

# Thomas Letzel

## List of Publications by Year in descending order

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88  
papers

3,276  
citations

159358

30  
h-index

155451

55  
g-index

98  
all docs

98  
docs citations

98  
times ranked

4401  
citing authors

#	ARTICLE	IF	CITATIONS
1	Non-target screening with high-resolution mass spectrometry: critical review using a collaborative trial on water analysis. <i>Analytical and Bioanalytical Chemistry</i> , 2015, 407, 6237-6255.	1.9	489
2	Interaction of Ozone and Water Vapor with Spark Discharge Soot Aerosol Particles Coated with Benzo[a]pyrene: O <sub>3</sub> and H <sub>2</sub> O Adsorption, Benzo[a]pyrene Degradation, and Atmospheric Implications. <i>Journal of Physical Chemistry A</i> , 2001, 105, 4029-4041.	1.1	300
3	Measuring biomarkers in wastewater as a new source of epidemiological information: Current state and future perspectives. <i>Environment International</i> , 2017, 99, 131-150.	4.8	209
4	Main Interactions and Influences of the Chromatographic Parameters in HILIC Separations. <i>Journal of Chromatographic Science</i> , 2013, 51, 684-693.	0.7	132
5	Function of phytochelatin synthase in catabolism of glutathione-conjugates. <i>Plant Journal</i> , 2007, 49, 740-749.	2.8	120
6	Electrochemical disinfection using boron-doped diamond electrode – The synergetic effects of in situ ozone and free chlorine generation. <i>Chemosphere</i> , 2015, 121, 47-53.	4.2	102
7	On-Line Coupling of High-Performance Liquid Chromatography to a Continuous-Flow Enzyme Assay Based on Electrospray Ionization Mass Spectrometry. <i>Analytical Chemistry</i> , 2004, 76, 3155-3161.	3.2	94
8	RPLC-HILIC and SFC with Mass Spectrometry: Polarity-Extended Organic Molecule Screening in Environmental (Water) Samples. <i>Analytical Chemistry</i> , 2017, 89, 7907-7914.	3.2	87
9	The strength in numbers: comprehensive characterization of house dust using complementary mass spectrometric techniques. <i>Analytical and Bioanalytical Chemistry</i> , 2019, 411, 1957-1977.	1.9	84
10	Enzymes in removal of pharmaceuticals from wastewater: A critical review of challenges, applications and screening methods for their selection. <i>Chemosphere</i> , 2018, 205, 649-661.	4.2	79
11	Study of the retention behavior in zwitterionic hydrophilic interaction chromatography of isomeric hydroxy- and aminobenzoic acids. <i>Journal of Chromatography A</i> , 2012, 1235, 60-67.	1.8	76
12	Serial coupling of reversed-phase and zwitterionic hydrophilic interaction LC-MS for the analysis of polar and nonpolar phenols in wine. <i>Journal of Separation Science</i> , 2013, 36, 1379-1388.	1.3	75
13	Influence of temperature and degree of hydrolysis on the peptide composition of trypsin hydrolysates of $\beta$ -lactoglobulin: Analysis by LC-ESI-TOF/MS. <i>Food Chemistry</i> , 2010, 121, 457-467.	4.2	74
14	Exposure assessment of the pharmaceutical diclofenac based on long-term measurements of the aquatic input. <i>Environment International</i> , 2009, 35, 363-368.	4.8	68
15	LC-MS screening techniques for wastewater analysis and analytical data handling strategies: Sartans and their transformation products as an example. <i>Chemosphere</i> , 2015, 137, 198-206.	4.2	62
16	Influence of denaturation and aggregation of $\beta$ -lactoglobulin on its tryptic hydrolysis and the release of functional peptides. <i>Food Chemistry</i> , 2015, 187, 545-554.	4.2	56
17	Emerging pollutants and plants – Metabolic activation of diclofenac by peroxidases. <i>Chemosphere</i> , 2016, 146, 435-441.	4.2	56
18	Phenyl-Modified Reversed-Phase Liquid Chromatography Coupled to Atmospheric Pressure Chemical Ionization Mass Spectrometry: A Universal Method for the Analysis of Partially Oxidized Aromatic Hydrocarbons. <i>Analytical Chemistry</i> , 2001, 73, 1634-1645.	3.2	55

