Richard D Beger

List of Publications by Year
in descending order

107 papers	4,528 citations	117453 34 h-index	114278 63 g-index
112 all docs	112 docs citations	112 times ranked	6596 citing authors

#	Article	IF	Citations
1	Identification of structural factors that affect binding to cannabinoid receptor type 1. Journal of Molecular Structure, 2022, 1249, 131589.	1.8	0
2	Emerging technologies and their impact on regulatory science. Experimental Biology and Medicine, 2022, 247, 1-75.	1.1	22
3	Reference materials for MS-based untargeted metabolomics and lipidomics: a review by the metabolomics quality assurance and quality control consortium (mQACC). Metabolomics, 2022, 18, 24.	1.4	43
4	Evaluating Cefoperazone-Induced Gut Metabolic Functional Changes in MR1-Deficient Mice. Metabolites, 2022, 12, 380.	1.3	1
5	Discovery of Novel Proteomic Biomarkers for the Prediction of Kidney Recovery from Dialysis-Dependent AKI Patients. Kidney360, 2021, 2, 1716-1727.	0.9	16
6	Metabolomics as a Truly Translational Tool for Precision Medicine. International Journal of Toxicology, 2021, 40, 413-426.	0.6	13
7	Progress towards an OECD reporting framework for transcriptomics and metabolomics in regulatory toxicology. Regulatory Toxicology and Pharmacology, 2021, 125, 105020.	1.3	46
8	Serum metabolite profiles predict outcomes in critically ill patients receiving renal replacement therapy. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2021, 1187, 123024.	1.2	8
9	Dissemination and analysis of the quality assurance (QA) and quality control (QC) practices of LCâ€“MS based untargeted metabolomics practitioners. Metabolomics, 2020, 16, 113.	1.4	56
10	Distinct lipid signatures are identified in the plasma of rats with chronic inflammation induced by estradiol benzoate and sex hormones. Metabolomics, 2020, 16, 95.	1.4	4
11	Hepatic Transcript Profiles of Cytochrome P450 Genes Predict Sex Differences in Drug Metabolism. Drug Metabolism and Disposition, 2020, 48, 447-458.	1.7	20
12	Current Concepts in Pharmacometabolomics, Biomarker Discovery, and Precision Medicine. Metabolites, 2020, 10, 129.	1.3	56
13	Determination of structural factors affecting binding to mu, kappa and delta opioid receptors. Archives of Toxicology, 2020, 94, 1215-1227.	1.9	2
14	Quantitative structureâ€“toxicity relationships in translational toxicology. Current Opinion in Toxicology, 2020, 23-24, 46-49.	2.6	4
15	Bile Acid Profile and its Changes in Response to Cefoperazone Treatment in MR1 Deficient Mice. Metabolites, 2020, 10, 127.	1.3	7
16	Use cases, best practice and reporting standards for metabolomics in regulatory toxicology. Nature Communications, 2019, 10, 3041.	5.8	131
17	Pharmacometabolomic Pathway Response of Effective Anticancer Agents on Different Diets in Rats with Induced Mammary Tumors. Metabolites, 2019, 9, 149.	1.3	6
18	Metabolomicsâ€based pathway changes in testis fragments treated with ethinylestradiol in vitro. Birth Defects Research, 2019, 111, 1643-1654.	0.8	2

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19	Metabolomics Test Materials for Quality Control: A Study of a Urine Materials Suite. Metabolites, 2019, 9, 270.	1.3	13
20	Stability of the Human Plasma Proteome to Pre-analytical Variability as Assessed by an Aptamer-Based Approach. Journal of Proteome Research, 2019, 18, 3661-3670.	1.8	17
21	Microbiota of MR1 deficient mice confer resistance against Clostridium difficile infection. PLoS ONE, 2019, 14, e0223025.	1.1	19
22	Testicular function in cultured postnatal mouse testis fragments is similar to that of animals during the first wave of spermatogenesis. Birth Defects Research, 2019, 111, 270-280.	0.8	12
