

Bernhard Lendl

List of Publications by Year in descending order

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346
papers

9,738
citations

53660

45
h-index

64668

79
g-index

356
all docs

356
docs citations

356
times ranked

9774
citing authors

#	ARTICLE	IF	CITATIONS
1	A New Method for Fast Preparation of Highly Surface-Enhanced Raman Scattering (SERS) Active Silver Colloids at Room Temperature by Reduction of Silver Nitrate with Hydroxylamine Hydrochloride. <i>Journal of Physical Chemistry B</i> , 2003, 107, 5723-5727.	1.2	1,040
2	Multidimensional Information on the Chemical Composition of Single Bacterial Cells by Confocal Raman Microspectroscopy. <i>Analytical Chemistry</i> , 2000, 72, 5529-5534.	3.2	262
3	Direct monitoring of lipid oxidation in edible oils by Fourier transform Raman spectroscopy. <i>Chemistry and Physics of Lipids</i> , 2005, 134, 173-182.	1.5	237
4	Rapid Method for the Discrimination of Red Wine Cultivars Based on Mid-Infrared Spectroscopy of Phenolic Wine Extracts. <i>Journal of Agricultural and Food Chemistry</i> , 2001, 49, 1139-1145.	2.4	180
5	Two-dimensional correlation spectroscopy and multivariate curve resolution for the study of lipid oxidation in edible oils monitored by FTIR and FT-Raman spectroscopy. <i>Analytica Chimica Acta</i> , 2007, 593, 54-67.	2.6	152
6	Toward the Optical Tongue: A Flow-Through Sensing of Tannin-Protein Interactions Based on FTIR Spectroscopy. <i>Journal of the American Chemical Society</i> , 2002, 124, 14741-14747.	6.6	146
7	Raman spectroscopy in chemical bioanalysis. <i>Current Opinion in Chemical Biology</i> , 2004, 8, 534-539.	2.8	146
8	Probing Intermolecular Interactions in Water/Ionic Liquid Mixtures by Far-infrared Spectroscopy. <i>Journal of Physical Chemistry B</i> , 2007, 111, 4446-4452.	1.2	140
9	Quantum cascade lasers (QCLs) in biomedical spectroscopy. <i>Chemical Society Reviews</i> , 2017, 46, 5903-5924.	18.7	133
10	Association of Methanol and Water in Ionic Liquids Elucidated by Infrared Spectroscopy Using Two-Dimensional Correlation and Multivariate Curve Resolution. <i>Journal of Physical Chemistry B</i> , 2006, 110, 10896-10902.	1.2	130
11	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.	1.2	117
12	Direct, reagent-free determination of free fatty acid content in olive oil and olives by Fourier transform Raman spectrometry. <i>Analytica Chimica Acta</i> , 2003, 487, 211-220.	2.6	109
13	On-Line Fermentation Monitoring by Mid-Infrared Spectroscopy. <i>Applied Spectroscopy</i> , 2004, 58, 804-810.	1.2	109
14	Design, simulation and application of a new micromixing device for time resolved infrared spectroscopy of chemical reactions in solution. <i>Lab on A Chip</i> , 2001, 1, 16.	3.1	108
15	Application of a Combination of Hard and Soft Modeling for Equilibrium Systems to the Quantitative Analysis of pH-Modulated Mixture Samples. <i>Analytical Chemistry</i> , 2003, 75, 641-647.	3.2	90
16	High-performance liquid chromatography with real-time Fourier-transform infrared detection for the determination of carbohydrates, alcohols and organic acids in wines. <i>Journal of Chromatography A</i> , 1998, 824, 159-167.	1.8	87
17	Compact quantum cascade laser based quartz-enhanced photoacoustic spectroscopy sensor system for detection of carbon disulfide. <i>Optics Express</i> , 2016, 24, 6559.	1.7	86
18	Determination of Peroxide-Based Explosives Using Liquid Chromatography with On-Line Infrared Detection. <i>Analytical Chemistry</i> , 2006, 78, 8150-8155.	3.2	82

