Elaine Holmes

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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.

510	54,341 citations	114	219
papers		h-index	g-index
561	61,404	7.4	7.43
ext. papers	ext. citations	avg, IF	L-index

#	Paper	IF	Citations
510	'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
509	Host-gut microbiota metabolic interactions. <i>Science</i> , 2012 , 336, 1262-7	33.3	2728
508	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
507	Metabonomics: a platform for studying drug toxicity and gene function. <i>Nature Reviews Drug Discovery</i> , 2002 , 1, 153-61	64.1	1524
506	Chemometrics in metabonomics. <i>Journal of Proteome Research</i> , 2007 , 6, 469-79	5.6	1009
505	OPLS discriminant analysis: combining the strengths of PLS-DA and SIMCA classification. <i>Journal of Chemometrics</i> , 2006 , 20, 341-351	1.6	922
504	Rapid and noninvasive diagnosis of the presence and severity of coronary heart disease using 1H-NMR-based metabonomics. <i>Nature Medicine</i> , 2002 , 8, 1439-44	50.5	855
503	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
502	Human metabolic phenotype diversity and its association with diet and blood pressure. <i>Nature</i> , 2008 , 453, 396-400	50.4	847
501	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
500	Gut microbiomes of Malawian twin pairs discordant for kwashiorkor. <i>Science</i> , 2013 , 339, 548-54	33.3	810
499	Statistical total correlation spectroscopy: an exploratory approach for latent biomarker identification from metabolic 1H NMR data sets. <i>Analytical Chemistry</i> , 2005 , 77, 1282-9	7.8	729
498	Gut microorganisms, mammalian metabolism and personalized health care. <i>Nature Reviews Microbiology</i> , 2005 , 3, 431-8	22.2	717
497	Global metabolic profiling procedures for urine using UPLC-MS. <i>Nature Protocols</i> , 2010 , 5, 1005-18	18.8	676
496	Metabolic phenotyping in health and disease. <i>Cell</i> , 2008 , 134, 714-7	56.2	568
495	Evaluation of the orthogonal projection on latent structure model limitations caused by chemical shift variability and improved visualization of biomarker changes in 1H NMR spectroscopic metabonomic studies. <i>Analytical Chemistry</i> , 2005 , 77, 517-26	7.8	508
494	Systemic gut microbial modulation of bile acid metabolism in host tissue compartments. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108 Suppl 1, 4523	- 30 5	495

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493	Rapid and noninvasive metabonomic characterization of inflammatory bowel disease. <i>Journal of Proteome Research</i> , 2007 , 6, 546-51	5.6	456
492	Global metabolic profiling of animal and human tissues via UPLC-MS. <i>Nature Protocols</i> , 2013 , 8, 17-32	18.8	405
491	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
490	Metabonomics technologies and their applications in physiological monitoring, drug safety assessment and disease diagnosis. <i>Biomarkers</i> , 2004 , 9, 1-31	2.6	393
489	NMR-based metabonomic approaches for evaluating physiological influences on biofluid composition. <i>NMR in Biomedicine</i> , 2005 , 18, 143-62	4.4	387
488	Scaling and normalization effects in NMR spectroscopic metabonomic data sets. <i>Analytical Chemistry</i> , 2006 , 78, 2262-7	7.8	383
487	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
486	Metabolic phenotyping in clinical and surgical environments. <i>Nature</i> , 2012 , 491, 384-92	50.4	364
485	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
484	Metabonomics: Metabolic processes studied by NMR spectroscopy of biofluids. <i>Concepts in Magnetic Resonance</i> , 2000 , 12, 289-320		354
483	Pattern recognition methods and applications in biomedical magnetic resonance. <i>Progress in Nuclear Magnetic Resonance Spectroscopy</i> , 2001 , 39, 1-40	10.4	344
482	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
481	The challenges of modeling mammalian biocomplexity. <i>Nature Biotechnology</i> , 2004 , 22, 1268-74	44.5	321
480	Metabolic surgery profoundly influences gut microbial-host metabolic cross-talk. <i>Gut</i> , 2011 , 60, 1214-23	319.2	319
479	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
478	Susceptibility of human metabolic phenotypes to dietary modulation. <i>Journal of Proteome Research</i> , 2006 , 5, 2780-8	5.6	311
477	High-resolution magic-angle-spinning NMR spectroscopy for metabolic profiling of intact tissues. <i>Nature Protocols</i> , 2010 , 5, 1019-32	18.8	309
476	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

