

Jeremy K Nicholson

List of Publications by Citations

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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.

778
papers

75,653
citations

133
h-index

247
g-index

828
ext. papers

84,265
ext. citations

7.5
avg, IF

7.85
L-index

#	Paper	IF	Citations
778	'Metabonomics': understanding the metabolic responses of living systems to pathophysiological stimuli via multivariate statistical analysis of biological NMR spectroscopic data. <i>Xenobiotica</i> , 1999 , 29, 1181-9	2	2971
777	Host-gut microbiota metabolic interactions. <i>Science</i> , 2012 , 336, 1262-7	33.3	2728
776	Metabolic profiling, metabolomic and metabonomic procedures for NMR spectroscopy of urine, plasma, serum and tissue extracts. <i>Nature Protocols</i> , 2007 , 2, 2692-703	18.8	1536
775	Metabonomics: a platform for studying drug toxicity and gene function. <i>Nature Reviews Drug Discovery</i> , 2002 , 1, 153-61	64.1	1524
774	OPLS discriminant analysis: combining the strengths of PLS-DA and SIMCA classification. <i>Journal of Chemometrics</i> , 2006 , 20, 341-351	1.6	922
773	750 MHz ¹ H and ¹ H- ¹³ C NMR spectroscopy of human blood plasma. <i>Analytical Chemistry</i> , 1995 , 67, 793-811	8.1	890
772	Rapid and noninvasive diagnosis of the presence and severity of coronary heart disease using ¹ H-NMR-based metabonomics. <i>Nature Medicine</i> , 2002 , 8, 1439-44	50.5	855
771	Metabolic profiling reveals a contribution of gut microbiota to fatty liver phenotype in insulin-resistant mice. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006 , 103, 12511-6	11.5	854
770	Human metabolic phenotype diversity and its association with diet and blood pressure. <i>Nature</i> , 2008 , 453, 396-400	50.4	847
769	Opinion: understanding 'global' systems biology: metabonomics and the continuum of metabolism. <i>Nature Reviews Drug Discovery</i> , 2003 , 2, 668-76	64.1	838
768	Symbiotic gut microbes modulate human metabolic phenotypes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008 , 105, 2117-22	11.5	825
767	Gut microbiomes of Malawian twin pairs discordant for kwashiorkor. <i>Science</i> , 2013 , 339, 548-54	33.3	810
766	Statistical total correlation spectroscopy: an exploratory approach for latent biomarker identification from metabolic ¹ H NMR data sets. <i>Analytical Chemistry</i> , 2005 , 77, 1282-9	7.8	729
765	Gut microorganisms, mammalian metabolism and personalized health care. <i>Nature Reviews Microbiology</i> , 2005 , 3, 431-8	22.2	717
764	Pharmaco-metabonomic phenotyping and personalized drug treatment. <i>Nature</i> , 2006 , 440, 1073-7	50.4	689
763	Global metabolic profiling procedures for urine using UPLC-MS. <i>Nature Protocols</i> , 2010 , 5, 1005-18	18.8	676
762	Impact of the gut microbiota on inflammation, obesity, and metabolic disease. <i>Genome Medicine</i> , 2016 , 8, 42	14.4	669