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19	External-Cavity Quantum Cascade Laser Spectroscopy for Mid-IR Transmission Measurements of Proteins in Aqueous Solution. <i>Analytical Chemistry</i> , 2015, 87, 6980-6987.	3.2	80
20	Antibacterial effect of various shapes of silver nanoparticles monitored by SERS. <i>Talanta</i> , 2015, 138, 183-189.	2.9	76
21	Fabrication of miniaturized fluidic devices using SU-8 based lithography and low temperature wafer bonding. <i>Sensors and Actuators A: Physical</i> , 2004, 115, 591-599.	2.0	73
22	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.	1.1	73
23	On-Line Monitoring of Airborne Chemistry in Levitated Nanodroplets: In Situ Synthesis and Application of SERS-Active Ag ₂ Sols for Trace Analysis by FT-Raman Spectroscopy. <i>Analytical Chemistry</i> , 2003, 75, 2166-2171.	3.2	70
24	Stand-off Raman spectroscopy: a powerful technique for qualitative and quantitative analysis of inorganic and organic compounds including explosives. <i>Analytical and Bioanalytical Chemistry</i> , 2011, 400, 2439-2447.	1.9	69
25	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.	3.2	69
26	Determination of oil and water content in olive pomace using near infrared and Raman spectrometry. A comparative study. <i>Analytical and Bioanalytical Chemistry</i> , 2004, 379, 35-41.	1.9	68
27	Application of Mid-Infrared Transmission Spectrometry to the Direct Determination of Glucose in Whole Blood. <i>Applied Spectroscopy</i> , 1998, 52, 820-822.	1.2	66
28	Quality assurance of qualitative analysis in the framework of the European project 'MEQUALAN'. <i>Accreditation and Quality Assurance</i> , 2003, 8, 68-77.	0.4	66
29	Fourier-transform infrared (FTIR) spectroscopy for monitoring and determining the degree of crystallisation of polyhydroxyalkanoates (PHAs). <i>Analytical and Bioanalytical Chemistry</i> , 2007, 388, 1207-1213.	1.9	66
30	Nanoscale chemical imaging of individual chemotherapeutic cytarabine-loaded liposomal nanocarriers. <i>Nano Research</i> , 2019, 12, 197-203.	5.8	65
31	A rapid method for peroxide value determination in edible oils based on flow analysis with Fourier transform infrared spectroscopic detection. <i>Analyst, The</i> , 2001, 126, 242-246.	1.7	64
32	High-performance liquid chromatography with diamond ATR-FTIR detection for the determination of carbohydrates, alcohols and organic acids in red wine. <i>Analytical and Bioanalytical Chemistry</i> , 2003, 376, 92-97.	1.9	62
33	Ionic liquids and CE combination. <i>Electrophoresis</i> , 2008, 29, 94-107.	1.3	62
34	A highly uniform lamination micromixer with wedge shaped inlet channels for time resolved infrared spectroscopy. <i>Microfluidics and Nanofluidics</i> , 2011, 10, 889-897.	1.0	62
35	On-line FT-Raman spectroscopic monitoring of starch gelatinisation and enzyme catalysed starch hydrolysis. <i>Vibrational Spectroscopy</i> , 2000, 22, 181-190.	1.2	60
36	Tunable external cavity quantum cascade laser for the simultaneous determination of glucose and lactate in aqueous phase. <i>Analyst, The</i> , 2010, 135, 3260.	1.7	60

