nodular cast iron (NCI) substrate. <i>Applied Surface Science</i> , 2021 , 559, 149897	6.7	3
301	ATR-FTIR spectroscopy for the routine quality control of exosome isolations. <i>Chemometrics and Intelligent Laboratory Systems</i> , 2021 , 217, 104401	3.8	3
300	A thermoelectrically stabilized aluminium acoustic trap combined with attenuated total reflection infrared spectroscopy for detection of in water. <i>Lab on A Chip</i> , 2021 , 21, 1811-1819	7.2	

299	Mesoporous Zirconia Coating for Sensing Applications Using Attenuated Total Reflection Fourier Transform Infrared (ATR FT-IR) Spectroscopy.. <i>Applied Spectroscopy</i> , 2021 , 37028211057156	3.1	0
298	Production of Active Recombinant Hyaluronidase Inclusion Bodies from in BL21(DE3) and characterization by FT-IR Spectroscopy. <i>International Journal of Molecular Sciences</i> , 2020 , 21,	6.3	7
297	3D Printing for Low-Cost and Versatile Attenuated Total Reflection Infrared Spectroscopy. <i>Analytical Chemistry</i> , 2020 , 92, 4736-4741	7.8	8
296	Sensitivity-Enhanced Fourier Transform Mid-Infrared Spectroscopy Using a Supercontinuum Laser Source. <i>Applied Spectroscopy</i> , 2020 , 74, 485-493	3.1	23
295	Anomalous Humidity Dependence in Photoacoustic Spectroscopy of CO Explained by Kinetic Cooling. <i>Applied Sciences (Switzerland)</i> , 2020 , 10, 843	2.6	8
294	Quantum cascade laser-based infrared transmission spectroscopy of proteins in solution 2020 , 59-88		5
293	The Next Generation of IR Spectroscopy: EC-QCL-Based Mid-IR Transmission Spectroscopy of Proteins with Balanced Detection. <i>Analytical Chemistry</i> , 2020 , 92, 9901-9907	7.8	22
292	Beyond Beer's Law: Why the Index of Refraction Depends (Almost) Linearly on Concentration. <i>ChemPhysChem</i> , 2020 , 21, 707-711	3.2	17
291	In Situ Pt Photodeposition and Methanol Photooxidation on Pt/TiO ₂ : Pt-Loading-Dependent Photocatalytic Reaction Pathways Studied by Liquid-Phase Infrared Spectroscopy. <i>ACS Catalysis</i> , 2020 , 10, 2964-2977	13.1	19
290	A pocket-sized 3D-printed attenuated total reflection-infrared filterometer combined with functionalized silica films for nitrate sensing in water. <i>Sensors and Actuators B: Chemical</i> , 2020 , 310, 127847	8.5	10
289	Correlative infrared optical coherence tomography and hyperspectral chemical imaging. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2020 , 37, B19-B26	1.8	10
288	Multiplex volatile organic compound Raman sensing with nanophotonic slot waveguides functionalized with a mesoporous enrichment layer. <i>Optics Letters</i> , 2020 , 45, 447	3	10
287	Mid-IR refractive index sensor for detecting proteins employing an external cavity quantum cascade laser-based Mach-Zehnder interferometer. <i>Optics Express</i> , 2020 , 28, 36632-36642	3.3	2
286	FTIR spectroscopy as a novel analytical approach for investigation of glucose transport and glucose transport inhibition studies in transwell in vitro barrier models. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2020 , 237, 118388	4.4	
285	pH titration of Lactoglobulin monitored by laser-based Mid-IR transmission spectroscopy coupled to chemometric analysis. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2020 , 226, 117636	4.4	11
284	External Cavity Quantum Cascade Laser-Based Mid-Infrared Dispersion Spectroscopy for Qualitative and Quantitative Analysis of Liquid-Phase Samples. <i>Applied Spectroscopy</i> , 2020 , 74, 452-459	3.1	5
