

# Richard D Beger

## List of Publications by Year in descending order

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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	Metabolomics enables precision medicine: <a href="#">White Paper, Community Perspective</a> , <i>Metabolomics</i> , 2016, 12, 149.	1.4	434
2	CERAPP: Collaborative Estrogen Receptor Activity Prediction Project. <i>Environmental Health Perspectives</i> , 2016, 124, 1023-1033.	2.8	264
3	Summary recommendations for standardization and reporting of metabolic analyses. <i>Nature Biotechnology</i> , 2005, 23, 833-838.	9.4	261
4	Isolation of human intestinal bacteria metabolizing the natural isoflavone glycosides daidzin and genistin. <i>Archives of Microbiology</i> , 2000, 174, 422-428.	1.0	238
5	A Review of Applications of Metabolomics in Cancer. <i>Metabolites</i> , 2013, 3, 552-574.	1.3	217
6	Metabolomics approaches for discovering biomarkers of drug-induced hepatotoxicity and nephrotoxicity. <i>Toxicology and Applied Pharmacology</i> , 2010, 243, 154-166.	1.3	202
7	Use cases, best practice and reporting standards for metabolomics in regulatory toxicology. <i>Nature Communications</i> , 2019, 10, 3041.	5.8	131
8	Metabonomics evaluation of urine from rats given acute and chronic doses of acetaminophen using NMR and UPLC/MS. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2008, 871, 328-340.	1.2	115
9	Neuroprotective effect of the chemical chaperone, trehalose in a chronic MPTP-induced Parkinson's disease mouse model. <i>NeuroToxicology</i> , 2014, 44, 250-262.	1.4	103
10	Towards quality assurance and quality control in untargeted metabolomics studies. <i>Metabolomics</i> , 2019, 15, 4.	1.4	101
11	Metabonomics of acute kidney injury in children after cardiac surgery. <i>Pediatric Nephrology</i> , 2008, 23, 977-984.	0.9	89
12	Serum metabolomic profiles from patients with acute kidney injury: A pilot study. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2012, 893-894, 107-113.	1.2	81
13	Metabonomic models of human pancreatic cancer using 1D proton NMR spectra of lipids in plasma. <i>Metabolomics</i> , 2006, 2, 125-134.	1.4	80
14	Potential of extracellular microRNAs as biomarkers of acetaminophen toxicity in children. <i>Toxicology and Applied Pharmacology</i> , 2015, 284, 180-187.	1.3	73
15	Translational biomarkers of acetaminophen-induced acute liver injury. <i>Archives of Toxicology</i> , 2015, 89, 1497-1522.	1.9	72
16	Monitoring the health to disease continuum with global metabolic profiling and systems biology. <i>Pharmacogenomics</i> , 2006, 7, 1077-1086.	0.6	67
17	Targeted liquid chromatography-mass spectrometry analysis of serum acylcarnitines in acetaminophen toxicity in children. <i>Biomarkers in Medicine</i> , 2014, 8, 147-159.	0.6	62
18	Dissemination and analysis of the quality assurance (QA) and quality control (QC) practices of LC-MS based untargeted metabolomics practitioners. <i>Metabolomics</i> , 2020, 16, 113.	1.4	56

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19	Current Concepts in Pharmacometabolomics, Biomarker Discovery, and Precision Medicine. <i>Metabolites</i> , 2020, 10, 129.	1.3	56
20	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. <i>Journal of Biomolecular NMR</i> , 1997, 10, 129-142.	1.6	54
21	The Liver Toxicity Biomarker Study: Phase I Design and Preliminary Results. <i>Toxicologic Pathology</i> , 2009, 37, 52-64.	0.9	53
22	Quality assurance and quality control processes: summary of a metabolomics community questionnaire. <i>Metabolomics</i> , 2017, 13, 1.	1.4	53
23	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. <i>BMC Bioinformatics</i> , 2007, 8, S3.	1.2	50
24	An Integrated Study of Acute Effects of Valproic Acid in the Liver Using Metabonomics, Proteomics, and Transcriptomics Platforms. <i>OMICS A Journal of Integrative Biology</i> , 2006, 10, 1-14.	1.0	49
25	Metabolomics as an Extension of Proteomic Analysis: Study of Acute Kidney Injury. <i>Seminars in Nephrology</i> , 2007, 27, 609-620.	0.6	47
26	Progress towards an OECD reporting framework for transcriptomics and metabolomics in regulatory toxicology. <i>Regulatory Toxicology and Pharmacology</i> , 2021, 125, 105020.	1.3	46
27	Reference materials for MS-based untargeted metabolomics and lipidomics: a review by the metabolomics quality assurance and quality control consortium (mQACC). <i>Metabolomics</i> , 2022, 18, 24.	1.4	43
28	Metabolomics evaluation of the effects of green tea extract on acetaminophen-induced hepatotoxicity in mice. <i>Food and Chemical Toxicology</i> , 2013, 62, 707-721.	1.8	42
29	Multiple microRNAs function as self-protective modules in acetaminophen-induced hepatotoxicity in humans. <i>Archives of Toxicology</i> , 2018, 92, 845-858.	1.9	42
30	The Utility of a Rodent Model in Detecting Pediatric Drug-Induced Nephrotoxicity. <i>Toxicological Sciences</i> , 2007, 99, 637-648.	1.4	41
31	Studies of Acetaminophen and Metabolites in Urine and Their Correlations with Toxicity Using Metabolomics. <i>Drug Metabolism Letters</i> , 2009, 3, 130-136.	0.5	41
32	Models of Polychlorinated Dibenzodioxins, Dibenzofurans, and Biphenyls Binding Affinity to the Aryl Hydrocarbon Receptor Developed Using <sup>13</sup> C NMR Data. <i>Journal of Chemical Information and Computer Sciences</i> , 2001, 41, 1322-1329.	2.8	39
33	Evaluations of the trans-sulfuration pathway in multiple liver toxicity studies. <i>Toxicology and Applied Pharmacology</i> , 2009, 235, 25-32.	1.3	39
34	<sup>13</sup> C NMR Quantitative Spectrometric Data-Activity Relationship (QSDAR) Models of Steroids Binding the Aromatase Enzyme. <i>Journal of Chemical Information and Computer Sciences</i> , 2001, 41, 1360-1366.	2.8	38
35	Early metabolomics changes in heart and plasma during chronic doxorubicin treatment in B6C3F <sub>1</sub> mice. <i>Journal of Applied Toxicology</i> , 2016, 36, 1486-1495.	1.4	37
36	Identification of metabolite profiles of the catechol-O-methyl transferase inhibitor tolcapone in rat urine using LC/MS-based metabonomics analysis. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2009, 877, 2557-2565.	1.2	36