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37	Mid-Infrared Quantum Cascade Lasers for Flow Injection Analysis. <i>Analytical Chemistry</i> , 2000, 72, 1645-1648.	3.2	59
38	External cavity-quantum cascade laser infrared spectroscopy for secondary structure analysis of proteins at low concentrations. <i>Scientific Reports</i> , 2016, 6, 33556.	1.6	57
39	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.	3.2	55
40	Raman spectroscopic study of CuOâ€“V2O5â€“P2O5â€“CaO glass system. <i>Vibrational Spectroscopy</i> , 2008, 48, 259-262.	1.2	53
41	Reagent-free monitoring of multiple clinically relevant parameters in human blood plasma using a mid-infrared quantum cascade laser based sensor system. <i>Analyst</i> , 2013, 138, 4022.	1.7	53
42	Mid-infrared spectroscopy coupled to sequential injection analysis for the on-line monitoring of the acetoneâ€“butanol fermentation process. <i>Analytica Chimica Acta</i> , 2001, 438, 175-186.	2.6	52
43	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, 103-110.	2.6	52
44	Separation of Single-Walled Carbon Nanotubes by Use of Ionic Liquid-Aided Capillary Electrophoresis. <i>Analytical Chemistry</i> , 2008, 80, 2672-2679.	3.2	50
45	Stand-Off Spatial Offset Raman Spectroscopy for the Detection of Concealed Content in Distant Objects. <i>Analytical Chemistry</i> , 2011, 83, 9438-9442.	3.2	48
46	Stand-off Raman spectroscopy. <i>TrAC - Trends in Analytical Chemistry</i> , 2009, 28, 1235-1242.	5.8	46
47	Comparability of Raman Spectroscopic Configurations: A Large Scale Cross-Laboratory Study. <i>Analytical Chemistry</i> , 2020, 92, 15745-15756.	3.2	46
48	Fourier Transform Infrared Detection in Miniaturized Total Analysis Systems for Sucrose Analysis. <i>Analytical Chemistry</i> , 1997, 69, 2877-2881.	3.2	45
49	Time-Resolved FT-IR Spectroscopy of Chemical Reactions in Solution by Fast Diffusion-Based Mixing in a Micromachined Flow Cell. <i>Applied Spectroscopy</i> , 2001, 55, 241-251.	1.2	45
50	On-Line Determination of the Intracellular Poly(γ -hydroxybutyric acid) Content in Transformed <i>Escherichia coli</i> and Glucose during PHB Production Using Stopped-Flow Attenuated Total Reflection FT-IR Spectrometry. <i>Analytical Chemistry</i> , 2004, 76, 6353-6358.	3.2	44
51	Time-resolved Fourier transform infrared spectrometry using a microfabricated continuous flow mixer: application to protein conformation study using the example of ubiquitin. <i>Lab on A Chip</i> , 2003, 3, 82.	3.1	43
52	Determination of Pyrimidine and Purine Bases by Reversed-Phase Capillary Liquid Chromatography with At-Line Surface-Enhanced Raman Spectroscopic Detection Employing a Novel SERS Substrate Based on ZnS/CdSe Silverâ€“Quantum Dots. <i>Analytical Chemistry</i> , 2011, 83, 9391-9398.	3.2	43
53	Discrimination of Olives According to Fruit Quality Using Fourier Transform Raman Spectroscopy and Pattern Recognition Techniques. <i>Journal of Agricultural and Food Chemistry</i> , 2004, 52, 6055-6060.	2.4	42
54	Chemistry and morphology of driedâ€“up pollen suspension residues. <i>Journal of Raman Spectroscopy</i> , 2013, 44, 1654-1658.	1.2	42