283	Toward Rapid Screening of Liver Grafts at the Operating Room Using Mid-infrared Spectroscopy. <i>Analytical Chemistry</i> , 2020 , 92, 14542-14549	7.8	2
282	Comparability of Raman Spectroscopic Configurations: A Large Scale Cross-Laboratory Study. <i>Analytical Chemistry</i> , 2020 , 92, 15745-15756	7.8	22

281	Nanoscale Infrared Spectroscopy and Chemometrics Enable Detection of Intracellular Protein Distribution. <i>Analytical Chemistry</i> , 2020 , 92, 15719-15725	7.8	6
280	Ultra-sensitive refractive index gas sensor with functionalized silicon nitride photonic circuits. <i>APL Photonics</i> , 2020 , 5, 081301	5.2	15
279	Mesoporous silica films for sensing volatile organic compounds using attenuated total reflection spectroscopy. <i>Sensors and Actuators B: Chemical</i> , 2020 , 302, 127194	8.5	10
278	A Quantum Cascade Laser-Based Multi-Gas Sensor for Ambient Air Monitoring. <i>Sensors</i> , 2020 , 20,	3.8	8
277	In-Line Ultrasound-Enhanced Raman Spectroscopy Allows for Highly Sensitive Analysis with Improved Selectivity in Suspensions. <i>Analytical Chemistry</i> , 2019 , 91, 14231-14238	7.8	5
276	Mid-infrared sensing of CO at saturated absorption conditions using intracavity quartz-enhanced photoacoustic spectroscopy. <i>Applied Physics B: Lasers and Optics</i> , 2019 , 125, 159	1.9	11
275	Pore Size-Dependent Structure of Confined Water in Mesoporous Silica Films from Water Adsorption/Desorption Using ATR-FTIR Spectroscopy. <i>Langmuir</i> , 2019 , 35, 11986-11994	4	20
274	In-Depth Study of Coating Multimodal Porosity Using Ellipsometry Porosimetry in Desorption Scanning Mode. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 23464-23479	3.8	8
273	An Acoustic Trap for Bead Injection Attenuated Total Reflection Infrared Spectroscopy. <i>Analytical Chemistry</i> , 2019 , 91, 7672-7678	7.8	6
272	Stand-off Hyperspectral Raman Imaging and Random Decision Forest Classification: A Potent Duo for the Fast, Remote Identification of Explosives. <i>Analytical Chemistry</i> , 2019 , 91, 7712-7718	7.8	3
271	Hydrogen Sulfide Detection in the Midinfrared Using a 3D-Printed Resonant Gas Cell. <i>Journal of Sensors</i> , 2019 , 2019, 1-7	2	5
270	Native Nano-electrospray Differential Mobility Analyzer (nES GEMMA) Enables Size Selection of Liposomal Nanocarriers Combined with Subsequent Direct Spectroscopic Analysis. <i>Analytical Chemistry</i> , 2019 , 91, 3860-3868	7.8	8
269	High-throughput quantitation of bovine milk proteins and discrimination of commercial milk types by external cavity-quantum cascade laser spectroscopy and chemometrics. <i>Analyst, The</i> , 2019 , 144, 5571-5579	5.579	13
268	Comparing mapping and direct hyperspectral imaging in stand-off Raman spectroscopy for remote material identification. <i>Journal of Raman Spectroscopy</i> , 2019 , 50, 1034-1043	2.3	2
267	Multimodal mid-infrared optical coherence tomography and spectroscopy for non-destructive testing and art diagnosis 2019 ,		2
266	Balanced-detection interferometric cavity-assisted photothermal spectroscopy. <i>Optics Express</i> , 2019 , 27, 12183-12195	3.3	22
265	High frequency modulation and (quasi) single-sideband emission of mid-infrared ring and ridge quantum cascade lasers. <i>Optics Express</i> , 2019 , 27, 14716-14724	3.3	7
264	Implementation and characterization of a thermal infrared laser heterodyne radiometer based on a wavelength modulated local oscillator laser. <i>Optics Express</i> , 2019 , 27, 15575-15584	3.3	5

263	Smart textiles in wound care: functionalization of cotton/PET blends with antimicrobial nanocapsules. <i>Journal of Materials Chemistry B</i> , 2019 , 7, 6592-6603	7.3	14
