Markus R Meyer

List of Publications by Citations

172 papers	4,612 citations	37 h-index	58 g-index
187 ext. papers	5,178 ext. citations	4.2 avg, IF	6.16 L-index

#	Paper	IF	Citations
172	Beta-keto amphetamines: studies on the metabolism of the designer drug mephedrone and toxicological detection of mephedrone, butylone, and methylone in urine using gas chromatography-mass spectrometry. *Analytical and Bioanalytical Chemistry*, **2010**, 397, 1225-33	4.4	221
171	Studies on the metabolism of the pyrrolidinophenone designer drug methylenedioxy-pyrovalerone (MDPV) in rat and human urine and human liver microsomes using GC-MS and LC-high-resolution MS and its detectability in urine by GC-MS. *Journal of Mass Spectrometry*, **2010**, 45, 1426-42	2.2	158
170	Measuring biomarkers in wastewater as a new source of epidemiological information: Current state and future perspectives. *Environment International*, **2017**, 99, 131-150	12.9	141
169	Drugs of abuse screening in urine as part of a metabolite-based LC-MSn screening concept. *Analytical and Bioanalytical Chemistry*, **2011**, 400, 3481-9	4.4	116
168	Ion suppression and enhancement effects of co-eluting analytes in multi-analyte approaches: systematic investigation using ultra-high-performance liquid chromatography/mass spectrometry with atmospheric-pressure chemical ionization or electrospray ionization. *Rapid Communications in Mass Spectrometry*, **2010**, 24, 3103-9	2.2	113
167	Automated mass spectral deconvolution and identification system for GC-MS screening for drugs, poisons, and metabolites in urine. *Clinical Chemistry*, **2010**, 56, 575-84	5.5	103
166	Development of the first metabolite-based LC-MS(n) urine drug screening procedure-exemplified for antidepressants. *Analytical and Bioanalytical Chemistry*, **2011**, 400, 79-88	4.4	97
165	Orbitrap technology for comprehensive metabolite-based liquid chromatographic-high resolution-tandem mass spectrometric urine drug screening - exemplified for cardiovascular drugs. *Analytica Chimica Acta*, **2015**, 891, 221-33	6.6	91
164	Metabolism of designer drugs of abuse: an updated review. *Current Drug Metabolism*, **2010**, 11, 468-82	3.5	91
163	Systematic investigation of ion suppression and enhancement effects of fourteen stable-isotope-labeled internal standards by their native analogues using atmospheric-pressure chemical ionization and electrospray ionization and the relevance for multi-analyte liquid chromatographic/mass spectrometric procedures. *Rapid Communications in Mass Spectrometry*, **2010**, 24, 849-57	2.2	88
162	New cathinone-derived designer drugs 3-bromomethcathinone and 3-fluoromethcathinone: studies on their metabolism in rat urine and human liver microsomes using GC-MS and LC-high-resolution MS and their detectability in urine. *Journal of Mass Spectrometry*, **2012**, 47, 253-62	2.2	80
161	The role of human hepatic cytochrome P450 isozymes in the metabolism of racemic 3,4-methylenedioxy-methamphetamine and its enantiomers. *Drug Metabolism and Disposition*, **2008**, 36, 2345-54	4	80
160	Addendum: Hemmer, S., et al. Comparison of Three Untargeted Data Processing Workflows for Evaluating LC-HRMS Metabolomics Data. Metabolites 2020, 10, 378. *Metabolites*, **2020**, 10, 432	5.6	78
159	New designer drug alpha-pyrrolidinovalerophenone (PVP): studies on its metabolism and toxicological detection in rat urine using gas chromatographic/mass spectrometric techniques. *Journal of Mass Spectrometry*, **2009**, 44, 952-64	2.2	75
158	Current applications of high-resolution mass spectrometry in drug metabolism studies. *Analytical and Bioanalytical Chemistry*, **2012**, 403, 1221-31	4.4	72