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19	Characterisation of the tryptophan synthase alpha subunit in maize. <i>BMC Plant Biology</i> , 2008, 8, 44.	1.6	53
20	Persistent, mobile and toxic substances in the environment: a spotlight on current research and regulatory activities. <i>Environmental Sciences Europe</i> , 2020, 32, .	2.6	50
21	Separation and identification of polar degradation products of benzo[a]pyrene with ozone by atmospheric pressure chemical ionization mass spectrometry after optimized column chromatographic clean-up. <i>Journal of Chromatography A</i> , 1999, 855, 501-514.	1.8	49
22	Transglycosylation reaction catalyzed by a class V chitinase from cycad, <i>Cycas revoluta</i> : A study involving site-directed mutagenesis, HPLC, and real-time ESI-MS. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2010, 1804, 668-675.	1.1	44
23	Liquid chromatography/atmospheric pressure ionization mass spectrometry with post-column liquid mixing for the efficient determination of partially oxidized polycyclic aromatic hydrocarbons. <i>Journal of Chromatography A</i> , 2007, 1139, 75-83.	1.8	42
24	Biochemical and molecular characterization of a thermostable chitosanase produced by the strain <i>Paenibacillus</i> sp. 1794 newly isolated from compost. <i>Applied Microbiology and Biotechnology</i> , 2013, 97, 5801-5813.	1.7	41
25	The medical plant butterbur ( <i>Petasites</i> ): Analytical and physiological (re)view. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2013, 75, 220-229.	1.4	40
26	Getting in control of persistent, mobile and toxic (PMT) and very persistent and very mobile (vPvM) substances to protect water resources: strategies from diverse perspectives. <i>Environmental Sciences Europe</i> , 2022, 34, .	2.6	39
27	Phytochelatin synthesis by two vacuolar serine carboxypeptidases in <i>Saccharomyces cerevisiae</i> . <i>FEBS Letters</i> , 2007, 581, 1681-1687.	1.3	35
28	Oligosaccharide hydrolysis by chitosanase enzymes monitored by real-time electrospray ionization mass spectrometry. <i>Journal of Biotechnology</i> , 2008, 134, 253-260.	1.9	35
29	On the inter-instrument and the inter-laboratory transferability of a tandem mass spectral reference library. 3. Focus on ion trap and upfront CID. <i>Journal of Mass Spectrometry</i> , 2012, 47, 263-270.	0.7	33
30	Mass spectrometric real-time monitoring of enzymatic glycosidic hydrolysis, enzymatic inhibition and enzyme complexes. <i>Analytical and Bioanalytical Chemistry</i> , 2006, 386, 689-698.	1.9	31
31	Dissection of glutathione conjugate turnover in yeast. <i>Phytochemistry</i> , 2010, 71, 54-61.	1.4	30
32	Serial coupling of RP and zwitterionic hydrophilic interaction LC-MS: Suspects screening of diclofenac transformation products by oxidation with a boron-doped diamond electrode. <i>Journal of Separation Science</i> , 2013, 36, 3011-3018.	1.3	30
33	Accessory active site residues of <i>Streptomyces</i> sp. N174 chitosanase. <i>FEBS Journal</i> , 2009, 276, 857-869.	2.2	28
34	Inhibition of Cereulide Toxin Synthesis by Emetic <i>Bacillus cereus</i> via Long-Chain Polyphosphates. <i>Applied and Environmental Microbiology</i> , 2011, 77, 1475-1482.	1.4	23
35	Fractionation of dairy based functional peptides using ion-exchange membrane adsorption chromatography and cross-flow electro membrane filtration. <i>International Dairy Journal</i> , 2014, 38, 116-123.	1.5	23
36	Influence of buffer type and concentration on the peptide composition of trypsin hydrolysates of $\beta$ -lactoglobulin. <i>Food Chemistry</i> , 2011, 125, 121-127.	4.2	21