761	Metabolic phenotyping in health and disease. <i>Cell</i> , 2008 , 134, 714-7	56.2	568
760	Pharmacometabonomic identification of a significant host-microbiome metabolic interaction affecting human drug metabolism. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009 , 106, 14728-33	11.5	562
759	Fat, fibre and cancer risk in African Americans and rural Africans. <i>Nature Communications</i> , 2015 , 6, 6342	17.4	534
758	High resolution proton magnetic resonance spectroscopy of biological fluids. <i>Progress in Nuclear Magnetic Resonance Spectroscopy</i> , 1989 , 21, 449-501	10.4	516
757	Evaluation of the orthogonal projection on latent structure model limitations caused by chemical shift variability and improved visualization of biomarker changes in ¹ H NMR spectroscopic metabonomic studies. <i>Analytical Chemistry</i> , 2005 , 77, 517-26	7.8	508
756	Systemic gut microbial modulation of bile acid metabolism in host tissue compartments. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011 , 108 Suppl 1, 4523-30	11.5	495
755	Symbiotic bacterial metabolites regulate gastrointestinal barrier function via the xenobiotic sensor PXR and Toll-like receptor 4. <i>Immunity</i> , 2014 , 41, 296-310	32.3	470
754	Preparing for precision medicine. <i>New England Journal of Medicine</i> , 2012 , 366, 489-91	59.2	467
753	Improved WATERGATE Pulse Sequences for Solvent Suppression in NMR Spectroscopy. <i>Journal of Magnetic Resonance</i> , 1998 , 132, 125-129	3	451
752	Gut microbiome-host interactions in health and disease. <i>Genome Medicine</i> , 2011 , 3, 14	14.4	425
751	Global metabolic profiling of animal and human tissues via UPLC-MS. <i>Nature Protocols</i> , 2013 , 8, 17-32	18.8	405
750	High resolution "ultra performance" liquid chromatography coupled to oa-TOF mass spectrometry as a tool for differential metabolic pathway profiling in functional genomic studies. <i>Journal of Proteome Research</i> , 2005 , 4, 591-8	5.6	398
749	Integrated metabonomic analysis of the multiorgan effects of hydrazine toxicity in the rat. <i>Chemical Research in Toxicology</i> , 2005 , 18, 115-22	4	394
748	UPLC/MS(E); a new approach for generating molecular fragment information for biomarker structure elucidation. <i>Rapid Communications in Mass Spectrometry</i> , 2006 , 20, 1989-94	2.2	393
747	Metabonomics technologies and their applications in physiological monitoring, drug safety assessment and disease diagnosis. <i>Biomarkers</i> , 2004 , 9, 1-31	2.6	393
746	NMR-based metabonomic approaches for evaluating physiological influences on biofluid composition. <i>NMR in Biomedicine</i> , 2005 , 18, 143-62	4.4	387
745	Intraoperative tissue identification using rapid evaporative ionization mass spectrometry. <i>Science Translational Medicine</i> , 2013 , 5, 194ra93	17.5	384
744	Scaling and normalization effects in NMR spectroscopic metabonomic data sets. <i>Analytical Chemistry</i> , 2006 , 78, 2262-7	7.8	383