157	Absorption, distribution, metabolism and excretion pharmacogenomics of drugs of abuse. *Pharmacogenomics*, **2011**, 12, 215-33	2.6	72
156	High-resolution mass spectrometry in toxicology: current status and future perspectives. *Archives of Toxicology*, **2016**, 90, 2161-2172	5.8	66

155	Review: LC coupled to low- and high-resolution mass spectrometry for new psychoactive substance screening in biological matrices - Where do we stand today?. *Analytica Chimica Acta*, **2016**, 927, 13-20	6.6	64
154	Studies on the metabolism and toxicological detection of the new psychoactive designer drug 2-(4-iodo-2,5-dimethoxyphenyl)-N-[(2-methoxyphenyl)methyl]ethanamine (25I-NBOMe) in human and rat urine using GC-MS, LC-MS(n), and LC-HR-MS/MS. *Analytical and Bioanalytical Chemistry*, **2015**	4.4	63
153	2-methiopropamine, a thiophene analogue of methamphetamine: studies on its metabolism and detectability in the rat and human using GC-MS and LC-(HR)-MS techniques. *Analytical and Bioanalytical Chemistry*, **2013**, 405, 3125-35	4.4	63
152	Blood pressure reductions following catheter-based renal denervation are not related to improvements in adherence to antihypertensive drugs measured by urine/plasma toxicological analysis. *Clinical Research in Cardiology*, **2015**, 104, 1097-105	6.1	61
151	Fast and simple procedure for liquid-liquid extraction of 136 analytes from different drug classes for development of a liquid chromatographic-tandem mass spectrometric quantification method in human blood plasma. *Analytical and Bioanalytical Chemistry*, **2010**, 397, 2303-14	4.4	57
150	Benzofuran analogues of amphetamine and methamphetamine: studies on the metabolism and toxicological analysis of 5-APB and 5-MAPB in urine and plasma using GC-MS and LC-(HR)-MS(n) techniques. *Analytical and Bioanalytical Chemistry*, **2015**, 407, 1371-88	4.4	54
149	New psychoactive substances: an overview on recent publications on their toxicodynamics and toxicokinetics. *Archives of Toxicology*, **2016**, 90, 2421-44	5.8	54
148	Chiral drug analysis using mass spectrometric detection relevant to research and practice in clinical and forensic toxicology. *Journal of Chromatography A*, **2012**, 1269, 122-35	4.5	50
147	In vitro approaches to studying the metabolism of new psychoactive compounds. *Drug Testing and Analysis*, **2011**, 3, 483-95	3.5	50
146	Identification of main human urinary metabolites of the designer nitrobenzodiazepines clonazolam, meclonazepam, and nifoxipam by nano-liquid chromatography-high-resolution mass spectrometry for drug testing purposes. *Analytical and Bioanalytical Chemistry*, **2016**, 408, 3571-91	4.4	50
145	Pooled human liver preparations, HepaRG, or HepG2 cell lines for metabolism studies of new psychoactive substances? A study using MDMA, MDBD, butylone, MDPPP, MDPV, MDPB, 5-MAPB, and 5-API as examples. *Journal of Pharmaceutical and Biomedical Analysis*, **2017**, 143, 32-42	3.5	47
144	A validated GC-MS procedure for fast, simple, and cost-effective quantification of glycols and GHB in human plasma and their identification in urine and plasma developed for emergency toxicology. *Analytical and Bioanalytical Chemistry*, **2011**, 400, 411-4	4.4	45
143	Paper Spray Ionization Coupled to High Resolution Tandem Mass Spectrometry for Comprehensive Urine Drug Testing in Comparison to Liquid Chromatography-Coupled Techniques after Urine Precipitation or Dried Urine Spot Workup. *Analytical Chemistry*, **2017**, 89, 11779-11786	7.8	42