262	Nanoscale Chemical Imaging of Individual, Chemotherapeutic Cytarabine-loaded Liposomal Nanocarriers. <i>Nano Research</i> , 2019 , 12, 197	10	39
261	Azobis[tetrazolide]-Carbonates of the Lanthanides [Breaking the Gadolinium Break. <i>European Journal of Inorganic Chemistry</i> , 2018 , 2018, 1969-1975	2.3	5
260	Azobis[tetrazolide]-Carbonates of the Lanthanides [Breaking the Gadolinium Break. <i>European Journal of Inorganic Chemistry</i> , 2018 , 2018, 1954-1954	2.3	
259	Fast quantification of bovine milk proteins employing external cavity-quantum cascade laser spectroscopy. <i>Food Chemistry</i> , 2018 , 252, 22-27	8.5	16
258	A quantum cascade laser-based Mach-Zehnder interferometer for chemical sensing employing molecular absorption and dispersion. <i>Applied Physics B: Lasers and Optics</i> , 2018 , 124, 1	1.9	13
257	Recent advancements of EC-QCL based mid-IR transmission spectroscopy of proteins and application to analysis of bovine milk1. <i>Biomedical Spectroscopy and Imaging</i> , 2018 , 7, 35-45	1.3	8
256	Simultaneous Laser Doppler Velocimetry and stand-off Raman spectroscopy as a novel tool to assess flow characteristics of process streams. <i>Chemical Engineering Journal</i> , 2018 , 334, 123-133	14.7	
255	Fourier Transform Infrared (FT-IR) and Laser Ablation Inductively Coupled Plasma-Mass Spectrometry (LA-ICP-MS) Imaging of Cerebral Ischemia: Combined Analysis of Rat Brain Thin Cuts Toward Improved Tissue Classification. <i>Applied Spectroscopy</i> , 2018 , 72, 241-250	3.1	12
254	Enhanced mid-infrared multi-bounce ATR spectroscopy for online detection of hydrogen peroxide using a supercontinuum laser. <i>Optics Express</i> , 2018 , 26, 12169	3.3	25
253	Phosphonate coating of SiO nanoparticles abrogates inflammatory effects and local changes of the lipid composition in the rat lung: a complementary bioimaging study. <i>Particle and Fibre Toxicology</i> , 2018 , 15, 31	8.4	9
252	Assessment of discriminant models in infrared imaging using constrained repeated random sampling - Cross validation. <i>Analytica Chimica Acta</i> , 2018 , 1033, 156-164	6.6	11
251	Towards ultrasound enhanced mid-IR spectroscopy for sensing bacteria in aqueous solutions 2018 ,		1
250	Frequency-locked cavity ring-down Faraday rotation spectroscopy. <i>Optics Letters</i> , 2018 , 43, 5046-5049	3	3
249	WaterSpy: A High Sensitivity, Portable Photonic Device for Pervasive Water Quality Analysis. <i>Sensors</i> , 2018 , 19,	3.8	5
248	Online Detection of Functional Groups in SEC via Quantum Cascade Laser IR Spectroscopy. <i>Macromolecular Rapid Communications</i> , 2018 , 39, 1700307	4.8	7
247	Prediction of filamentous process performance attributes by CSL quality assessment using mid-infrared spectroscopy and chemometrics. <i>Journal of Biotechnology</i> , 2018 , 265, 93-100	3.7	9
246	Teaching an old pET new tricks: tuning of inclusion body formation and properties by a mixed feed system in E. coli. <i>Applied Microbiology and Biotechnology</i> , 2018 , 102, 667-676	5.7	30

245	Structure elucidation and degradation kinetic study of Ofloxacin using surface enhanced Raman spectroscopy. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2018 , 193, 63-70	4.4	13
244	Liquid ChromatographyLiquid ChromatographyFourier Transform Infrared 2018 , 75-75		1
243	In Situ IR Spectroscopy of Mesoporous Silica Films for Monitoring Adsorption Processes and Trace Analysis. <i>ACS Applied Nano Materials</i> , 2018 , 1, 7083-7091	5.6	15