475	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
474	Assessment of analytical reproducibility of 1H NMR spectroscopy based metabonomics for large-scale epidemiological research: the INTERMAP Study. <i>Analytical Chemistry</i> , 2006 , 78, 2199-208	7.8	304
473	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
472	The vaginal microbiome during pregnancy and the postpartum period in a European population. <i>Scientific Reports</i> , 2015 , 5, 8988	4.9	288
471	Colonization-induced host-gut microbial metabolic interaction. <i>MBio</i> , 2011 , 2, e00271-10	7.8	281
470	Molecular phenomics and metagenomics of hepatic steatosis in non-diabetic obese women. <i>Nature Medicine</i> , 2018 , 24, 1070-1080	50.5	276
469	NMR-based metabolic profiling and metabonomic approaches to problems in molecular toxicology. <i>Chemical Research in Toxicology</i> , 2008 , 21, 9-27	4	267
468	Systemic multicompartmental effects of the gut microbiome on mouse metabolic phenotypes. <i>Molecular Systems Biology</i> , 2008 , 4, 219	12.2	261
467	Chemometric models for toxicity classification based on NMR spectra of biofluids. <i>Chemical Research in Toxicology</i> , 2000 , 13, 471-8	4	261
466	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
465	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
464	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
463	The Consortium for Metabonomic Toxicology (COMET): aims, activities and achievements. <i>Pharmacogenomics</i> , 2005 , 6, 691-9	2.6	255
462	Analytical reproducibility in (1)H NMR-based metabonomic urinalysis. <i>Chemical Research in Toxicology</i> , 2002 , 15, 1380-6	4	239
461	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
460	Metabonomics techniques and applications to pharmaceutical research & development. <i>Pharmaceutical Research</i> , 2006 , 23, 1075-88	4.5	236
459	Metabonomic investigations in mice infected with Schistosoma mansoni: 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
458	Summary recommendations for standardization and reporting of metabolic analyses. <i>Nature Biotechnology</i> , 2005 , 23, 833-8	44.5	233

457	Metabonomics in pharmaceutical R&D. FEBS Journal, 2007, 274, 1140-51	5.7	229
456	A metabonomic strategy for the detection of the metabolic effects of chamomile (Matricaria recutita L.) ingestion. <i>Journal of Agricultural and Food Chemistry</i> , 2005 , 53, 191-6	5.7	229
455	Using chemometrics for navigating in the large data sets of genomics, proteomics, and metabonomics (gpm). <i>Analytical and Bioanalytical Chemistry</i> , 2004 , 380, 419-29	4.4	218
454	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
453	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
452	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
451	The microbiome of professional athletes differs from that of more sedentary subjects in composition and particularly at the functional metabolic level. <i>Gut</i> , 2018 , 67, 625-633	19.2	200
450	Impact of analytical bias in metabonomic studies of human blood serum and plasma. <i>Analytical Chemistry</i> , 2006 , 78, 4307-18	7.8	200
449	Automatic data reduction and pattern recognition methods for analysis of 1H nuclear magnetic resonance spectra of human urine from normal and pathological states. <i>Analytical Biochemistry</i> , 1994 , 220, 284-96	3.1	200
448	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
447	Top-down systems biology modeling of host metabotype-microbiome associations in obese rodents. <i>Journal of Proteome Research</i> , 2009 , 8, 2361-75	5.6	197
446	Hippurate: the natural history of a mammalian-microbial cometabolite. <i>Journal of Proteome Research</i> , 2013 , 12, 1527-46	5.6	196
445	Chemometric contributions to the evolution of metabonomics: mathematical solutions to characterising and interpreting complex biological NMR spectra. <i>Analyst, The</i> , 2002 , 127, 1549-57	5	195
444	Culture-independent analysis of the gut microbiota in colorectal cancer and polyposis. <i>Environmental Microbiology</i> , 2008 , 10, 789-98	5.2	193
443	Cervical intraepithelial neoplasia disease progression is associated with increased vaginal microbiome diversity. <i>Scientific Reports</i> , 2015 , 5, 16865	4.9	191
442	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
441	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
440	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