142	Liquid chromatography-high resolution-tandem mass spectrometry using Orbitrap technology for comprehensive screening to detect drugs and their metabolites in blood plasma. *Analytica Chimica Acta*, **2017**, 965, 83-95	6.6	41
141	Studies on the metabolism of the Delta9-tetrahydrocannabinol precursor Delta9-tetrahydrocannabinolic acid A (Delta9-THCA-A) in rat using LC-MS/MS, LC-QTOF MS and GC-MS techniques. *Journal of Mass Spectrometry*, **2009**, 44, 1423-33	2.2	41
140	Sympathomimetic toxicity in a case of analytically confirmed recreational use of naphyrone (naphthylpyrovalerone). *Clinical Toxicology*, **2011**, 49, 691-3	2.9	41
139	Ketamine-derived designer drug methoxetamine: metabolism including isoenzyme kinetics and toxicological detectability using GC-MS and LC-(HR-)MSn. *Analytical and Bioanalytical Chemistry*, **2013**, 405, 6307-21	4.4	40
138	New psychoactive substances: Studies on the metabolism of XLR-11, AB-PINACA, FUB-PB-22, 4-methoxy-PVP, 25-I-NBOMe, and meclonazepam using human liver preparations in comparison to primary human hepatocytes, and human urine. *Toxicology Letters*, **2017**, 280, 142-150	4.4	40

137	Studies on the metabolism and toxicological detection of the new designer drug 4R-methyl-alpha-pyrrolidinobutyrophenone (MPBP) in rat urine using gas chromatography-mass spectrometry. *Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences*, **2005**, 824, 81-91	3.2	39
136	Direct analysis of the mushroom poisons α-and β-amanitin in human urine using a novel on-line turbulent flow chromatography mode coupled to liquid chromatography-high resolution-mass spectrometry/mass spectrometry. *Journal of Chromatography A*, **2014**, 1325, 92-8	4.5	38
135	Elucidation of the metabolites of the novel psychoactive substance 4-methyl-N-ethyl-cathinone (4-MEC) in human urine and pooled liver microsomes by GC-MS and LC-HR-MS/MS techniques and of its detectability by GC-MS or LC-MS(n) standard screening approaches. *Drug Testing and Analysis*, **2015**, 7, 368-75	3.5	37
134	Qualitative studies on the metabolism and the toxicological detection of the fentanyl-derived designer drugs 3-methylfentanyl and isofentanyl in rats using liquid chromatography-linear ion trap-mass spectrometry (LC-MS(n)). *Analytical and Bioanalytical Chemistry*, **2012**, 402, 1249-55	4.4	37
133	Monitoring of kratom or Krypton intake in urine using GC-MS in clinical and forensic toxicology. *Analytical and Bioanalytical Chemistry*, **2011**, 400, 127-35	4.4	37
132	Full validation and application of an ultra high performance liquid chromatographic-tandem mass spectrometric procedure for target screening and quantification of 34 antidepressants in human blood plasma as part of a comprehensive multi-analyte approach. *Analytical and Bioanalytical Chemistry*, **2011**, 400, 2093-107	4.4	37
131	Current position of high-resolution MS for drug quantification in clinical & forensic toxicology. *Bioanalysis*, **2014**, 6, 2275-84	2.1	35
130	Enantioselectivity in the methylation of the catecholic phase I metabolites of methylenedioxy designer drugs and their capability to inhibit catechol-O-methyltransferase-catalyzed dopamine 3-methylation. *Chemical Research in Toxicology*, **2009**, 22, 1205-11	4	35
129	Metabolic fate and detectability of the new psychoactive substances 2-(4-bromo-2,5-dimethoxyphenyl)-N-[(2-methoxyphenyl)methyl]ethanamine (25B-NBOMe) and 2-(4-chloro-2,5-dimethoxyphenyl)-N-[(2-methoxyphenyl)methyl]ethanamine (25C-NBOMe) in human and rat urine by GC-MS, LC-MS, and LC-HR-MS/MS approaches. *Journal of Pharmaceutical and Biomedical Analysis*, **2017**, 134, 158-169	3.5	34