242	Structural insights into pH-responsive drug release of self-assembling human serum albumin-silk fibroin nanocapsules. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2018 , 133, 176-187	5.7	15
241	Beyond Fourier Transform Infrared Spectroscopy: External Cavity Quantum Cascade Laser-Based Mid-infrared Transmission Spectroscopy of Proteins in the Amide I and Amide II Region. <i>Analytical Chemistry</i> , 2018 , 90, 7072-7079	7.8	45
240	On-Capillary Surface-Enhanced Raman Spectroscopy: Determination of Glutathione in Whole Blood Microsamples. <i>Analytical Chemistry</i> , 2018 , 90, 9093-9100	7.8	31
239	Enhanced mid-infrared multi-bounce ATR spectroscopy for online detection of hydrogen peroxide using a supercontinuum laser. <i>Optics Express</i> , 2018 , 26, 12169-12179	3.3	4
238	External cavity-quantum cascade laser (EC-QCL) spectroscopy for protein analysis in bovine milk. <i>Analytica Chimica Acta</i> , 2017 , 963, 99-105	6.6	16
237	Quantum-cascade-laser-based heterodyne phase-sensitive dispersion spectroscopy in the mid-IR range: capabilities and limitations 2017 ,		1
236	Implementation of Resonance Tracking for Assuring Reliability in Resonance Enhanced Photothermal Infrared Spectroscopy and Imaging. <i>Applied Spectroscopy</i> , 2017 , 71, 2013-2020	3.1	13
235	Application of MCR-ALS to reveal intermediate conformations in the thermally induced α transition of poly-L-lysine monitored by FT-IR spectroscopy. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2017 , 185, 304-309	4.4	19
234	A novel substrate for multisensor hyperspectral imaging. <i>Journal of Microscopy</i> , 2017 , 265, 341-348	1.9	3
233	Heterodyne Phase-Sensitive Dispersion Spectroscopy in the Mid-Infrared with a Quantum Cascade Laser. <i>Analytical Chemistry</i> , 2017 , 89, 5916-5922	7.8	18
232	A quantitative comparison of dispersion- and absorption-spectroscopic gas sensing 2017 ,		2
231	FTIR-spectroscopic and LA-ICP-MS imaging for combined hyperspectral image analysis of tumor models. <i>Analytical Methods</i> , 2017 , 9, 5464-5471	3.2	15
230	Pikomolare Spuren von AmIII verursachen drastische Unterschiede in der Koordinationschemie von TbIII: ein Sprung über die Gadoliniumecke <i>Angewandte Chemie</i> , 2017 , 129, 13448-13453	3.6	1
229	Picomolar Traces of Americium(III) Introduce Drastic Changes in the Structural Chemistry of Terbium(III): A Break in the "Gadolinium Break". <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 13264-13269	16.4	5
228	Image-Based Chemical Structure Determination. <i>Scientific Reports</i> , 2017 , 7, 6832	4.9	7

227	Quantum cascade lasers (QCLs) in biomedical spectroscopy. <i>Chemical Society Reviews</i> , 2017 , 46, 5903-5928	38.5	88
226	Toward a Noninvasive, Label-Free Screening Method for Determining Spore Inoculum Quality of <i>Penicillium chrysogenum</i> Using Raman Spectroscopy. <i>Applied Spectroscopy</i> , 2017 , 71, 2661-2669	3.1	3
225	Advanced IR and Raman detectors for identification and quantification 2017 , 463-477		2
224	Off-beam quartz-enhanced photoacoustic spectroscopy-based sensor for hydrogen sulfide trace gas detection using a mode-hop-free external cavity quantum cascade laser. <i>Applied Physics B: Lasers and Optics</i> , 2017 , 123, 1	1.9	16
223	On-line monitoring of methanol and methyl formate in the exhaust gas of an industrial formaldehyde production plant by a mid-IR gas sensor based on tunable Fabry-Pérot filter technology. <i>Analytical and Bioanalytical Chemistry</i> , 2017 , 409, 753-761	4.4	10