439	The interaction between vaginal microbiota, cervical length, and vaginal progesterone treatment for preterm birth risk. <i>Microbiome</i> , 2017 , 5, 6	16.6	180
438	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
437	Therapeutic modulation of microbiota-host metabolic interactions. <i>Science Translational Medicine</i> , 2012 , 4, 137rv6	17.5	170
436	Metabonomic investigations into hydrazine toxicity in the rat. <i>Chemical Research in Toxicology</i> , 2001 , 14, 975-87	4	170
435	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
434	So what's the deal with metabonomics?. <i>Analytical Chemistry</i> , 2003 , 75, 384A-391A	7.8	165
433	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
432	Age-related immune response heterogeneity to SARS-CoV-2 vaccine BNT162b2. <i>Nature</i> , 2021 , 596, 417	- 4 :224	163
431	Multiple parasite infections and their relationship to self-reported morbidity in a community of rural CEe d'Ivoire. <i>International Journal of Epidemiology</i> , 2004 , 33, 1092-102	7.8	158
430	Metabonomic applications in toxicity screening and disease diagnosis. <i>Current Topics in Medicinal Chemistry</i> , 2002 , 2, 35-51	3	158
429	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
428	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
427	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
426	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
425	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
424	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
423	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
422	Metabonomics and its role in drug development and disease diagnosis. <i>Expert Review of Molecular Diagnostics</i> , 2004 , 4, 189-99	3.8	149

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421	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
420	Objective assessment of dietary patterns by use of metabolic phenotyping: a randomised, controlled, crossover trial. <i>Lancet Diabetes and Endocrinology,the</i> , 2017 , 5, 184-195	18.1	143
419	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
418	Urinary metabolic signatures of human adiposity. Science Translational Medicine, 2015, 7, 285ra62	17.5	141
417	Panorganismal gut microbiome-host metabolic crosstalk. <i>Journal of Proteome Research</i> , 2009 , 8, 2090-1	05 6	137
416	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
415	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
414	Metabonomic analysis identifies molecular changes associated with the pathophysiology and drug treatment of bipolar disorder. <i>Molecular Psychiatry</i> , 2009 , 14, 269-79	15.1	135
413	Dietary supplementation with inulin-propionate ester or inulin improves insulin sensitivity in adults with overweight and obesity with distinct effects on the gut microbiota, plasma metabolome and systemic inflammatory responses: a randomised cross-over trial. <i>Gut</i> , 2019 , 68, 1430-1438	19.2	134
412	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
411	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
410	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
409	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
408	Metabonomic deconvolution of embedded toxicity: application to thioacetamide hepato- and nephrotoxicity. <i>Chemical Research in Toxicology</i> , 2005 , 18, 639-54	4	129
407	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
406	HILIC-UPLC-MS for exploratory urinary metabolic profiling in toxicological studies. <i>Analytical Chemistry</i> , 2011 , 83, 382-90	7.8	128
405	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
404	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

403	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
402	The gut microbiota influences skeletal muscle mass and function in mice. <i>Science Translational Medicine</i> , 2019 , 11,	17.5	124
401	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
400	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
399	Human metabolic profiles are stably controlled by genetic and environmental variation. <i>Molecular Systems Biology</i> , 2011 , 7, 525	12.2	119
398	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
397	Metabolic surgery and cancer: protective effects of bariatric procedures. <i>Cancer</i> , 2011 , 117, 1788-99	6.4	113
396	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
395	Toxicological applications of magnetic resonance. <i>Progress in Nuclear Magnetic Resonance Spectroscopy</i> , 2004 , 45, 109-143	10.4	110
394	A genome-wide metabolic QTL analysis in Europeans implicates two loci shaped by recent positive selection. <i>PLoS Genetics</i> , 2011 , 7, e1002270	6	109
393	Global metabolic responses of mice to Trypanosoma brucei brucei infection. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008 , 105, 6127-32	11.5	109
392	Detection of urinary drug metabolite (xenometabolome) signatures in molecular epidemiology studies via statistical total correlation (NMR) spectroscopy. <i>Analytical Chemistry</i> , 2007 , 79, 2629-40	7.8	108
391	Robust data processing and normalization strategy for MALDI mass spectrometric imaging. <i>Analytical Chemistry</i> , 2012 , 84, 1310-9	7.8	107
390	Metabolomic analysis of the consequences of cadmium exposure in Silene cucubalus cell cultures via 1H NMR spectroscopy and chemometrics. <i>Phytochemistry</i> , 2003 , 62, 851-8	4	107
389	Comparative metabonomics of differential hydrazine toxicity in the rat and mouse. <i>Toxicology and Applied Pharmacology</i> , 2005 , 204, 135-51	4.6	107
388	Metabolome-wide association study identifies multiple biomarkers that discriminate north and south Chinese populations at differing risks of cardiovascular disease: INTERMAP study. <i>Journal of Proteome Research</i> , 2010 , 9, 6647-54	5.6	106
387	The human gut microbiome: implications for future health care. <i>Current Gastroenterology Reports</i> , 2008 , 10, 396-403	5	106
386	The assessment of plant metabolite profiles by NMR-based methodologies. <i>Planta Medica</i> , 2006 , 72, 771-85	3.1	106