128	Metabolism of the new psychoactive substances N,N-diallyltryptamine (DALT) and 5-methoxy-DALT and their detectability in urine by GC-MS, LC-MSn, and LC-HR-MS-MS. *Analytical and Bioanalytical Chemistry*, **2015**, 407, 7831-42	4.4	33
127	What is the contribution of human FMO3 in the N-oxygenation of selected therapeutic drugs and drugs of abuse?. *Toxicology Letters*, **2016**, 258, 55-70	4.4	33
126	Development of an in vitro cytochrome P450 cocktail inhibition assay for assessing the inhibition risk of drugs of abuse. *Toxicology Letters*, **2014**, 230, 28-35	4.4	33
125	Metabolic fate of desomorphine elucidated using rat urine, pooled human liver preparations, and human hepatocyte cultures as well as its detectability using standard urine screening approaches. *Analytical and Bioanalytical Chemistry*, **2016**, 408, 6283-94	4.4	33
124	A qualitative/quantitative approach for the detection of 37 tryptamine-derived designer drugs, 5-β-carbolines, ibogaine, and yohimbine in human urine and plasma using standard urine screening and multi-analyte approaches. *Analytical and Bioanalytical Chemistry*, **2014**, 406, 225-37	4.4	30
123	Towards a universal LC-MS screening procedure - can an LIT LC-MS(n) screening approach and reference library be used on a quadrupole-LIT hybrid instrument?. *Journal of Mass Spectrometry*, **2012**, 47, 66-71	2.2	30
122	Current status of hyphenated mass spectrometry in studies of the metabolism of drugs of abuse, including doping agents. *Analytical and Bioanalytical Chemistry*, **2012**, 402, 195-208	4.4	30
121	Analytical toxicology of emerging drugs of abuse--an update. *Therapeutic Drug Monitoring*, **2012**, 34, 615-21	3.2	30
120	Studies on the metabolism and toxicological detection of glaucine, an isoquinoline alkaloid from Glaucium flavum (Papaveraceae), in rat urine using GC-MS, LC-MS(n) and LC-high-resolution MS(n). *Journal of Mass Spectrometry*, **2013**, 48, 24-41	2.2	29

119	Tools for studying the metabolism of new psychoactive substances for toxicological screening purposes - A comparative study using pooled human liver S9, HepaRG cells, and zebrafish larvae. *Toxicology Letters*, **2019**, 305, 73-80	4.4	27
118	Studies on the microbial biotransformation of the novel psychoactive substance methylenedioxypyrovalerone (MDPV) in wastewater by means of liquid chromatography-high resolution mass spectrometry/mass spectrometry. *Science of the Total Environment*, **2014**, 493, 588-95	10.2	27
117	The role of human UDP-glucuronyltransferases on the formation of the methylenedioxymethamphetamine (ecstasy) phase II metabolites R- and S-3-methoxymethamphetamine 4-O-glucuronides. *Drug Metabolism and Disposition*, **2009**, 37, 2212-20	4	27
116	First report on the pharmacokinetics of tramadol and O-desmethyltramadol in exhaled breath compared to plasma and oral fluid after a single oral dose. *Biochemical Pharmacology*, **2015**, 98, 502-10	6	26
115	In vitro cytochrome P450 inhibition potential of methylenedioxy-derived designer drugs studied with a two-cocktail approach. *Archives of Toxicology*, **2016**, 90, 305-18	5.8	26
114	Studies on the metabolism and the detectability of 4-methyl-amphetamine and its isomers 2-methyl-amphetamine and 3-methyl-amphetamine in rat urine using GC-MS and LC-(high-resolution)-MSn. *Analytical and Bioanalytical Chemistry*, **2014**, 406, 1957-74	4.4	25
113	P-glycoprotein interactions of novel psychoactive substances - stimulation of ATP consumption and transport across Caco-2 monolayers. *Biochemical Pharmacology*, **2015**, 94, 220-6	6	25