23	An Integrated Analysis of Metabolites, Peptides, and Inflammation Biomarkers for Assessment of Preanalytical Variability of Human Plasma. Journal of Proteome Research, 2019, 18, 2411-2421.	1.8	20
24	Interest is high in improving quality control for clinical metabolomics: setting the path forward for community harmonization of quality control standards. Metabolomics, 2019, 15, 1.	1.4	26
25	Towards quality assurance and quality control in untargeted metabolomics studies. Metabolomics, 2019, 15, 4.	1.4	101
26	Multiple microRNAs function as self-protective modules in acetaminophen-induced hepatotoxicity in humans. Archives of Toxicology, 2018, 92, 845-858.	1.9	42
27	Immune response proteins as predictive biomarkers of doxorubicin-induced cardiotoxicity in breast cancer patients. Experimental Biology and Medicine, 2018, 243, 248-255.	1.1	29
28	Comparison of Effects of Diet on Mammary Cancer: Efficacy of Various Preventive Agents and Metabolomic Changes of Different Diets and Agents. Cancer Prevention Research, 2018, 11, 831-840.	0.7	7
29	Computational identification of structural factors affecting the mutagenic potential of aromatic amines: study design and experimental validation. Archives of Toxicology, 2018, 92, 2369-2384.	1.9	6
30	Aptamer-Based Proteomics Identifies Mortality-Associated Serum Biomarkers in Dialysis-Dependent AKI Patients. Kidney International Reports, 2018, 3, 1202-1213.	0.4	20
31	An Aptamerâ€Based Approach to Assess the Human Plasma Proteome for Preâ€Analytical Variability. FASEB Journal, 2018, 32, 802.5.	0.2	0
32	3D-SDAR modeling of hERG potassium channel affinity: A case study in model design and toxicophore identification. Journal of Molecular Graphics and Modelling, 2017, 72, 246-255.	1.3	10
33	Quality assurance and quality control processes: summary of a metabolomics community questionnaire. Metabolomics, 2017, 13, 1.	1.4	53
34	Dose-response analysis of epigenetic, metabolic, and apical endpoints after short-term exposure to experimental hepatotoxicants. Food and Chemical Toxicology, 2017, 109, 690-702.	1.8	21
35	Rigorous 3-dimensional spectral data activity relationship approach modeling strategy for ToxCast estrogen receptor data classification, validation, and feature extraction. Environmental Toxicology and Chemistry, 2017, 36, 823-830.	2.2	4
36	Evaluation of metabolism of azo dyes and their effects on Staphylococcus aureus metabolome. Journal of Industrial Microbiology and Biotechnology, 2017, 44, 1471-1481.	1.4	23

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37	Proteomic analysis of acetaminophen-induced hepatotoxicity and identification of heme oxygenase 1 as a potential plasma biomarker of liver injury. Proteomics - Clinical Applications, 2017, 11, 1600123.	0.8	26
38	Metabolomics Analysis of Urine Samples from Children after Acetaminophen Overdose. Metabolites, 2017, 7, 46.	1.3	14
39	CERAPP: Collaborative Estrogen Receptor Activity Prediction Project. Environmental Health Perspectives, 2016, 124, 1023-1033.	2.8	264
40	Pharmacometabolomics in drug safety and drug-exposome interactions. Metabolomics, 2016, 12, 1.	1.4	7
41	Metabolomics enables precision medicine: â€œA White Paper, Community Perspectiveâ€• Metabolomics, 2016, 12, 149.	1.4	434
42	Targeted metabolomic profiling indicates structure-based perturbations in serum phospholipids in children with acetaminophen overdose. Toxicology Reports, 2016, 3, 747-755.	1.6	8
43	Metabolomics evaluation of the impact of smokeless tobacco exposure on the oral bacterium Capnocytophaga sputigena. Toxicology in Vitro, 2016, 36, 133-141.	1.1	12