222	Application of a tunable Fabry-Pérot filterometer to mid-infrared gas sensing. <i>Sensors and Actuators B: Chemical</i> , 2017 , 242, 9-14	8.5	13
221	On the Identification of Rayon/Viscose as a Major Fraction of Microplastics in the Marine Environment: Discrimination between Natural and Manmade Cellulosic Fibers Using Fourier Transform Infrared Spectroscopy. <i>Applied Spectroscopy</i> , 2017 , 71, 939-950	3.1	80
220	Implementation of a quantum cascade laser-based gas sensor prototype for sub-ppmv HS measurements in a petrochemical process gas stream. <i>Analytical and Bioanalytical Chemistry</i> , 2017 , 409, 729-739	4.4	30
219	Surface emitting ring quantum cascade lasers for chemical sensing. <i>Optical Engineering</i> , 2017 , 57, 1	1.1	5
218	Application of a ring cavity surface emitting quantum cascade laser (RCSE-QCL) on the measurement of H ₂ S in a CH ₄ matrix for process analytics. <i>Optics Express</i> , 2016 , 24, 6572-85	3.3	10
217	Comparison of Fiber Optic and Conduit Attenuated Total Reflection (ATR) Fourier Transform Infrared (FT-IR) Setup for In-Line Fermentation Monitoring. <i>Applied Spectroscopy</i> , 2016 , 70, 1965-1973	3.1	10
216	Remote Sensing with Commutable Monolithic Laser and Detector. <i>ACS Photonics</i> , 2016 , 3, 1794-1798	6.3	12
215	External cavity-quantum cascade laser infrared spectroscopy for secondary structure analysis of proteins at low concentrations. <i>Scientific Reports</i> , 2016 , 6, 33556	4.9	44
214	Mid-infrared surface transmitting and detecting quantum cascade device for gas-sensing. <i>Scientific Reports</i> , 2016 , 6, 21795	4.9	27
213	Compact quantum cascade laser based quartz-enhanced photoacoustic spectroscopy sensor system for detection of carbon disulfide. <i>Optics Express</i> , 2016 , 24, 6559-71	3.3	73
212	Sequential SERS determination of aspirin and vitamin C using in situ laser-induced photochemical silver substrate synthesis in a moving flow cell. <i>Analytical and Bioanalytical Chemistry</i> , 2016 , 408, 4733-4744	4.4	15
211	Cantilever-enhanced photoacoustic detection of hydrogen sulfide (H ₂ S) using NIR telecom laser sources near 1.6 μ m. <i>Applied Physics B: Lasers and Optics</i> , 2016 , 122, 1	1.9	16
210	Surface enhanced Raman spectroscopic direct determination of low molecular weight biothiols in umbilical cord whole blood. <i>Analyst, The</i> , 2016 , 141, 2165-74	5	21

209	In situ formation of reduced graphene oxide structures in ceria by combined sol-gel and solvothermal processing. <i>Beilstein Journal of Nanotechnology</i> , 2016 , 7, 1815-1821	3	11
208	2f-wavelength modulation Fabry-Perot photothermal interferometry. <i>Optics Express</i> , 2016 , 24, 28958-28967	3.9	23
207	EC-QCL mid-IR transmission spectroscopy for monitoring dynamic changes of protein secondary structure in aqueous solution on the example of β -aggregation in alcohol-denaturated β -chymotrypsin. <i>Analytical and Bioanalytical Chemistry</i> , 2016 , 408, 3933-41	4.4	24
206	Tip-Enhanced Raman Spectroscopy of Atmospherically Relevant Aerosol Nanoparticles. <i>Analytical Chemistry</i> , 2016 , 88, 9766-9772	7.8	31
205	How salt lakes affect atmospheric new particle formation: A case study in Western Australia. <i>Science of the Total Environment</i> , 2016 , 573, 985-995	10.2	4
204	Utility of surface enhanced Raman spectroscopy (SERS) for elucidation and simultaneous determination of some penicillins and penicilloic acid using hydroxylamine silver nanoparticles. <i>Talanta</i> , 2015 , 144, 710-6	6.2	30