112	Stereoselective differences in the cytochrome P450-dependent dealkylation and demethylenation of N-methyl-benzodioxolyl-butanamine (MBDB, Eden) enantiomers. *Biochemical Pharmacology*, **2009**, 77, 1725-34	6	24
111	Untargeted metabolomics by high resolution mass spectrometry coupled to normal and reversed phase liquid chromatography as a tool to study the in vitro biotransformation of new psychoactive substances. *Scientific Reports*, **2019**, 9, 2741	4.9	24
110	LC-high resolution-MS/MS for identification of 69 metabolites of the new psychoactive substance 1-(4-ethylphenyl-)-N-[(2-methoxyphenyl)methyl] propane-2-amine (4-EA-NBOMe) in rat urine and human liver S9 incubates and comparison of its screening power with further MS techniques. *Analytical and Bioanalytical Chemistry*, **2016**, 410, 897-913	4.4	22
109	Urinary excretion kinetics of 3,4-methylenedioxymethamphetamine (MDMA, ecstasy) and its phase I and phase II metabolites in humans following controlled MDMA administration. *Clinical Chemistry*, **2011**, 57, 1748-56	5.5	22
108	In vitro metabolic fate of nine LSD-based new psychoactive substances and their analytical detectability in different urinary screening procedures. *Analytical and Bioanalytical Chemistry*, **2019**, 411, 4751-4763	4.4	22
107	Human urinary metabolic patterns of the designer benzodiazepines flubromazolam and pyrazolam studied by liquid chromatography-high resolution mass spectrometry. *Drug Testing and Analysis*, **2018**, 10, 496-506	3.5	21
106	Development of a quantitative approach in blood plasma for low-dosed hallucinogens and opioids using LC-high resolution mass spectrometry. *Talanta*, **2018**, 176, 635-645	6.2	21
105	Lefetamine-derived designer drugs N-ethyl-1,2-diphenylethylamine (NEDPA) and N-iso-propyl-1,2-diphenylethylamine (NPDPA): metabolism and detectability in rat urine using GC-MS, LC-MSn and LC-HR-MS/MS. *Drug Testing and Analysis*, **2014**, 6, 1038-48	3.5	21
104	Stereoselective urinary MDMA (ecstasy) and metabolites excretion kinetics following controlled MDMA administration to humans. *Biochemical Pharmacology*, **2012**, 83, 131-8	6	21
103	Sulfation of the 3,4-methylenedioxymethamphetamine (MDMA) metabolites 3,4-dihydroxymethamphetamine (DHMA) and 4-hydroxy-3-methoxymethamphetamine (HMMA) and their capability to inhibit human sulfotransferases. *Toxicology Letters*, **2011**, 202, 120-8	4.4	21
102	The role of human hepatic cytochrome P450 isozymes in the metabolism of racemic 3,4-methylenedioxyethylamphetamine and its single enantiomers. *Drug Metabolism and Disposition*, **2009**, 37, 1152-6	4	21

101	Metabolic fate, mass spectral fragmentation, detectability, and differentiation in urine of the benzofuran designer drugs 6-APB and 6-MAPB in comparison to their 5-isomers using GC-MS and LC-(HR)-MS(n) techniques. *Analytical and Bioanalytical Chemistry*, **2015**, 407, 3457-70	4.4	20
100	Studies on the metabolism and detectability of the designer drug Ehaphyrone in rat urine using GC-MS and LC-HR-MS/MS. *Drug Testing and Analysis*, **2013**, 5, 259-65	3.5	20
99	Toxicokinetics of new psychoactive substances: plasma protein binding, metabolic stability, and human phase I metabolism of the synthetic cannabinoid WIN 55,212-2 studied using in vitro tools and LC-HR-MS/MS. *Drug Testing and Analysis*, **2016**, 8, 1039-1048	3.5	20
98	Dried urine spots - A novel sampling technique for comprehensive LC-MS drug screening. *Analytica Chimica Acta*, **2017**, 982, 112-121	6.6	19