743	Gut microbiota modulation of chemotherapy efficacy and toxicity. <i>Nature Reviews Gastroenterology and Hepatology</i> , 2017 , 14, 356-365	24.2	382
742	Metabolic profiling of human colorectal cancer using high-resolution magic angle spinning nuclear magnetic resonance (HR-MAS NMR) spectroscopy and gas chromatography mass spectrometry (GC/MS). <i>Journal of Proteome Research</i> , 2009 , 8, 352-61	5.6	377
741	A top-down systems biology view of microbiome-mammalian metabolic interactions in a mouse model. <i>Molecular Systems Biology</i> , 2007 , 3, 112	12.2	374
740	Metabolic phenotyping in clinical and surgical environments. <i>Nature</i> , 2012 , 491, 384-92	50.4	364
739	Understanding the role of gut microbiome-host metabolic signal disruption in health and disease. <i>Trends in Microbiology</i> , 2011 , 19, 349-59	12.4	359
738	Metabonomics: Metabolic processes studied by NMR spectroscopy of biofluids. <i>Concepts in Magnetic Resonance</i> , 2000 , 12, 289-320		354
737	Pattern recognition methods and applications in biomedical magnetic resonance. <i>Progress in Nuclear Magnetic Resonance Spectroscopy</i> , 2001 , 39, 1-40	10.4	344
736	Contemporary issues in toxicology the role of metabonomics in toxicology and its evaluation by the COMET project. <i>Toxicology and Applied Pharmacology</i> , 2003 , 187, 137-46	4.6	342
735	Gut microbiota: a potential new territory for drug targeting. <i>Nature Reviews Drug Discovery</i> , 2008 , 7, 123-9	64.1	337
734	The challenges of modeling mammalian biocomplexity. <i>Nature Biotechnology</i> , 2004 , 22, 1268-74	44.5	321
733	Metabolic surgery profoundly influences gut microbial-host metabolic cross-talk. <i>Gut</i> , 2011 , 60, 1214-23	19.2	319
732	Gut microbiota composition and activity in relation to host metabolic phenotype and disease risk. <i>Cell Metabolism</i> , 2012 , 16, 559-64	24.6	316
731	Susceptibility of human metabolic phenotypes to dietary modulation. <i>Journal of Proteome Research</i> , 2006 , 5, 2780-8	5.6	311
730	High-resolution magic-angle-spinning NMR spectroscopy for metabolic profiling of intact tissues. <i>Nature Protocols</i> , 2010 , 5, 1019-32	18.8	309
729	Probiotic modulation of symbiotic gut microbial-host metabolic interactions in a humanized microbiome mouse model. <i>Molecular Systems Biology</i> , 2008 , 4, 157	12.2	304
728	Statistical heterospectroscopy, an approach to the integrated analysis of NMR and UPLC-MS data sets: application in metabonomic toxicology studies. <i>Analytical Chemistry</i> , 2006 , 78, 363-71	7.8	304
727	Assessment of analytical reproducibility of ¹ H NMR spectroscopy based metabonomics for large-scale epidemiological research: the INTERMAP Study. <i>Analytical Chemistry</i> , 2006 , 78, 2199-208	7.8	304
726	Precision high-throughput proton NMR spectroscopy of human urine, serum, and plasma for large-scale metabolic phenotyping. <i>Analytical Chemistry</i> , 2014 , 86, 9887-94	7.8	291

725	Gut microbiome interactions with drug metabolism, efficacy, and toxicity. <i>Translational Research</i> , 2017 , 179, 204-222	11	281
724	Colonization-induced host-gut microbial metabolic interaction. <i>MBio</i> , 2011 , 2, e00271-10	7.8	281
723	Molecular phenomics and metagenomics of hepatic steatosis in non-diabetic obese women. <i>Nature Medicine</i> , 2018 , 24, 1070-1080	50.5	276
722	Quantifying Diet-Induced Metabolic Changes of the Human Gut Microbiome. <i>Cell Metabolism</i> , 2015 , 22, 320-31	24.6	275
721	NMR Spectroscopy of Biofluids. <i>Annual Reports on NMR Spectroscopy</i> , 1999 , 38, 1-88	1.7	275
720	Use of high-resolution proton nuclear magnetic resonance spectroscopy for rapid multi-component analysis of urine.. <i>Clinical Chemistry</i> , 1984 , 30, 426-432	5.5	268
719	NMR-based metabolic profiling and metabonomic approaches to problems in molecular toxicology. <i>Chemical Research in Toxicology</i> , 2008 , 21, 9-27	4	267
718	Systemic multicompartmental effects of the gut microbiome on mouse metabolic phenotypes. <i>Molecular Systems Biology</i> , 2008 , 4, 219	12.2	261
717	Chemometric models for toxicity classification based on NMR spectra of biofluids. <i>Chemical Research in Toxicology</i> , 2000 , 13, 471-8	4	261
716	Nuclear magnetic resonance spectroscopic and principal components analysis investigations into biochemical effects of three model hepatotoxins. <i>Chemical Research in Toxicology</i> , 1998 , 11, 260-72	4	261
715	An NMR-based metabonomic approach to investigate the biochemical consequences of genetic strain differences: application to the C57BL10J and Alpk:ApfCD mouse. <i>FEBS Letters</i> , 2000 , 484, 169-74	3.8	259
714	Recursive segment-wise peak alignment of biological (1)h NMR spectra for improved metabolic biomarker recovery. <i>Analytical Chemistry</i> , 2009 , 81, 56-66	7.8	258
713	Proton-nuclear-magnetic-resonance studies of serum, plasma and urine from fasting normal and diabetic subjects. <i>Biochemical Journal</i> , 1984 , 217, 365-75	3.8	258
712	The Consortium for Metabonomic Toxicology (COMET): aims, activities and achievements. <i>Pharmacogenomics</i> , 2005 , 6, 691-9	2.6	255
711	Spectroscopic and statistical techniques for information recovery in metabonomics and metabolomics. <i>Annual Review of Analytical Chemistry</i> , 2008 , 1, 45-69	12.5	241
710	Analytical reproducibility in (1)H NMR-based metabonomic urinalysis. <i>Chemical Research in Toxicology</i> , 2002 , 15, 1380-6	4	239
709	Urinary metabolic phenotyping differentiates children with autism from their unaffected siblings and age-matched controls. <i>Journal of Proteome Research</i> , 2010 , 9, 2996-3004	5.6	237
708	Metabonomics techniques and applications to pharmaceutical research & development. <i>Pharmaceutical Research</i> , 2006 , 23, 1075-88	4.5	236