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37	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. <i>Metabolomics</i> , 2009, 5, 336-345.	1.4	34
38	Assessment of usnic acid toxicity in rat primary hepatocytes using 13C isotopomer distribution analysis of lactate, glutamate and glucose. <i>Food and Chemical Toxicology</i> , 2011, 49, 2968-2974.	1.8	32
39	Metabolomic biomarkers: their role in the critical path. <i>Drug Discovery Today: Technologies</i> , 2007, 4, 13-16.	4.0	30
40	Developing 13C NMR quantitative spectrometric data-activity relationship (QSDAR) models of steroid binding to the corticosteroid binding globulin. , 2001, 15, 659-669.		29
41	Immune response proteins as predictive biomarkers of doxorubicin-induced cardiotoxicity in breast cancer patients. <i>Experimental Biology and Medicine</i> , 2018, 243, 248-255.	1.1	29
42	Differential gene expression in mouse liver associated with the hepatoprotective effect of clofibrate. <i>Toxicology and Applied Pharmacology</i> , 2007, 222, 169-179.	1.3	27
43	Evaluating effects of penicillin treatment on the metabolome of rats. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2013, 932, 134-143.	1.2	26
44	Metabolic fate of fructose in human adipocytes: a targeted 13C tracer fate association study. <i>Metabolomics</i> , 2015, 11, 529-544.	1.4	26
45	Proteomic analysis of acetaminophen-induced hepatotoxicity and identification of heme oxygenase 1 as a potential plasma biomarker of liver injury. <i>Proteomics - Clinical Applications</i> , 2017, 11, 1600123.	0.8	26
46	Interest is high in improving quality control for clinical metabolomics: setting the path forward for community harmonization of quality control standards. <i>Metabolomics</i> , 2019, 15, 1.	1.4	26
47	The Role of Metabolic Biomarkers in Drug Toxicity Studies. <i>Toxicology Mechanisms and Methods</i> , 2008, 18, 301-311.	1.3	25
48	Study of valproic acid-induced endogenous and exogenous metabolite alterations using LC-MS-based metabolomics. <i>Bioanalysis</i> , 2010, 2, 207-216.	0.6	25
49	Evaluation of metabolism of azo dyes and their effects on <i>Staphylococcus aureus</i> metabolome. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2017, 44, 1471-1481.	1.4	23
50	BUILDING AN ORGAN-SPECIFIC CARCINOGENIC DATABASE FOR SAR ANALYSES. <i>Journal of Toxicology and Environmental Health - Part A: Current Issues</i> , 2004, 67, 1363-1389.	1.1	22
51	Age-related differences in susceptibility to toxic effects of valproic acid in rats. <i>Journal of Applied Toxicology</i> , 2008, 28, 628-637.	1.4	22
52	Metabolomics data and the biomarker qualification process. <i>Metabolomics</i> , 2012, 8, 2-7.	1.4	22
53	Metabolomics as a tool for personalizing medicine: 2012 update. <i>Personalized Medicine</i> , 2013, 10, 149-161.	0.8	22
54	Emerging technologies and their impact on regulatory science. <i>Experimental Biology and Medicine</i> , 2022, 247, 1-75.	1.1	22