97	In vitro monoamine oxidase inhibition potential of alpha-methyltryptamine analog new psychoactive substances for assessing possible toxic risks. *Toxicology Letters*, **2017**, 272, 84-93	4.4	19
96	Contribution of human esterases to the metabolism of selected drugs of abuse. *Toxicology Letters*, **2015**, 232, 159-66	4.4	19
95	Cytochrome P450 inhibition potential of new psychoactive substances of the tryptamine class. *Toxicology Letters*, **2016**, 241, 82-94	4.4	19
94	The in vivo and in vitro metabolism and the detectability in urine of 3R4Rmethylenedioxy-alpha-pyrrolidinobutyrophenone (MDPBP), a new pyrrolidinophenone-type designer drug, studied by GC-MS and LC-MS(n.). *Drug Testing and Analysis*, **2014**, 6, 746-56	3.5	19
93	Dimethocaine, a synthetic cocaine analogue: studies on its in-vivo metabolism and its detectability in urine by means of a rat model and liquid chromatography-linear ion-trap (high-resolution) mass spectrometry. *Analytical and Bioanalytical Chemistry*, **2014**, 406, 1845-54	4.4	19
92	Identification of cytochrome P450 enzymes involved in the metabolism of the new designer drug 4Rmethyl-alpha-pyrrolidinobutyrophenone. *Drug Metabolism and Disposition*, **2008**, 36, 163-8	4	19
91	Automated optimization of XCMS parameters for improved peak picking of liquid chromatography-mass spectrometry data using the coefficient of variation and parameter sweeping for untargeted metabolomics. *Drug Testing and Analysis*, **2019**, 11, 752-761	3.5	19
90	Development, validation, and application of a fast and simple GC-MS method for determination of some therapeutic drugs relevant in emergency toxicology. *Therapeutic Drug Monitoring*, **2011**, 33, 649-53	3.2	18
89	In situ antibiofilm effect of glass-ionomer cement containing dimethylaminododecyl methacrylate. *Dental Materials*, **2015**, 31, 992-1002	5.7	17
88	Different in vitro and in vivo tools for elucidating the human metabolism of alpha-cathinone-derived drugs of abuse. *Drug Testing and Analysis*, **2018**, 10, 1119	3.5	17
87	Metabolic fate of the new synthetic cannabinoid 7RN-5F-ADB in rat, human, and pooled human S9 studied by means of hyphenated high-resolution mass spectrometry. *Drug Testing and Analysis*, **2019**, 11, 305-317	3.5	17
86	LC-HR-MS/MS standard urine screening approach: Pros and cons of automated on-line extraction by turbulent flow chromatography versus dilute-and-shoot and comparison with established urine precipitation. *Journal of Chromatography B: Analytical Technologies in the Biomedical and Life*	3.2	16
85	Methylenedioxy designer drugs: mass spectrometric characterization of their glutathione conjugates by means of liquid chromatography-high-resolution mass spectrometry/mass spectrometry and studies on their glutathionyl transferase inhibition potency. *Analytica Chimica Acta*, **2014**, 822, 37-50	6.6	16
84	A new approach towards biomarker selection in estimation of human exposure to chiral chemicals: a case study of mephedrone. *Scientific Reports*, **2017**, 7, 13009	4.9	16

83	Investigation on the enantioselectivity of the sulfation of the methylenedioxymethamphetamine metabolites 3,4-dihydroxymethamphetamine and 4-hydroxy-3-methoxymethamphetamine using the substrate-depletion approach. *Drug Metabolism and Disposition*, **2011**, 39, 1998-2002	4	16
82	Investigations on the human hepatic cytochrome P450 isozymes involved in the metabolism of 3,4-methylenedioxy-amphetamine (MDA) and benzodioxolyl-butanamine (BDB) enantiomers. *Toxicology Letters*, **2009**, 190, 54-60	4.4	16
81	How to Study the Metabolism of New Psychoactive Substances for the Purpose of Toxicological Screenings-A Follow-Up Study Comparing Pooled Human Liver S9, HepaRG Cells, and Zebrafish Larvae. *Frontiers in Chemistry*, **2020**, 8, 539	5	14