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385	Extraction, interpretation and validation of information for comparing samples in metabolic LC/MS data sets. <i>Analyst, The</i> , 2005 , 130, 701-7	5	105
384	The evolution of partial least squares models and related chemometric approaches in metabonomics and metabolic phenotyping. <i>Journal of Chemometrics</i> , 2010 , 24, 636-649	1.6	104
383	Stability and robustness of human metabolic phenotypes in response to sequential food challenges. <i>Journal of Proteome Research</i> , 2012 , 11, 643-55	5.6	103
382	Increased colonic propionate reduces anticipatory reward responses in the human striatum to high-energy foods. <i>American Journal of Clinical Nutrition</i> , 2016 , 104, 5-14	7	103
381	Metabolic profiling and the metabolome-wide association study: significance level for biomarker identification. <i>Journal of Proteome Research</i> , 2010 , 9, 4620-7	5.6	102
380	Variation in antibiotic-induced microbial recolonization impacts on the host metabolic phenotypes of rats. <i>Journal of Proteome Research</i> , 2011 , 10, 3590-603	5.6	101
379	Microbial bile salt hydrolases mediate the efficacy of faecal microbiota transplant in the treatment of recurrent infection. <i>Gut</i> , 2019 , 68, 1791-1800	19.2	100
378	Chemo-informatic strategy for imaging mass spectrometry-based hyperspectral profiling of lipid signatures in colorectal cancer. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 1216-21	11.5	99
377	High-throughput 1H NMR-based metabolic analysis of human serum and urine for large-scale epidemiological studies: validation study. <i>International Journal of Epidemiology</i> , 2008 , 37 Suppl 1, i31-40	7 ^{.8}	99
376	Metabolic characterization of the R6/2 transgenic mouse model of Huntington's disease by high-resolution MAS 1H NMR spectroscopy. <i>Journal of Proteome Research</i> , 2006 , 5, 483-92	5.6	99
375	Metabolomic strategy for the classification and quality control of phytomedicine: a case study of chamomile flower (Matricaria recutita L.). <i>Planta Medica</i> , 2004 , 70, 250-5	3.1	98
374	Optimized Sample Handling Strategy for Metabolic Profiling of Human Feces. <i>Analytical Chemistry</i> , 2016 , 88, 4661-8	7.8	97
373	Metabonomic studies on the physiological effects of acute and chronic psychological stress in Sprague-Dawley rats. <i>Journal of Proteome Research</i> , 2007 , 6, 2080-93	5.6	96
372	Automatic reduction of NMR spectroscopic data for statistical and pattern recognition classification of samples. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 1994 , 12, 1215-25	3.5	96
371	Experimental and analytical variation in human urine in 1H NMR spectroscopy-based metabolic phenotyping studies. <i>Analytical Chemistry</i> , 2007 , 79, 5204-11	7.8	94
370	Subtle metabolic and liver gene transcriptional changes underlie diet-induced fatty liver susceptibility in insulin-resistant mice. <i>Diabetologia</i> , 2007 , 50, 1867-1879	10.3	94
369	Metabolic assessment of human liver transplants from biopsy samples at the donor and recipient stages using high-resolution magic angle spinning 1H NMR spectroscopy. <i>Analytical Chemistry</i> , 2005 , 77, 5570-8	7.8	94
368	High-resolution magic angle spinning NMR spectroscopy: Application to biomedical studies. <i>Progress in Nuclear Magnetic Resonance Spectroscopy</i> , 2009 , 55, 79-100	10.4	93