707	Metabonomic investigations in mice infected with <i>Schistosoma mansoni</i> : an approach for biomarker identification. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004 , 101, 12676-81	11.5	235
706	Summary recommendations for standardization and reporting of metabolic analyses. <i>Nature Biotechnology</i> , 2005 , 23, 833-8	44.5	233
705	The footprints of gut microbial-mammalian co-metabolism. <i>Journal of Proteome Research</i> , 2011 , 10, 5512-22	5.82	229
704	Metabonomics in pharmaceutical R&D. <i>FEBS Journal</i> , 2007 , 274, 1140-51	5.7	229
703	A metabonomic strategy for the detection of the metabolic effects of chamomile (<i>Matricaria recutita</i> L.) ingestion. <i>Journal of Agricultural and Food Chemistry</i> , 2005 , 53, 191-6	5.7	229
702	An integrated metabonomic investigation of acetaminophen toxicity in the mouse using NMR spectroscopy. <i>Chemical Research in Toxicology</i> , 2003 , 16, 295-303	4	224
701	Metabolic profiling of CSF: evidence that early intervention may impact on disease progression and outcome in schizophrenia. <i>PLoS Medicine</i> , 2006 , 3, e327	11.6	213
700	Global urinary metabolic profiling procedures using gas chromatography-mass spectrometry. <i>Nature Protocols</i> , 2011 , 6, 1483-99	18.8	205
699	Optimized preprocessing of ultra-performance liquid chromatography/mass spectrometry urinary metabolic profiles for improved information recovery. <i>Analytical Chemistry</i> , 2011 , 83, 5864-72	7.8	201
698	Metabolic profiling strategy for discovery of nutritional biomarkers: proline betaine as a marker of citrus consumption. <i>American Journal of Clinical Nutrition</i> , 2010 , 92, 436-43	7	201
697	Impact of analytical bias in metabonomic studies of human blood serum and plasma. <i>Analytical Chemistry</i> , 2006 , 78, 4307-18	7.8	200
696	Automatic data reduction and pattern recognition methods for analysis of ¹ H nuclear magnetic resonance spectra of human urine from normal and pathological states. <i>Analytical Biochemistry</i> , 1994 , 220, 284-96	3.1	200
695	High resolution ¹ H n.m.r. studies of vertebrate blood and plasma. <i>Biochemical Journal</i> , 1983 , 211, 605-15	3.8	199
694	Dietary Modulation of Gut Microbiota Contributes to Alleviation of Both Genetic and Simple Obesity in Children. <i>EBioMedicine</i> , 2015 , 2, 968-84	8.8	198
693	Top-down systems biology modeling of host metabolite-microbiome associations in obese rodents. <i>Journal of Proteome Research</i> , 2009 , 8, 2361-75	5.6	197
692	Hippurate: the natural history of a mammalian-microbial cometabolite. <i>Journal of Proteome Research</i> , 2013 , 12, 1527-46	5.6	196
691	NMR spectroscopic-based metabonomic studies of urinary metabolite variation in acclimatizing germ-free rats. <i>Chemical Research in Toxicology</i> , 2003 , 16, 1395-404	4	195
690	Cervical intraepithelial neoplasia disease progression is associated with increased vaginal microbiome diversity. <i>Scientific Reports</i> , 2015 , 5, 16865	4.9	191