80	Human cytochrome P450 kinetic studies on six N-2-methoxybenzyl (NBOMe)-derived new psychoactive substances using the substrate depletion approach. *Toxicology Letters*, **2018**, 285, 1-8	4.4	14
79	In vitro glucuronidation of designer benzodiazepines by human UDP-glucuronyltransferases. *Drug Testing and Analysis*, **2019**, 11, 45-50	3.5	14
78	Nano liquid chromatography-high-resolution mass spectrometry for the identification of metabolites of the two new psychoactive substances N-(ortho-methoxybenzyl)-3,4-dimethoxyamphetamine and	6.2	14
77	Screening for illicit drugs in pooled human urine and urinated soil samples and studies on the stability of urinary excretion products of cocaine, MDMA, and MDEA in wastewater by hyphenated mass spectrometry techniques. *Drug Testing and Analysis*, **2017**, 9, 106-114	3.5	13
76	Biotransformation and detectability of the new psychoactive substances N,N-diallyltryptamine (DALT) derivatives 5-fluoro-DALT, 7-methyl-DALT, and 5,6-methylenedioxy-DALT in urine using GC-MS, LC-MS, and LC-HR-MS/MS. *Analytical and Bioanalytical Chemistry*, **2017**, 409, 1681-1695	4.4	13
75	Analytical characterization of bioactive N-benzyl-substituted phenethylamines and 5-methoxytryptamines. *Rapid Communications in Mass Spectrometry*, **2015**, 29, 573-84	2.2	13
74	Biotransformation and detectability of the designer drug 2,5-dimethoxy-4-propylphenethylamine (2C-P) studied in urine by GC-MS, LC-MS(n), and LC-high-resolution-MS(n). *Analytical and Bioanalytical Chemistry*, **2015**, 407, 831-43	4.4	13
73	Power of Orbitrap-based LC-high resolution-MS/MS for comprehensive drug testing in urine with or without conjugate cleavage or using dried urine spots after on-spot cleavage in comparison to established LC-MS or GC-MS procedures. *Drug Testing and Analysis*, **2018**, 10, 158-163	3.5	13
72	Distribution of the (synthetic) cannabinoids JWH-210, RCS-4, as well as Δ9-tetrahydrocannabinol following pulmonary administration to pigs. *Archives of Toxicology*, **2019**, 93, 2211-2218	5.8	12
71	Toxicokinetics of lefetamine and derived diphenylethylamine designer drugs-Contribution of human cytochrome P450 isozymes to their main phase I metabolic steps. *Toxicology Letters*, **2015**, 238, 39-44	4.4	12
70	Metabolism of the tryptamine-derived new psychoactive substances 5-MeO-2-Me-DALT, 5-MeO-2-Me-ALCHT, and 5-MeO-2-Me-DIPT and their detectability in urine studied by GC-MS, LC-MS , and LC-HR-MS/MS. *Drug Testing and Analysis*, **2018**, 10, 184-195	3.5	12
69	Toxicokinetics of novel psychoactive substances: characterization of N-acetyltransferase (NAT) isoenzymes involved in the phase II metabolism of 2C designer drugs. *Toxicology Letters*, **2014**, 227, 124-8	4.4	12
68	Studies on the in vivo contribution of human cytochrome P450s to the hepatic metabolism of glaucine, a new drug of abuse. *Biochemical Pharmacology*, **2013**, 86, 1497-506	6	12
67	Michaelis-Menten kinetic analysis of drugs of abuse to estimate their affinity to human P-glycoprotein. *Toxicology Letters*, **2013**, 217, 137-42	4.4	12
66	Low resolution and high resolution MS for studies on the metabolism and toxicological detection of the new psychoactive substance methoxypiperamide (MeOP). *Journal of Mass Spectrometry*, **2015**, 50, 1163-74	2.2	12

65	Comparison of Three Untargeted Data Processing Workflows for Evaluating LC-HRMS Metabolomics Data. *Metabolites*, **2020**, 10,	5.6	12