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55	A rapid automated method for wine analysis based upon sequential injection (SI)-FTIR spectrometry. Fresenius' Journal of Analytical Chemistry, 1998, 362, 130-136.	1.5	41
56	Hyphenation of Ion Exchange High-Performance Liquid Chromatography with Fourier Transform Infrared Detection for the Determination of Sugars in Nonalcoholic Beverages. Analytical Chemistry, 1997, 69, 4286-4290.	3.2	40
57	Towards functional group-specific detection in high-performance liquid chromatography using mid-infrared quantum cascade lasers. Journal of Chromatography A, 2001, 934, 123-128.	1.8	40
58	On-Line Fourier Transform Infrared Detection in Capillary Electrophoresis. Analytical Chemistry, 2002, 74, 3843-3848.	3.2	40
59	Automated sample preparation and analysis using a sequential-injection capillary electrophoresis (SI-CE) interface. Analyst, The, 2006, 131, 739-744.	1.7	40
60	Tunable mid-infrared lasers in physical chemosensors towards the detection of physiologically relevant parameters in biofluids. Sensors and Actuators B: Chemical, 2012, 170, 189-195.	4.0	40
61	Teaching an old pET new tricks: tuning of inclusion body formation and properties by a mixed feed system in E. coli. Applied Microbiology and Biotechnology, 2018, 102, 667-676.	1.7	40
62	On-Capillary Surface-Enhanced Raman Spectroscopy: Determination of Glutathione in Whole Blood Microsamples. Analytical Chemistry, 2018, 90, 9093-9100.	3.2	40
63	Analytical potential of mid-infrared detection in capillary electrophoresis and liquid chromatography: A review. Analytica Chimica Acta, 2010, 679, 31-42.	2.6	39
64	Background Correction and Multivariate Curve Resolution of Online Liquid Chromatography with Infrared Spectrometric Detection. Analytical Chemistry, 2011, 83, 4855-4862.	3.2	39
65	Quartz-enhanced photoacoustic spectroscopy-based sensor system for sulfur dioxide detection using a CW DFB-QCL. Applied Physics B: Lasers and Optics, 2014, 117, 113-120.	1.1	39
66	Utility of surface enhanced Raman spectroscopy (SERS) for elucidation and simultaneous determination of some penicillins and penicilloic acid using hydroxylamine silver nanoparticles. Talanta, 2015, 144, 710-716.	2.9	39
67	Implementation of a quantum cascade laser-based gas sensor prototype for sub-ppmv H ₂ S measurements in a petrochemical process gas stream. Analytical and Bioanalytical Chemistry, 2017, 409, 729-739.	1.9	39
68	Automated Multivariate Calibration in Sequential Injection-Fourier Transform Infrared Spectroscopy for Sugar Analysis. Analytical Chemistry, 1998, 70, 226-231.	3.2	38
69	Photo-Fenton decomposition of chlorfenvinphos: Determination of reaction pathway. Water Research, 2009, 43, 441-449.	5.3	38
70	Mid-infrared surface transmitting and detecting quantum cascade device for gas-sensing. Scientific Reports, 2016, 6, 21795.	1.6	38
71	Pore Size-Dependent Structure of Confined Water in Mesoporous Silica Films from Water Adsorption/Desorption Using ATR-FTIR Spectroscopy. Langmuir, 2019, 35, 11986-11994.	1.6	38
72	Calix[8]arene Coated CdSe/ZnS Quantum Dots as C ₆₀ -Nanosensor. Analytical Chemistry, 2011, 83, 8093-8100.	3.2	37