689	NMR and pattern recognition studies on the time-related metabolic effects of alpha-naphthylisothiocyanate on liver, urine, and plasma in the rat: an integrative metabonomic approach. <i>Chemical Research in Toxicology</i> , 2001 , 14, 1401-12	4	188
688	Use of relaxation-edited one-dimensional and two dimensional nuclear magnetic resonance spectroscopy to improve detection of small metabolites in blood plasma. <i>Analytical Biochemistry</i> , 2004 , 325, 260-72	3.1	186
687	Metabonomic and microbiological analysis of the dynamic effect of vancomycin-induced gut microbiota modification in the mouse. <i>Journal of Proteome Research</i> , 2008 , 7, 3718-28	5.6	185
686	Application of biofluid 1H nuclear magnetic resonance-based metabonomic techniques for the analysis of the biochemical effects of dietary isoflavones on human plasma profile. <i>Analytical Biochemistry</i> , 2003 , 323, 197-204	3.1	181
685	The interaction between vaginal microbiota, cervical length, and vaginal progesterone treatment for preterm birth risk. <i>Microbiome</i> , 2017 , 5, 6	16.6	180
684	Development of a model for classification of toxin-induced lesions using 1H NMR spectroscopy of urine combined with pattern recognition. <i>NMR in Biomedicine</i> , 1998 , 11, 235-44	4.4	180
683	Different levels of polybrominated diphenyl ethers (PBDEs) and chlorinated compounds in breast milk from two U.K. Regions. <i>Environmental Health Perspectives</i> , 2004 , 112, 1085-91	8.4	180
682	Cryogenic probe 13C NMR spectroscopy of urine for metabonomic studies. <i>Analytical Chemistry</i> , 2002 , 74, 4588-93	7.8	174
681	Microbiome-host systems interactions: protective effects of propionate upon the blood-brain barrier. <i>Microbiome</i> , 2018 , 6, 55	16.6	170
680	Therapeutic modulation of microbiota-host metabolic interactions. <i>Science Translational Medicine</i> , 2012 , 4, 137rv6	17.5	170
679	Metabonomic investigations into hydrazine toxicity in the rat. <i>Chemical Research in Toxicology</i> , 2001 , 14, 975-87	4	170
678	Investigations into biochemical changes due to diurnal variation and estrus cycle in female rats using high-resolution (1)H NMR spectroscopy of urine and pattern recognition. <i>Analytical Biochemistry</i> , 2001 , 295, 194-202	3.1	169
677	So what's the deal with metabonomics?. <i>Analytical Chemistry</i> , 2003 , 75, 384A-391A	7.8	165
676	Metabonomic characterization of genetic variations in toxicological and metabolic responses using probabilistic neural networks. <i>Chemical Research in Toxicology</i> , 2001 , 14, 182-91	4	165
675	Physiological variation in metabolic phenotyping and functional genomic studies: use of orthogonal signal correction and PLS-DA. <i>FEBS Letters</i> , 2002 , 530, 191-6	3.8	157
674	High-resolution magic angle spinning 1H NMR spectroscopic studies on intact rat renal cortex and medulla. <i>Magnetic Resonance in Medicine</i> , 1999 , 41, 1108-18	4.4	157
673	Species variation in the fecal metabolome gives insight into differential gastrointestinal function. <i>Journal of Proteome Research</i> , 2008 , 7, 352-60	5.6	156
672	Application of chemometrics to 1H NMR spectroscopic data to investigate a relationship between human serum metabolic profiles and hypertension. <i>Analyst, The</i> , 2003 , 128, 32-6	5	156