367	Relationship between vaginal microbial dysbiosis, inflammation, and pregnancy outcomes in cervical cerclage. <i>Science Translational Medicine</i> , 2016 , 8, 350ra102	17.5	92
366	1H HR-MAS NMR spectroscopy of tumor-induced local metabolic "field-effects" enables colorectal cancer staging and prognostication. <i>Journal of Proteome Research</i> , 2013 , 12, 959-68	5.6	92
365	Integrated metabonomic analysis of bromobenzene-induced hepatotoxicity: novel induction of 5-oxoprolinosis. <i>Journal of Proteome Research</i> , 2006 , 5, 1448-59	5.6	91
364	Determination of drug-plasma protein binding kinetics and equilibria by chromatographic profiling: exemplification of the method using L-tryptophan and albumin. <i>Analytical Chemistry</i> , 2002 , 74, 446-52	7.8	91
363	Identification of human urinary biomarkers of cruciferous vegetable consumption by metabonomic profiling. <i>Journal of Proteome Research</i> , 2011 , 10, 4513-21	5.6	89
362	A metabolic system-wide characterisation of the pig: a model for human physiology. <i>Molecular BioSystems</i> , 2011 , 7, 2577-88		89
361	High-resolution (1)H NMR and magic angle spinning NMR spectroscopic investigation of the biochemical effects of 2-bromoethanamine in intact renal and hepatic tissue. <i>Magnetic Resonance in Medicine</i> , 2001 , 45, 781-90	4.4	89
360	The gut microbiota elicits a profound metabolic reorientation in the mouse jejunal mucosa during conventionalisation. <i>Gut</i> , 2013 , 62, 1306-14	19.2	88
359	Meeting-in-the-middle using metabolic profiling - a strategy for the identification of intermediate biomarkers in cohort studies. <i>Biomarkers</i> , 2011 , 16, 83-8	2.6	88
358	NMR spectroscopy based metabonomic studies on the comparative biochemistry of the kidney and urine of the bank vole (Clethrionomys glareolus), wood mouse (Apodemus sylvaticus), white toothed shrew (Crocidura suaveolens) and the laboratory rat. Comparative Biochemistry and	2.3	88
357	Proteomic and metabonomic biomarkers for hepatocellular carcinoma: a comprehensive review. British Journal of Cancer, 2015 , 112, 1141-56	8.7	86
356	Probing latent biomarker signatures and in vivo pathway activity in experimental disease states via statistical total correlation spectroscopy (STOCSY) of biofluids: application to HgCl2 toxicity. Journal of Proteome Research, 2006, 5, 1313-20	5.6	86
355	Distinction between normal and renal cell carcinoma kidney cortical biopsy samples using pattern recognition of (1)H magic angle spinning (MAS) NMR spectra. <i>NMR in Biomedicine</i> , 2000 , 13, 64-71	4.4	85
354	Top-down systems biology integration of conditional prebiotic modulated transgenomic interactions in a humanized microbiome mouse model. <i>Molecular Systems Biology</i> , 2008 , 4, 205	12.2	84
353	Deep learning and 3D-DESI imaging reveal the hidden metabolic heterogeneity of cancer. <i>Chemical Science</i> , 2017 , 8, 3500-3511	9.4	83
352	Evaluation of full-resolution J-resolved 1H NMR projections of biofluids for metabonomics information retrieval and biomarker identification. <i>Analytical Chemistry</i> , 2010 , 82, 1811-21	7.8	83
351	Effects of probiotic Lactobacillus paracasei treatment on the host gut tissue metabolic profiles probed via magic-angle-spinning NMR spectroscopy. <i>Journal of Proteome Research</i> , 2007 , 6, 1471-81	5.6	83
350	Application of orthogonal signal correction to minimise the effects of physical and biological variation in high resolution 1H NMR spectra of biofluids. <i>Analyst, The</i> , 2002 , 127, 1283-8	5	83

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