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73	Balanced-detection interferometric cavity-assisted photothermal spectroscopy. <i>Optics Express</i> , 2019, 27, 12183.	1.7	37
74	Modulation of the pH in the Determination of Phosphate With Flow Injection and Fourier Transform Infrared Detection. <i>Analyst</i> , 1997, 122, 525-530.	1.7	36
75	Direct Determination of Carbon Dioxide in Aqueous Solution Using Mid-Infrared Quantum Cascade Lasers. <i>Applied Spectroscopy</i> , 2004, 58, 667-670.	1.2	36
76	2f-wavelength modulation Fabry-Perot photothermal interferometry. <i>Optics Express</i> , 2016, 24, 28958.	1.7	36
77	Heterodyne Phase-Sensitive Dispersion Spectroscopy in the Mid-Infrared with a Quantum Cascade Laser. <i>Analytical Chemistry</i> , 2017, 89, 5916-5922.	3.2	36
78	Sequential injection Fourier transform infrared spectroscopy for the simultaneous determination of organic acids and sugars in soft drinks employing automated solid phase extraction. <i>Analytica Chimica Acta</i> , 2000, 422, 63-69.	2.6	35
79	Detection of Albumin Unfolding Preceding Proteolysis Using Fourier Transform Infrared Spectroscopy and Chemometric Data Analysis. <i>Analytical Chemistry</i> , 2006, 78, 3257-3264.	3.2	35
80	A rapid method for the differentiation of yeast cells grown under carbon and nitrogen-limited conditions by means of partial least squares discriminant analysis employing infrared micro-spectroscopic data of entire yeast cells. <i>Talanta</i> , 2012, 99, 566-573.	2.9	35
81	Sensitivity-Enhanced Fourier Transform Mid-Infrared Spectroscopy Using a Supercontinuum Laser Source. <i>Applied Spectroscopy</i> , 2020, 74, 485-493.	1.2	35
82	Parts-per-billion detection of carbon monoxide: A comparison between quartz-enhanced photoacoustic and photothermal spectroscopy. <i>Photoacoustics</i> , 2021, 22, 100244.	4.4	34
83	Quantitation of Mixtures of Diprotic Organic Acids by FT-IR Flow Titrations and Multivariate Curve Resolution. <i>Applied Spectroscopy</i> , 2002, 56, 40-50.	1.2	33
84	Tip-Enhanced Raman Spectroscopy of Atmospherically Relevant Aerosol Nanoparticles. <i>Analytical Chemistry</i> , 2016, 88, 9766-9772.	3.2	33
85	Enhanced mid-infrared multi-bounce ATR spectroscopy for online detection of hydrogen peroxide using a supercontinuum laser. <i>Optics Express</i> , 2018, 26, 12169.	1.7	33
86	Ultra-sensitive refractive index gas sensor with functionalized silicon nitride photonic circuits. <i>APL Photonics</i> , 2020, 5, 081301.	3.0	33
87	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.	5.5	33
88	Ultrasound-Enhanced Attenuated Total Reflection Mid-infrared Spectroscopy In-Line Probe: Acquisition of Cell Spectra in a Bioreactor. <i>Analytical Chemistry</i> , 2015, 87, 2314-2320.	3.2	32
89	Simultaneous determination of α -amylase and amyloglucosidase activities using flow injection analysis with fourier transform infrared spectroscopic detection and partial least-squares data treatment. <i>Analytica Chimica Acta</i> , 1998, 366, 35-43.	2.6	31
90	Differentiation of walnut wood species and steam treatment using ATR-FTIR and partial least squares discriminant analysis (PLS-DA). <i>Analytical and Bioanalytical Chemistry</i> , 2010, 398, 2713-2722.	1.9	31