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37	Systematic Development of a Simultaneous Determination of Plastic Particle Identity and Adsorbed Organic Compounds by Thermodesorption-Pyrolysis GC/MS (TD-Pyr-GC/MS). <i>Molecules</i> , 2020, 25, 4985.	1.7	21
38	Real-time mass spectrometry in enzymology. <i>Analytical and Bioanalytical Chemistry</i> , 2008, 390, 257-261.	1.9	20
39	Simultaneous investigation of sesquiterpenes, pyrrolizidine alkaloids and N-oxides in <i>Butterbur</i> ( <i>Petasites hybridus</i> ) with an offline 2D-combination of HPLC-UV and LC-MMI-ToF-MS. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2013, 85, 74-82.	1.4	20
40	Solid support membrane-aerated catalytic biofilm reactor for the continuous synthesis of styrene oxide at gram scale. <i>Biotechnology Journal</i> , 2014, 9, 1339-1349.	1.8	19
41	<i>In vitro</i> and <i>in vivo</i> efficacy of PEGylated diisopropyl fluorophosphatase (DFPase). <i>Drug Testing and Analysis</i> , 2012, 4, 262-270.	1.6	18
42	A highly conserved arginine residue of the chitosanase from <i>Streptomyces</i> sp. N174 is involved both in catalysis and substrate binding. <i>BMC Biochemistry</i> , 2013, 14, 23.	4.4	18
43	Functional proteomics: application of mass spectrometry to the study of enzymology in complex mixtures. <i>Analytical and Bioanalytical Chemistry</i> , 2012, 402, 625-645.	1.9	17
44	Mass spectrometry based <i>in vitro</i> assay investigations on the transformation of pharmaceutical compounds by oxidative enzymes. <i>Chemosphere</i> , 2017, 174, 466-477.	4.2	17
45	Analysis of large oxygenated and nitrated polycyclic aromatic hydrocarbons formed under simulated diesel engine exhaust conditions (by compound fingerprints with SPE/LC-API-MS). <i>Analytical and Bioanalytical Chemistry</i> , 2008, 391, 2599-2608.	1.9	15
46	Monitoring enzymatic degradation of emerging contaminants using a chip-based robotic nano-ESI-MS tool. <i>Analytical and Bioanalytical Chemistry</i> , 2018, 410, 27-32.	1.9	15
47	Organic Contaminants and Interactions with Micro- and Nano-Plastics in the Aqueous Environment: Review of Analytical Methods. <i>Molecules</i> , 2021, 26, 1164.	1.7	15
48	Microchip-ESI-MS determination of dissociation constant of the lysozyme-NAG <sub>3</sub> complex. <i>Electrophoresis</i> , 2010, 31, 2680-2685.	1.3	14
49	Spotlight on mass spectrometric non-target screening analysis: Advanced data processing methods recently communicated for extracting, prioritizing and quantifying features. <i>Analytical Science Advances</i> , 2022, 3, 103-112.	1.2	13
50	26kDa endochitinase from barley seeds: Real-time monitoring of the enzymatic reaction and substrate binding experiments using electrospray ionization mass spectrometry. <i>Journal of Biotechnology</i> , 2009, 143, 274-283.	1.9	12
51	Real-time ESI-MS of Enzymatic Conversion: Impact of Organic Solvents and Multiplexing. <i>Analytical Sciences</i> , 2012, 28, 607-612.	0.8	12
52	Fingerprinting of red wine by headspace solid-phase dynamic extraction of volatile constituents. <i>Analytical and Bioanalytical Chemistry</i> , 2012, 403, 2429-2436.	1.9	11
53	Untargeted Metabolomics Studies on Drug-Incubated <i>Phragmites australis</i> Profiles. <i>Metabolites</i> , 2021, 11, 2.	1.3	10
54	Enzymatic conversion continuously monitored with a robotic nanoESI-MS tool: experimental status. <i>Analytical Methods</i> , 2011, 3, 822.	1.3	9