44	Early metabolomics changes in heart and plasma during chronic doxorubicin treatment in B6C3F₁mice. Journal of Applied Toxicology, 2016, 36, 1486-1495.	1.4	37
45	Circulating mitochondrial biomarkers for drug-induced liver injury. Biomarkers in Medicine, 2015, 9, 1215-1223.	0.6	13
46	Fructose Alters Intermediary Metabolism of Glucose in Human Adipocytes and Diverts Glucose to Serine Oxidation in the Oneâ€“Carbon Cycle Energy Producing Pathway. Metabolites, 2015, 5, 364-385.	1.3	17
47	Translational biomarkers of acetaminophen-induced acute liver injury. Archives of Toxicology, 2015, 89, 1497-1522.	1.9	72
48	Metabolic fate of fructose in human adipocytes: a targeted 13C tracer fate association study. Metabolomics, 2015, 11, 529-544.	1.4	26
49	Potential of extracellular microRNAs as biomarkers of acetaminophen toxicity in children. Toxicology and Applied Pharmacology, 2015, 284, 180-187.	1.3	73
50	Targeted 13C-Labeled Tracer Fate Associations for Drug Efficacy Testing in Cancer. , 2015, , 349-372.		2
51	Targeted liquid chromatographyâ€“mass spectrometry analysis of serum acylcarnitines in acetaminophen toxicity in children. Biomarkers in Medicine, 2014, 8, 147-159.	0.6	62
52	Computational identification of a phospholipidosis toxicophore using 13 C and 15 N NMR-distance based fingerprints. Bioorganic and Medicinal Chemistry, 2014, 22, 6706-6714.	1.4	20
53	Partial least square and kâ€•nearest neighbor algorithms for improved 3D quantitative spectral dataâ€“activity relationship consensus modeling of acute toxicity. Environmental Toxicology and Chemistry, 2014, 33, 1271-1282.	2.2	15
54	Neuroprotective effect of the chemical chaperone, trehalose in a chronic MPTP-induced Parkinson's disease mouse model. NeuroToxicology, 2014, 44, 250-262.	1.4	103

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55	Comprehensive analysis of alterations in lipid and bile acid metabolism by carbon tetrachloride using integrated transcriptomics and metabolomics. Metabolomics, 2014, 10, 1293-1304.	1.4	5
56	The New Data Quality Task Group (DQTG): ensuring high quality data today and in the future. Metabolomics, 2014, 10, 539-540.	1.4	13
57	A Review of Applications of Metabolomics in Cancer. Metabolites, 2013, 3, 552-574.	1.3	217
58	Complementary PLS and KNN algorithms for improved 3D-QSDAR consensus modeling of AhR binding. Journal of Cheminformatics, 2013, 5, 47.	2.8	11
59	Metabolomics evaluation of the effects of green tea extract on acetaminophen-induced hepatotoxicity in mice. Food and Chemical Toxicology, 2013, 62, 707-721.	1.8	42
60	Metabolomics as a tool for personalizing medicine: 2012 update. Personalized Medicine, 2013, 10, 149-161.	0.8	22
61	Evaluating effects of penicillin treatment on the metabolome of rats. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2013, 932, 134-143.	1.2	26
62	The Liver Toxicity Biomarker Study Phase I: Markers for the Effects of Tolcapone or Entacapone. Toxicologic Pathology, 2012, 40, 951-964.	0.9	20
63	Discovery of early urinary biomarkers in preclinical study of gentamicin-induced kidney injury and recovery in rats. Metabolomics, 2012, 8, 1181-1193.	1.4	9
64	Metabolomics evaluation of hydroxyproline as a potential marker of melamine and cyanuric acid nephrotoxicity in male and female Fischer F344 rats. Food and Chemical Toxicology, 2012, 50, 3978-3983.	1.8	19
65	¹³C NMRâ€“Distance Matrix Descriptors: Optimal Abstract 3D Space Granularity for Predicting Estrogen Binding. Journal of Chemical Information and Modeling, 2012, 52, 1854-1864.	2.5	6