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91	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, 8241-8250.	1.9	31
92	Beyond Beer's Law: Why the Index of Refraction Depends (Almost) Linearly on Concentration. <i>ChemPhysChem</i> , 2020, 21, 707-711.	1.0	31
93	Assessment of quantum cascade lasers as mid infrared light sources for measurement of aqueous samples. <i>Vibrational Spectroscopy</i> , 2002, 29, 283-289.	1.2	30
94	Bead injection for surface enhanced Raman spectroscopy: automated on-line monitoring of substrate generation and application in quantitative analysis. <i>Analyst</i> , 2002, 127, 1365-1369.	1.7	29
95	On-column silver substrate synthesis and surface-enhanced Raman detection in capillary electrophoresis. <i>Analytical and Bioanalytical Chemistry</i> , 2010, 396, 2341-2348.	1.9	29
96	Fibre optic ATR-IR spectroscopy at cryogenic temperatures: in-line reaction monitoring on organolithium compounds. <i>Chemical Communications</i> , 2012, 48, 2451.	2.2	29
97	Determination of pesticides by capillary chromatography and SERS detection using a novel Silver-Quantum dots "sponge" nanocomposite. <i>Journal of Chromatography A</i> , 2012, 1225, 55-61.	1.8	29
98	EC-QCL mid-IR transmission spectroscopy for monitoring dynamic changes of protein secondary structure in aqueous solution on the example of I ² -aggregation in alcohol-denatured I±-chymotrypsin. <i>Analytical and Bioanalytical Chemistry</i> , 2016, 408, 3933-3941.	1.9	29
99	2D Correlation Spectroscopy and Multivariate Curve Resolution in Analyzing pH-Dependent Evolving Systems Monitored by FT-IR Spectroscopy, A Comparative Study. <i>Analytical Chemistry</i> , 2002, 74, 4944-4954.	3.2	28
100	<i>In Situ</i> IR Spectroscopy of Mesoporous Silica Films for Monitoring Adsorption Processes and Trace Analysis. <i>ACS Applied Nano Materials</i> , 2018, 1, 7083-7091.	2.4	28
101	Time-resolved flow-flash FT-IR difference spectroscopy: the kinetics of CO photodissociation from myoglobin revisited. <i>Analytical and Bioanalytical Chemistry</i> , 2009, 394, 1869-1877.	1.9	27
102	Recent advances in on-line liquid chromatography - infrared spectrometry (LC-IR). <i>TrAC - Trends in Analytical Chemistry</i> , 2010, 29, 544-552.	5.8	27
103	Determination of water soluble trace metals in airborne particulate matter using a dynamic extraction procedure with on-line inductively coupled plasma optical emission spectrometric detection. <i>Analytica Chimica Acta</i> , 2012, 750, 111-119.	2.6	27
104	Halogen-induced organic aerosol (XOA): a study on ultra-fine particle formation and time-resolved chemical characterization. <i>Faraday Discussions</i> , 2013, 165, 135.	1.6	27
105	Double-layered nanoparticle stacks for surface enhanced infrared absorption spectroscopy. <i>Nanoscale</i> , 2014, 6, 127-131.	2.8	27
106	Fourier Transform Raman Spectrometry for the Quantitative Analysis of Oil Content and Humidity in Olives. <i>Applied Spectroscopy</i> , 2003, 57, 233-237.	1.2	26
107	Chemometric Analysis of Multisensor Hyperspectral Images of Precipitated Atmospheric Particulate Matter. <i>Analytical Chemistry</i> , 2015, 87, 9413-9420.	3.2	26
108	Determination of enzyme kinetics and chemometric evaluation of reaction products by FTIR spectroscopy on the example of I ² -fructofuranosidase. <i>Vibrational Spectroscopy</i> , 1998, 16, 127-135.	1.2	25

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109	Simultaneous determination of enzyme activities by FTIR-spectroscopy in an one-step assay. <i>Analytica Chimica Acta</i> , 1999, 391, 19-28.	2.6	25
110	Alternatives for coupling sequential injection systems to commercial capillary electrophoresis mass spectrometry equipment. <i>Journal of Chromatography A</i> , 2006, 1127, 278-285.	1.8	25
111	Ultrasonic Trapping of Microparticles in Suspension and Reaction Monitoring Using Raman Microspectroscopy. <i>Analytical Chemistry</i> , 2007, 79, 7853-7857.	3.2	25
112	Univariate method for background correction in liquid chromatography Fourier transform infrared spectrometry. <i>Journal of Chromatography A</i> , 2008, 1190, 102-109.	1.8	25
113	Developing automated analytical methods for scientific environments using LabVIEW. <i>Talanta</i> , 2010, 80, 1081-1087.	2.9	25
114	Application of MCR-ALS to reveal intermediate conformations in the thermally induced α - β transition of poly-L-lysine monitored by FT-IR spectroscopy. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2017, 185, 304-309.	2.0	25
115	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.	2.0	25
116	On-Line Fourier Transform Infrared Spectrometric Detection in Gradient Capillary Liquid Chromatography Using Nanoliter-Flow Cells. <i>Analytical Chemistry</i> , 2009, 81, 3746-3753.	3.2	24
117	Studying enzymatic bioreactions in a millisecond microfluidic flow mixer. <i>Biomicrofluidics</i> , 2012, 6, 12803-128039.	1.2	24
118	High performance liquid chromatography with mid-infrared detection based on a broadly tunable quantum cascade laser. <i>Analyst</i> , 2014, 139, 2057.	1.7	24
119	Surface enhanced Raman spectroscopic direct determination of low molecular weight biothiols in umbilical cord whole blood. <i>Analyst</i> , 2016, 141, 2165-2174.	1.7	24
120	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.	1.1	24
121	A mid-IR flow-through sensor for direct monitoring of enzyme catalysed reactions. Case study: measurement of carbohydrates in beer. <i>Analyst</i> , 2002, 127, 109-113.	1.7	23
122	High performance liquid chromatography with on-line dual quantum cascade laser detection for the determination of carbohydrates, alcohols and organic acids in wine and grape juice. <i>Applied Physics B: Lasers and Optics</i> , 2010, 99, 833-840.	1.1	23
123	Remote mid-infrared photoacoustic spectroscopy with a quantum cascade laser. <i>Optics Letters</i> , 2015, 40, 3476.	1.7	23
124	Smart textiles in wound care: functionalization of cotton/PET blends with antimicrobial nanocapsules. <i>Journal of Materials Chemistry B</i> , 2019, 7, 6592-6603.	2.9	23
125	Sheath-flow Fourier transform infrared spectrometry for the simultaneous determination of citric, malic and tartaric acids in soft drinks. <i>Analytica Chimica Acta</i> , 2000, 417, 41-50.	2.6	22
126	External cavity-quantum cascade laser (EC-QCL) spectroscopy for protein analysis in bovine milk. <i>Analytica Chimica Acta</i> , 2017, 963, 99-105.	2.6	22