203	New particle formation above a simulated salt lake in aerosol chamber experiments. <i>Environmental Chemistry</i> , 2015 , 12, 489	3.2	6
202	Method for time-resolved monitoring of a solid state biological film using photothermal infrared nanoscopy on the example of poly-L-lysine. <i>Analytical Chemistry</i> , 2015 , 87, 4415-20	7.8	16
201	Simultaneous open-path determination of road side mono-nitrogen oxides employing mid-IR laser spectroscopy. <i>Atmospheric Environment</i> , 2015 , 112, 189-195	5.3	11
200	Antibacterial effect of various shapes of silver nanoparticles monitored by SERS. <i>Talanta</i> , 2015 , 138, 183-189	6.2	64
199	Remote mid-infrared photoacoustic spectroscopy with a quantum cascade laser. <i>Optics Letters</i> , 2015 , 40, 3476-9	3	15
198	Mid-infrared spectroscopic characterisation of an ultra-broadband tunable EC-QCL system intended for biomedical applications 2015 ,		5
197	Chemometric analysis of multisensor hyperspectral images of precipitated atmospheric particulate matter. <i>Analytical Chemistry</i> , 2015 , 87, 9413-20	7.8	25
196	External-Cavity Quantum Cascade Laser Spectroscopy for Mid-IR Transmission Measurements of Proteins in Aqueous Solution. <i>Analytical Chemistry</i> , 2015 , 87, 6980-7	7.8	68
195	Ultrasound-enhanced attenuated total reflection mid-infrared spectroscopy in-line probe: acquisition of cell spectra in a bioreactor. <i>Analytical Chemistry</i> , 2015 , 87, 2314-20	7.8	24
194	Mid-infrared spectroscopic characterisation of an ultra-broadband tunable EC-QCL system intended for biomedical applications 2015 ,		4
193	Experimental Study on Localized Surface Plasmon Mode Hybridization in the Near and Mid Infrared. <i>Plasmonics</i> , 2014 , 9, 707-713	2.4	1
192	Identification of lipophilic bioproduct portfolio from bioreactor samples of extreme halophilic archaea with HPLC-MS/MS. <i>Analytical and Bioanalytical Chemistry</i> , 2014 , 406, 2421-32	4.4	9

191	A broadband grating-coupled silicon nitride waveguide for the mid-IR: characterization and sensitive measurements using an external cavity quantum cascade laser. <i>Applied Physics B: Lasers and Optics</i> , 2014 , 116, 325-332	1.9	1
190	Multi-analyte quantification in bioprocesses by Fourier-transform-infrared spectroscopy by partial least squares regression and multivariate curve resolution. <i>Analytica Chimica Acta</i> , 2014 , 807, 103-10	6.6	37
189	Double-layered nanoparticle stacks for surface enhanced infrared absorption spectroscopy. <i>Nanoscale</i> , 2014 , 6, 127-31	7.7	21
188	Spectroscopic Techniques for Characterization of Gold Nanoparticles. <i>Comprehensive Analytical Chemistry</i> , 2014 , 66, 301-328	1.9	1
187	High performance liquid chromatography with mid-infrared detection based on a broadly tunable quantum cascade laser. <i>Analyst, The</i> , 2014 , 139, 2057-64	5	20
186	Quasi-simultaneous in-line flue gas monitoring of NO and NO _x emissions at a caloric power plant employing mid-IR laser spectroscopy. <i>Analytical Chemistry</i> , 2014 , 86, 9058-64	7.8	10
185	Nanoskopie im mittleren Infrarot. <i>Nachrichten Aus Der Chemie</i> , 2014 , 62, 780-781	0.1	
184	Quartz-enhanced photoacoustic spectroscopy-based sensor system for sulfur dioxide detection using a CW DFB-QCL. <i>Applied Physics B: Lasers and Optics</i> , 2014 , 117, 113-120	1.9	32
183	Infrared biospectroscopy for a fast qualitative evaluation of sample preparation in metabolomics. <i>Talanta</i> , 2014 , 127, 181-90	6.2	7