66	Serum metabolomic profiles from patients with acute kidney injury: A pilot study. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2012, 893-894, 107-113.	1.2	81
67	Metabolomics data and the biomarker qualification process. Metabolomics, 2012, 8, 2-7.	1.4	22
68	Assessment of usnic acid toxicity in rat primary hepatocytes using 13C isotopomer distribution analysis of lactate, glutamate and glucose. Food and Chemical Toxicology, 2011, 49, 2968-2974.	1.8	32
69	Metabolomic analysis of urine from rats chronically dosed with acrylamide using NMR and LC/MS. Metabolomics, 2010, 6, 550-563.	1.4	20
70	Metabolomics approaches for discovering biomarkers of drug-induced hepatotoxicity and nephrotoxicity. Toxicology and Applied Pharmacology, 2010, 243, 154-166.	1.3	202
71	Improving proton MR spectroscopy of brain tissue for noninvasive diagnostics. Journal of Magnetic Resonance Imaging, 2010, 32, 818-829.	1.9	12
72	Study of valproic acid-induced endogenous and exogenous metabolite alterations using LCâ€“MS-based metabolomics. Bioanalysis, 2010, 2, 207-216.	0.6	25

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73	The Liver Toxicity Biomarker Study: Phase I Design and Preliminary Results. Toxicologic Pathology, 2009, 37, 52-64.	0.9	53
74	Studies of Acetaminophen and Metabolites in Urine and Their Correlations with Toxicity Using Metabolomics. Drug Metabolism Letters, 2009, 3, 130-136.	0.5	41
75	Evaluations of the trans-sulfuration pathway in multiple liver toxicity studies. Toxicology and Applied Pharmacology, 2009, 235, 25-32.	1.3	39
76	Single valproic acid treatment inhibits glycogen and RNA ribose turnover while disrupting glucose-derived cholesterol synthesis in liver as revealed by the [U-13C6]-d-glucose tracer in mice. Metabolomics, 2009, 5, 336-345.	1.4	34
77	Identification of metabolite profiles of the catechol-O-methyl transferase inhibitor tolcapone in rat urine using LC/MS-based metabonomics analysis. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2009, 877, 2557-2565.	1.2	36
78	Metabonomics evaluation of urine from rats given acute and chronic doses of acetaminophen using NMR and UPLC/MS. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2008, 871, 328-340.	1.2	115
79	Metabonomics of acute kidney injury in children after cardiac surgery. Pediatric Nephrology, 2008, 23, 977-984.	0.9	89
80	Ageâ€related differences in susceptibility to toxic effects of valproic acid in rats. Journal of Applied Toxicology, 2008, 28, 628-637.	1.4	22
81	Metabolomics: a tool for personalizingÂmedicine?. Personalized Medicine, 2008, 5, 495-504.	0.8	8
82	The Role of Metabolic Biomarkers in Drug Toxicity Studies. Toxicology Mechanisms and Methods, 2008, 18, 301-311.	1.3	25
83	The Utility of a Rodent Model in Detecting Pediatric Drug-Induced Nephrotoxicity. Toxicological Sciences, 2007, 99, 637-648.	1.4	41
84	Metabolomics as an Extension of Proteomic Analysis: Study of Acute Kidney Injury. Seminars in Nephrology, 2007, 27, 609-620.	0.6	47
85	Metabolomic biomarkers: their role in the critical path. Drug Discovery Today: Technologies, 2007, 4, 13-16.	4.0	30
86	Metabonomics evaluations of age-related changes in the urinary compositions of male Sprague Dawley rats and effects of data normalization methods on statistical and quantitative analysis. BMC Bioinformatics, 2007, 8, S3.	1.2	50
87	Differential gene expression in mouse liver associated with the hepatoprotective effect of clofibrateâ˜†. Toxicology and Applied Pharmacology, 2007, 222, 169-179.	1.3	27
88	Evaluation of NMR spectral data of urine in conjunction with measured clinical chemistry and histopathology parameters to assess the effects of liver and kidney toxicants. Metabolomics, 2007, 3, 87-100.	1.4	18