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55	Chitinase-catalyzed hydrolysis of 4-nitrophenyl penta-N-acetyl- $\beta$ -D-glucopyranoside as determined by real-time ESIMS: The 4-nitrophenyl moiety of the substrate interacts with the enzyme binding site. <i>Carbohydrate Research</i> , 2011, 346, 863-866.	1.1	9
56	Sublethal effects of the beta-blocker sotalol at environmentally relevant concentrations on the New Zealand mudsnail <i>Potamopyrgus antipodarum</i> . <i>Environmental Toxicology and Chemistry</i> , 2014, 33, 2510-2515.	2.2	9
57	Possibilities and Limitations of Computer-Assisted Method Development in HILIC: A Case Study. <i>Chromatographia</i> , 2017, 80, 771-781.	0.7	9
58	The changes in Lemna minor metabolomic profile: A response to diclofenac incubation. <i>Chemosphere</i> , 2022, 287, 132078.	4.2	9
59	Sensitive determination of G-protein-coupled receptor binding ligands by solid phase extraction-electrospray ionization-mass spectrometry. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2006, 40, 744-751.	1.4	8
60	Enzymatic Assays Coupled with Mass Spectrometry with or without Embedded Liquid Chromatography. <i>ChemBioChem</i> , 2015, 16, 1985-1992.	1.3	8
61	Comprehensive MS-based screening and identification of pharmaceutical transformation products formed during enzymatic conversion. <i>Analytical and Bioanalytical Chemistry</i> , 2019, 411, 339-351.	1.9	8
62	Robustness of a method based on the serial coupling of reversed-phase and zwitterionic hydrophilic interaction LC-MS for the analysis of phenols. <i>Journal of Separation Science</i> , 2014, 37, 630-634.	1.3	7
63	HPLC method development for the online-coupling of chromatographic Perilla frutescens extract separation with xanthine oxidase enzymatic assay. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2016, 124, 347-357.	1.4	7
64	Fate of Diclofenac and Its Transformation and Inorganic By-Products in Different Water Matrices during Electrochemical Advanced Oxidation Process Using a Boron-Doped Diamond Electrode. <i>Water (Switzerland)</i> , 2020, 12, 1686.	1.2	7
65	Tryptic hydrolysis of $\beta$ -lactoglobulin: A generic approach to describe the hydrolysis kinetic and release of peptides. <i>International Dairy Journal</i> , 2020, 105, 104666.	1.5	7
66	Optimized hidden target screening for very polar molecules in surface waters including a compound database inquiry. <i>Analytical and Bioanalytical Chemistry</i> , 2020, 412, 4953-4966.	1.9	6
67	(Very) polar organic compounds in the Danube river basin: a non-target screening workflow and prioritization strategy for extracting highly confident features. <i>Analytical Methods</i> , 2021, 13, 2044-2054.	1.3	6
68	Utilization of real-time electrospray ionization mass spectrometry to gain further insight into the course of nucleotide degradation by intestinal alkaline phosphatase. <i>Rapid Communications in Mass Spectrometry</i> , 2014, 28, 869-878.	0.7	5
69	Lemna minor studies under various storage periods using extended-polarity extraction and metabolite non-target screening analysis. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2020, 188, 113362.	1.4	5
70	Untargeted Analysis of Lemna minor Metabolites: Workflow and Prioritization Strategy Comparing Highly Confident Features between Different Mass Spectrometers. <i>Metabolites</i> , 2021, 11, 832.	1.3	5
71	Mass spectrometric real-time monitoring of an enzymatic phosphorylation assay using internal standards and data-handling freeware. <i>Rapid Communications in Mass Spectrometry</i> , 2016, 30, 1019-1030.	0.7	3
72	Gas-phase behavior of noncovalent transmembrane segment complexes. <i>Rapid Communications in Mass Spectrometry</i> , 2008, 22, 4089-4097.	0.7	2

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73	Organization of nucleobase- $\epsilon$ -functionalized $\beta$ -peptides investigated by soft electrospray ionization mass spectrometry. <i>Journal of Mass Spectrometry</i> , 2009, 44, 794-802.	0.7	2
74	Achroma: a software strategy for analysing (a-)typical mass-spectrometric data. <i>Analytical Methods</i> , 2012, 4, 1060.	1.3	2
75	Widening the Analytical Perspective: Polarity Extended Separation for Monitoring of Trace Organic Compounds in Surface Water Matrices. <i>ACS Symposium Series</i> , 2016, , 103-117.	0.5	2
76	Effect of <i>Perilla frutescens</i> Extracts on Porcine Jejunal Epithelial Cells. <i>Phytotherapy Research</i> , 2017, 31, 303-311.	2.8	2
77	Comprehensive assessment of Cytochrome P450 reactions: A multiplex approach using real-time ESI-MS. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2015, 1850, 2573-2581.	1.1	1
78	Holistic and Detailed View on Workflow Strategies Applied in This Book. <i>ACS Symposium Series</i> , 2016, , 175-181.	0.5	1
79	Chemicals of Emerging Concern and Their Transformation Products in the Aqueous Environment. <i>ACS Symposium Series</i> , 2016, , 3-9.	0.5	1
80	New (Practical) Strategies in Target, Suspects, and Non-Target LC-MS(/MS) Screening: Bisoprolol and Transformation Products as an Example. <i>ACS Symposium Series</i> , 2016, , 85-101.	0.5	1
81	A Novel Analytical Approach to Assessing Sorption of Trace Organic Compounds into Micro- and Nanoplastic Particles. <i>Biomolecules</i> , 2022, 12, 953.	1.8	1
82	Review of National & International Management Approaches for Compounds of Emerging Concerns. <i>Proceedings of the Water Environment Federation</i> , 2014, 2014, 1082-1094.	0.0	0
83	Achiral SFC separations: Gold standard for the next generation of nontarget screening. <i>Analytical Science Advances</i> , 2021, 2, 43-46.	1.2	0
84	Das tÄgliche Brot. , 2010, , 1-35.		0
85	Chapter 2. How to Couple and Handle Liquid Chromatography with Mass Spectrometry. <i>RSC Chromatography Monographs</i> , 2011, , 11-25.	0.1	0
86	Chapter 11. Functional Analysis of Proteins, Including LC-MS and Special Freeware. <i>RSC Chromatography Monographs</i> , 2011, , 142-155.	0.1	0
87	SÄubern und Putzen. , 2016, , 151-197.		0
88	Das tÄgliche Brot. , 2016, , 1-36.		0