182	Silicon photonics in the mid-infrared: Waveguide absorption sensors 2014 ,		3
181	Time-resolved spectral characterization of ring cavity surface emitting and ridge-type distributed feedback quantum cascade lasers by step-scan FT-IR spectroscopy. <i>Optics Express</i> , 2014 , 22, 2656-64	3.3	16
180	Challenges in the determination of petroleum hydrocarbons in water by gas chromatography (hydrocarbon index). <i>Fuel</i> , 2013 , 113, 527-536	7.1	14
179	Direct determination of glucose, lactate and triglycerides in blood serum by a tunable quantum cascade laser-based mid-IR sensor. <i>Applied Physics B: Lasers and Optics</i> , 2013 , 110, 233-239	1.9	62
178	Combining light microscopy, dielectric spectroscopy, MALDI intact cell mass spectrometry, FTIR spectromicroscopy and multivariate data mining for morphological and physiological bioprocess characterization of filamentous organisms. <i>Fungal Genetics and Biology</i> , 2013 , 51, 1-11	3.9	17
177	Advanced Spectroscopic Detectors for Identification and Quantification 2013 , 333-347		
176	An unusually water-poor 5,5'-azobistetrazolate of dysprosium: stabilization of a nitrogen-rich heterocycle by a minimum of hydrogen bonds. <i>New Journal of Chemistry</i> , 2013 , 37, 3840	3.6	7
175	Determination of carbohydrates present in <i>Saccharomyces cerevisiae</i> using mid-infrared spectroscopy and partial least squares regression. <i>Analytical and Bioanalytical Chemistry</i> , 2013 , 405, 8241-40	4.4	19
174	Reagent-free monitoring of multiple clinically relevant parameters in human blood plasma using a mid-infrared quantum cascade laser based sensor system. <i>Analyst, The</i> , 2013 , 138, 4022-8	5	44

173	Halogen-induced organic aerosol (XOA): a study on ultra-fine particle formation and time-resolved chemical characterization. <i>Faraday Discussions</i> , 2013 , 165, 135-49	3.6	24
172	Ultrasonic manipulation of yeast cells in suspension for absorption spectroscopy with an immersible mid-infrared fiberoptic probe. <i>Ultrasound in Medicine and Biology</i> , 2013 , 39, 1094-101	3.5	9
171	Highly reproducible SERS detection in sequential injection analysis: real time preparation and application of photo-reduced silver substrate in a moving flow-cell. <i>Talanta</i> , 2013 , 116, 972-7	6.2	9
170	Attenuated Total Reflection Fourier Transform Infrared Spectroscopy 2013 ,		13
169	Chemistry and morphology of dried-up pollen suspension residues. <i>Journal of Raman Spectroscopy</i> , 2013 , 44, 1654-1658	2.3	33
168	Measures for optimizing pulsed EC-QC laser spectroscopy of liquids and application to multi-analyte blood analysis 2013 ,		3
167	Toward stand-off open-path measurements of NO and NO(2) in the sub-parts per million meter range using quantum cascade lasers (QCLs) in the intra-pulse absorption mode. <i>Applied Spectroscopy</i> , 2013 , 67, 1368-75	3.1	6
166	Peer review versus editorial review and their role in innovative science. <i>Theoretical Medicine and Bioethics</i> , 2012 , 33, 359-76	0.9	12
165	Tunable mid-infrared lasers in physical chemosensors towards the detection of physiologically relevant parameters in biofluids. <i>Sensors and Actuators B: Chemical</i> , 2012 , 170, 189-195	8.5	31
164	Fibre optic ATR-IR spectroscopy at cryogenic temperatures: in-line reaction monitoring on organolithium compounds. <i>Chemical Communications</i> , 2012 , 48, 2451-3	5.8	27
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