89	An Integrated Study of Acute Effects of Valproic Acid in the Liver Using Metabonomics, Proteomics, and Transcriptomics Platforms. OMICS A Journal of Integrative Biology, 2006, 10, 1-14.	1.0	49
90	Metabonomic models of human pancreatic cancer using 1D proton NMR spectra of lipids in plasma. Metabolomics, 2006, 2, 125-134.	1.4	80

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91	Computational modeling of biologically active molecules using NMR spectra. Drug Discovery Today, 2006, 11, 429-435.	3.2	9
92	Monitoring the health to disease continuum with global metabolic profiling and systems biology. Pharmacogenomics, 2006, 7, 1077-1086.	0.6	67
93	Summary recommendations for standardization and reporting of metabolic analyses. Nature Biotechnology, 2005, 23, 833-838.	9.4	261
94	NMR-based metabonomic evaluation of livers from rats chronically treated with tamoxifen, mestranol, and phenobarbital. Metabolomics, 2005, 1, 87-94.	1.4	20
95	BUILDING AN ORGAN-SPECIFIC CARCINOGENIC DATABASE FOR SAR ANALYSES. Journal of Toxicology and Environmental Health - Part A: Current Issues, 2004, 67, 1363-1389.	1.1	22
96	Discriminant Function Analyses of Liver-Specific Carcinogens. Journal of Chemical Information and Computer Sciences, 2004, 44, 1107-1110.	2.8	11
97	Models of Steroid Binding Based on the Minimum Deviation of Structurally Assigned 13C NMR Spectra Analysis (MiDSASA). Journal of Chemical Information and Computer Sciences, 2004, 44, 1489-1496.	2.8	8
98	The use of carbon thirteen nuclear magnetic resonance spectra to predict dioxin and furan binding affinities to the aryl hydrocarbon receptor. Environmental Toxicology and Chemistry, 2003, 22, 501-509.	2.2	9
99	Comparative Structural Connectivity Spectra Analysis (CoSCoSA) Models of Steroid Binding to the Corticosteroid Binding Globulin. Journal of Chemical Information and Computer Sciences, 2002, 42, 1123-1131.	2.8	20
100	Comparative structural connectivity spectra analysis (CoSCoSA) models of steroids binding to the aromatase enzyme. Journal of Molecular Recognition, 2002, 15, 154-162.	1.1	9
101	Combining NMR spectral and structural data to form models of polychlorinated dibenzodioxins, dibenzofurans, and biphenyls binding to the AhR. Journal of Computer-Aided Molecular Design, 2002, 16, 727-740.	1.3	14
102	Models of Polychlorinated Dibenzodioxins, Dibenzofurans, and Biphenyls Binding Affinity to the Aryl Hydrocarbon Receptor Developed Using13C NMR Data. Journal of Chemical Information and Computer Sciences, 2001, 41, 1322-1329.	2.8	39
103	13C NMR Quantitative Spectrometric Data-Activity Relationship (QSDAR) Models of Steroids Binding the Aromatase Enzyme. Journal of Chemical Information and Computer Sciences, 2001, 41, 1360-1366.	2.8	38
104	Developing 13C NMR quantitative spectrometric data-activity relationship (QSDAR) models of steroid binding to the corticosteroid binding globulin. , 2001, 15, 659-669.		29
105	Isolation of human intestinal bacteria metabolizing the natural isoflavone glycosides daidzin and genistin. Archives of Microbiology, 2000, 174, 422-428.	1.0	238
106	Producing13C NMR, Infrared Absorption, and Electron Ionization Mass Spectrometric Data Models of the Monodechlorination of Chlorobenzenes, Chlorophenols, and Chloroanilines. Journal of Chemical Information and Computer Sciences, 2000, 40, 1449-1455.	2.8	15
107	Protein phi and psi dihedral restraints determined from multidimensional hypersurface correlations of backbone chemical shifts and their use in the determination of protein tertiary structures. Journal of Biomolecular NMR, 1997, 10, 129-142.	1.6	54