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127	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.	2.0	22
128	Determination of Amyloglucosidase Activity Using Flow Injection Analysis With Fourier Transform Infrared Spectrometric detection. <i>Analyst, The</i> , 1997, 122, 531-534.	1.7	21
129	Containerless reaction monitoring in ionic liquids by means of Raman microspectroscopy. <i>Lab on A Chip</i> , 2007, 7, 126-132.	3.1	21
130	Remote Sensing with Commutable Monolithic Laser and Detector. <i>ACS Photonics</i> , 2016, 3, 1794-1798.	3.2	21
131	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.	2.0	21
132	Determination of sucrose by flow injection analysis with fourier transform infrared detection. <i>Mikrochimica Acta</i> , 1995, 119, 73-79.	2.5	20
133	Nitrogen-Rich Compounds of the Lanthanoids: The 5,5-Azobis[1H-tetrazol-1-ides] of some Yttrium Earths (Tb, Dy, Ho, Er, Tm, Yb, and Lu). <i>Helvetica Chimica Acta</i> , 2009, 92, 1371-1384.	1.0	20
134	IR absorption and reflectometric interference spectroscopy (RIFS) combined to a new sensing approach for gas analytes absorbed into thin polymer films. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2009, 72, 994-999.	2.0	20
135	Sensitive in-surface infrared monitoring coupled to stir membrane extraction for the selective determination of total hydrocarbon index in waters. <i>Analytical and Bioanalytical Chemistry</i> , 2010, 398, 1427-1433.	1.9	20
136	Observation of particles manipulated by ultrasound in close proximity to a cone-shaped infrared spectroscopy probe. <i>Ultrasonics</i> , 2010, 50, 240-246.	2.1	20
137	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.	1.7	20
138	Cantilever-enhanced photoacoustic detection of hydrogen sulfide (H ₂ S) using NIR telecom laser sources near 1.6 μm. <i>Applied Physics B: Lasers and Optics</i> , 2016, 122, 1.	1.1	20
139	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.	1.1	20
140	Mesoporous silica films for sensing volatile organic compounds using attenuated total reflection spectroscopy. <i>Sensors and Actuators B: Chemical</i> , 2020, 302, 127194.	4.0	20
141	A Quantum Cascade Laser-Based Multi-Gas Sensor for Ambient Air Monitoring. <i>Sensors</i> , 2020, 20, 1850.	2.1	20
142	Balanced-detection interferometric cavity-assisted photothermal spectroscopy employing an all-fiber-coupled probe laser configuration. <i>Optics Express</i> , 2021, 29, 7794.	1.7	20
143	Determination of α-amylase activity using Fourier transform infrared spectroscopy. <i>Analytical and Bioanalytical Chemistry</i> , 1996, 356, 504-507.	1.9	19
144	Study of acid-base titration of succinic and malic acid in aqueous solution by two-dimensional FTIR correlation spectroscopy. <i>Vibrational Spectroscopy</i> , 2000, 24, 297-306.	1.2	19

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