64	Toxicometabolomics of the new psychoactive substances 4-PBP and 4-PEP studied in HepaRG cell incubates by means of untargeted metabolomics revealed unexpected amino acid adducts. *Archives of Toxicology*, **2020**, 94, 2047-2059	5.8	12
63	Toxicokinetics and Analytical Toxicology of Flualprazolam: Metabolic Fate, Isozyme Mapping, Human Plasma Concentration and Main Urinary Excretion Products. *Journal of Analytical Toxicology*, **2020**, 44, 549-558	2.9	11
62	3-Fluorophenmetrazine, a fluorinated analogue of phenmetrazine: Studies on in vivo metabolism in rat and human, in vitro metabolism in human CYP isoenzymes and microbial biotransformation in Pseudomonas Putida and wastewater using GC and LC coupled to (HR)-MS techniques. *Journal of Pharmaceutical and Biomedical Analysis*, **2016**, 128, 485-495	3.5	11
61	Multiple stage MS in analysis of plasma, serum, urine and in vitro samples relevant to clinical and forensic toxicology. *Bioanalysis*, **2016**, 8, 457-81	2.1	11
60	Case report of accidental poisoning with the tranquilizer xylazine and the anesthetic ketamine confirmed by qualitative and quantitative toxicological analysis using GC-MS and LC-MS(n.). *Drug Testing and Analysis*, **2013**, 5, 785-9	3.5	11
59	Toxicokinetic studies of the four new psychoactive substances 4-chloroethcathinone, N-ethylnorpentylone, N-ethylhexedrone, and 4-fluoro-alpha-pyrrolidinohexiophenone. *Forensic Toxicology*, **2020**, 38, 59-69	2.6	11
58	Toxicokinetics and toxicodynamics of the fentanyl homologs cyclopropanoyl-1-benzyl-4-fluoro-4-anilinopiperidine and furanoyl-1-benzyl-4-anilinopiperidine. *Archives of Toxicology*, **2020**, 94, 2009-2025	5.8	10
57	Inhibition and stimulation of the human breast cancer resistance protein as in vitro predictor of drug-drug interactions of drugs of abuse. *Archives of Toxicology*, **2018**, 92, 2875-2884	5.8	10
56	Dimethocaine, a synthetic cocaine derivative: studies on its in vitro metabolism catalyzed by P450s and NAT2. *Toxicology Letters*, **2014**, 225, 139-46	4.4	10
55	Studies on the metabolism and detectability of the emerging drug of abuse diphenyl-2-pyrrolidinemethanol (D2PM) in rat urine using GC-MS and LC-HR-MS/MS. *Journal of Mass Spectrometry*, **2013**, 48, 243-9	2.2	10
54	Metabolic patterns of JWH-210, RCS-4, and THC in pig urine elucidated using LC-HR-MS/MS: Do they reflect patterns in humans?. *Drug Testing and Analysis*, **2017**, 9, 613-625	3.5	9
53	Studies on the in vitro and in vivo metabolism of the synthetic opioids U-51754, U-47931E, and methoxyacetylfentanyl using hyphenated high-resolution mass spectrometry. *Scientific Reports*, **2019**, 9, 13774	4.9	9
52	Development and application of a LC-HRMS/MS method for analyzing antihypertensive drugs in oral fluid for monitoring drug adherence. *Analytica Chimica Acta*, **2019**, 1070, 69-79	6.6	9
51	Trends in analyzing emerging drugs of abuse--from seized samples to body samples. *Analytical and Bioanalytical Chemistry*, **2014**, 406, 6105-10	4.4	9
50	Interactions of phenethylamine-derived psychoactive substances of the 2C-series with human monoamine oxidases. *Drug Testing and Analysis*, **2019**, 11, 318-324	3.5	9
49	Analytical characterization of N,N-diallyltryptamine (DALT) and 16 ring-substituted derivatives. *Drug Testing and Analysis*, **2017**, 9, 115-126	3.5	8
48	Evaluation of novel organosilane modifications of paper spray mass spectrometry substrates for analyzing polar compounds. *Talanta*, **2019**, 204, 677-684	6.2	8

47	Toxicokinetics of NPS: Update 2017. *Handbook of Experimental Pharmacology*, **2018**, 252, 441-459	3.2	8
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