671	Directly coupled HPLC-NMR and HPLC-NMR-MS in pharmaceutical research and development. <i>Biomedical Applications</i> , 2000 , 748, 233-58		154
670	Objective set of criteria for optimization of sample preparation procedures for ultra-high throughput untargeted blood plasma lipid profiling by ultra performance liquid chromatography-mass spectrometry. <i>Analytical Chemistry</i> , 2014 , 86, 5766-74	7.8	153
669	Application of chemometrics to the 1H NMR spectra of apple juices: discrimination between apple varieties. <i>Food Chemistry</i> , 1998 , 61, 207-213	8.5	153
668	High-resolution (1)H and (1)H-(13)C magic angle spinning NMR spectroscopy of rat liver. <i>Magnetic Resonance in Medicine</i> , 2000 , 44, 201-7	4.4	153
667	Integrated application of transcriptomics and metabonomics yields new insight into the toxicity due to paracetamol in the mouse. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2004 , 35, 93-105	3.5	151
666	Assignment of resonances for 'acute-phase' glycoproteins in high resolution proton NMR spectra of human blood plasma. <i>FEBS Letters</i> , 1987 , 215, 311-5	3.8	150
665	Investigations into the biochemical effects of region-specific nephrotoxins. <i>Molecular Pharmacology</i> , 1989 , 35, 242-50	4.3	150
664	Improved analysis of multivariate data by variable stability scaling: application to NMR-based metabolic profiling. <i>Analytica Chimica Acta</i> , 2003 , 490, 265-276	6.6	149
663	Metabonomics and its role in drug development and disease diagnosis. <i>Expert Review of Molecular Diagnostics</i> , 2004 , 4, 189-99	3.8	149
662	Combined HPLC, NMR spectroscopy, and ion-trap mass spectrometry with application to the detection and characterization of xenobiotic and endogenous metabolites in human urine. <i>Analytical Chemistry</i> , 1996 , 68, 4431-5	7.8	149
661	Novel application of reversed-phase UPLC-oeTOF-MS for lipid analysis in complex biological mixtures: a new tool for lipidomics. <i>Journal of Proteome Research</i> , 2007 , 6, 552-8	5.6	147
660	Prediction and classification of drug toxicity using probabilistic modeling of temporal metabolic data: the consortium on metabonomic toxicology screening approach. <i>Journal of Proteome Research</i> , 2007 , 6, 4407-22	5.6	146
659	Human metabolic phenotypes link directly to specific dietary preferences in healthy individuals. <i>Journal of Proteome Research</i> , 2007 , 6, 4469-77	5.6	145
658	Optimization and evaluation of metabolite extraction protocols for untargeted metabolic profiling of liver samples by UPLC-MS. <i>Analytical Chemistry</i> , 2010 , 82, 7779-86	7.8	144
657	Objective assessment of dietary patterns by use of metabolic phenotyping: a randomised, controlled, crossover trial. <i>Lancet Diabetes and Endocrinology</i> , 2017 , 5, 184-195	18.1	143
656	750 MHz 1H NMR spectroscopy characterisation of the complex metabolic pattern of urine from patients with inborn errors of metabolism: 2-hydroxyglutaric aciduria and maple syrup urine disease. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 1997 , 15, 1647-59	3.5	143
655	Urinary metabolic signatures of human adiposity. <i>Science Translational Medicine</i> , 2015 , 7, 285ra62	17.5	141
654	Panorganismal gut microbiome-host metabolic crosstalk. <i>Journal of Proteome Research</i> , 2009 , 8, 2090-1056		137

653	Use of metabonomics to identify impaired fatty acid metabolism as the mechanism of a drug-induced toxicity. <i>Chemical Research in Toxicology</i> , 2004 , 17, 165-73	4	137
652	Statistically integrated metabonomic-proteomic studies on a human prostate cancer xenograft model in mice. <i>Journal of Proteome Research</i> , 2006 , 5, 2642-55	5.6	136
651	Biofluid 1H NMR-based metabonomic techniques in nutrition research - metabolic effects of dietary isoflavones in humans. <i>Journal of Nutritional Biochemistry</i> , 2005 , 16, 236-44	6.3	136
650	Spectral editing and pattern recognition methods applied to high-resolution magic-angle spinning 1H nuclear magnetic resonance spectroscopy of liver tissues. <i>Analytical Biochemistry</i> , 2003 , 323, 26-32	3.1	134
649	NMR and pattern recognition studies on liver extracts and intact livers from rats treated with alpha-naphthylisothiocyanate. <i>Biochemical Pharmacology</i> , 2002 , 64, 67-77	6	133
648	Direct quantitative trait locus mapping of mammalian metabolic phenotypes in diabetic and normoglycemic rat models. <i>Nature Genetics</i> , 2007 , 39, 666-72	36.3	132
647	Systems toxicology: integrated genomic, proteomic and metabonomic analysis of methapyrilene induced hepatotoxicity in the rat. <i>Journal of Proteome Research</i> , 2006 , 5, 1586-601	5.6	132
646	Geometric trajectory analysis of metabolic responses to toxicity can define treatment specific profiles. <i>Chemical Research in Toxicology</i> , 2004 , 17, 579-87	4	131
645	High-resolution diffusion and relaxation edited one- and two-dimensional 1H NMR spectroscopy of biological fluids. <i>Analytical Chemistry</i> , 1996 , 68, 3370-6	7.8	131
644	Metabonomic deconvolution of embedded toxicity: application to thioacetamide hepato- and nephrotoxicity. <i>Chemical Research in Toxicology</i> , 2005 , 18, 639-54	4	129
643	Untargeted UPLC-MS profiling pipeline to expand tissue metabolome coverage: application to cardiovascular disease. <i>Analytical Chemistry</i> , 2015 , 87, 4184-93	7.8	128
642	HILIC-UPLC-MS for exploratory urinary metabolic profiling in toxicological studies. <i>Analytical Chemistry</i> , 2011 , 83, 382-90	7.8	128
641	Urinary excretion of acetaminophen and its metabolites as studied by proton NMR spectroscopy.. <i>Clinical Chemistry</i> , 1984 , 30, 1631-1636	5.5	128
640	Metabonomics in ulcerative colitis: diagnostics, biomarker identification, and insight into the pathophysiology. <i>Journal of Proteome Research</i> , 2010 , 9, 954-62	5.6	127
639	The identification of novel biomarkers of renal toxicity using automatic data reduction techniques and PCA of proton NMR spectra of urine. <i>Chemometrics and Intelligent Laboratory Systems</i> , 1998 , 44, 245-255	3.8	127
638	Metabonomic investigations of aging and caloric restriction in a life-long dog study. <i>Journal of Proteome Research</i> , 2007 , 6, 1846-54	5.6	127
637	NMR-based metabonomic toxicity classification: hierarchical cluster analysis and k-nearest-neighbour approaches. <i>Analytica Chimica Acta</i> , 2003 , 490, 3-15	6.6	127
636	Metabolic profiling of genetic disorders: a multitissue (1)H nuclear magnetic resonance spectroscopic and pattern recognition study into dystrophic tissue. <i>Analytical Biochemistry</i> , 2001 , 293, 16-21	3.1	127

635	The comparison of plasma deproteinization methods for the detection of low-molecular-weight metabolites by (1)H nuclear magnetic resonance spectroscopy. <i>Analytical Biochemistry</i> , 2002 , 304, 220-30	3.1	126
634	Direct coupling of chromatographic separations to NMR spectroscopy. <i>Progress in Nuclear Magnetic Resonance Spectroscopy</i> , 1996 , 29, 1-49	10.4	126
633	The gut microbiota influences skeletal muscle mass and function in mice. <i>Science Translational Medicine</i> , 2019 , 11,	17.5	124
632	Metabolic phenotyping and systems biology approaches to understanding metabolic syndrome and fatty liver disease. <i>Gastroenterology</i> , 2014 , 146, 46-62	13.3	124
631	Nuclear magnetic resonance spectroscopy and pattern recognition analysis of the biochemical processes associated with the progression of and recovery from nephrotoxic lesions in the rat induced by mercury(II) chloride and 2-bromoethanamine. <i>Molecular Pharmacology</i> , 1992 , 42, 922-30	4.3	123
630	Vaginal dysbiosis increases risk of preterm fetal membrane rupture, neonatal sepsis and is exacerbated by erythromycin. <i>BMC Medicine</i> , 2018 , 16, 9	11.4	122
629	Biochemical classification of kidney carcinoma biopsy samples using magic-angle-spinning 1H nuclear magnetic resonance spectroscopy. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 1998 , 17, 125-32	3.5	122
628	Application of pattern recognition methods to the analysis and classification of toxicological data derived from proton nuclear magnetic resonance spectroscopy of urine. <i>Molecular Pharmacology</i> , 1991 , 39, 629-42	4.3	121
627	Bile acid profiling and quantification in biofluids using ultra-performance liquid chromatography tandem mass spectrometry. <i>Analytical Chemistry</i> , 2015 , 87, 9662-70	7.8	120
626	Human metabolic profiles are stably controlled by genetic and environmental variation. <i>Molecular Systems Biology</i> , 2011 , 7, 525	12.2	119
625	Pharmacometabonomics as an effector for personalized medicine. <i>Pharmacogenomics</i> , 2011 , 12, 103-11	2.6	118
624	Environmental metabonomics: applying combination biomarker analysis in earthworms at a metal contaminated site. <i>Ecotoxicology</i> , 2004 , 13, 797-806	2.9	117
623	High-performance liquid chromatography coupled to high-field proton nuclear magnetic resonance spectroscopy: application to the urinary metabolites of ibuprofen. <i>Analytical Chemistry</i> , 1993 , 65, 327-30	7.8	117
622	Proton NMR spectra of urine as indicators of renal damage. Mercury-induced nephrotoxicity in rats. <i>Molecular Pharmacology</i> , 1985 , 27, 644-51	4.3	117
621	Dietary modulation of gut functional ecology studied by fecal metabonomics. <i>Journal of Proteome Research</i> , 2010 , 9, 5284-95	5.6	116
620	Spectral profiles of cultured neuronal and glial cells derived from HRMAS (1)H NMR spectroscopy. <i>NMR in Biomedicine</i> , 2002 , 15, 375-84	4.4	116
619	High-resolution magic angle spinning (1)H NMR spectroscopy of intact liver and kidney: optimization of sample preparation procedures and biochemical stability of tissue during spectral acquisition. <i>Analytical Biochemistry</i> , 2000 , 282, 16-23	3.1	115
618	Analytical technologies for metabonomics and metabolomics, and multi-omic information recovery. <i>TrAC - Trends in Analytical Chemistry</i> , 2008 , 27, 194-204	14.6	114

617	Opening up the "Black Box": metabolic phenotyping and metabolome-wide association studies in epidemiology. <i>Journal of Clinical Epidemiology</i> , 2010 , 63, 970-9	5.7	113
616	Cadmium and mercury nephrotoxicity. <i>Nature</i> , 1983 , 304, 633-5	50.4	111
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