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55	Dose-response analysis of epigenetic, metabolic, and apical endpoints after short-term exposure to experimental hepatotoxicants. <i>Food and Chemical Toxicology</i> , 2017, 109, 690-702.	1.8	21
56	Comparative Structural Connectivity Spectra Analysis (CoSCoSA) Models of Steroid Binding to the Corticosteroid Binding Globulin. <i>Journal of Chemical Information and Computer Sciences</i> , 2002, 42, 1123-1131.	2.8	20
57	NMR-based metabonomic evaluation of livers from rats chronically treated with tamoxifen, mestranol, and phenobarbital. <i>Metabolomics</i> , 2005, 1, 87-94.	1.4	20
58	Metabolomic analysis of urine from rats chronically dosed with acrylamide using NMR and LC/MS. <i>Metabolomics</i> , 2010, 6, 550-563.	1.4	20
59	The Liver Toxicity Biomarker Study Phase I: Markers for the Effects of Tolcapone or Entacapone. <i>Toxicologic Pathology</i> , 2012, 40, 951-964.	0.9	20
60	Computational identification of a phospholipidosis toxicophore using <sup>13</sup> C and <sup>15</sup> N NMR-distance based fingerprints. <i>Bioorganic and Medicinal Chemistry</i> , 2014, 22, 6706-6714.	1.4	20
61	Aptamer-Based Proteomics Identifies Mortality-Associated Serum Biomarkers in Dialysis-Dependent AKI Patients. <i>Kidney International Reports</i> , 2018, 3, 1202-1213.	0.4	20
62	An Integrated Analysis of Metabolites, Peptides, and Inflammation Biomarkers for Assessment of Preanalytical Variability of Human Plasma. <i>Journal of Proteome Research</i> , 2019, 18, 2411-2421.	1.8	20
63	Hepatic Transcript Profiles of Cytochrome P450 Genes Predict Sex Differences in Drug Metabolism. <i>Drug Metabolism and Disposition</i> , 2020, 48, 447-458.	1.7	20
64	Metabolomics evaluation of hydroxyproline as a potential marker of melamine and cyanuric acid nephrotoxicity in male and female Fischer F344 rats. <i>Food and Chemical Toxicology</i> , 2012, 50, 3978-3983.	1.8	19
65	Microbiota of MR1 deficient mice confer resistance against <i>Clostridium difficile</i> infection. <i>PLoS ONE</i> , 2019, 14, e0223025.	1.1	19
66	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. <i>Metabolomics</i> , 2007, 3, 87-100.	1.4	18
67	Fructose Alters Intermediary Metabolism of Glucose in Human Adipocytes and Diverts Glucose to Serine Oxidation in the One-Carbon Cycle Energy Producing Pathway. <i>Metabolites</i> , 2015, 5, 364-385.	1.3	17
68	Stability of the Human Plasma Proteome to Pre-analytical Variability as Assessed by an Aptamer-Based Approach. <i>Journal of Proteome Research</i> , 2019, 18, 3661-3670.	1.8	17
69	Discovery of Novel Proteomic Biomarkers for the Prediction of Kidney Recovery from Dialysis-Dependent AKI Patients. <i>Kidney360</i> , 2021, 2, 1716-1727.	0.9	16
70	Producing <sup>13</sup> C NMR, Infrared Absorption, and Electron Ionization Mass Spectrometric Data Models of the Monodechlorination of Chlorobenzenes, Chlorophenols, and Chloroanilines. <i>Journal of Chemical Information and Computer Sciences</i> , 2000, 40, 1449-1455.	2.8	15
71	Partial least square and k-nearest neighbor algorithms for improved 3D quantitative spectral data-activity relationship consensus modeling of acute toxicity. <i>Environmental Toxicology and Chemistry</i> , 2014, 33, 1271-1282.	2.2	15
72	Combining NMR spectral and structural data to form models of polychlorinated dibenzodioxins, dibenzofurans, and biphenyls binding to the AhR. <i>Journal of Computer-Aided Molecular Design</i> , 2002, 16, 727-740.	1.3	14

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73	Metabolomics Analysis of Urine Samples from Children after Acetaminophen Overdose. <i>Metabolites</i> , 2017, 7, 46.	1.3	14
74	The New Data Quality Task Group (DQTG): ensuring high quality data today and in the future. <i>Metabolomics</i> , 2014, 10, 539-540.	1.4	13
75	Circulating mitochondrial biomarkers for drug-induced liver injury. <i>Biomarkers in Medicine</i> , 2015, 9, 1215-1223.	0.6	13
76	Metabolomics Test Materials for Quality Control: A Study of a Urine Materials Suite. <i>Metabolites</i> , 2019, 9, 270.	1.3	13
77	Metabolomics as a Truly Translational Tool for Precision Medicine. <i>International Journal of Toxicology</i> , 2021, 40, 413-426.	0.6	13
78	Improving proton MR spectroscopy of brain tissue for noninvasive diagnostics. <i>Journal of Magnetic Resonance Imaging</i> , 2010, 32, 818-829.	1.9	12
79	Metabolomics evaluation of the impact of smokeless tobacco exposure on the oral bacterium <i>Capnocytophaga sputigena</i> . <i>Toxicology in Vitro</i> , 2016, 36, 133-141.	1.1	12
80	Testicular function in cultured postnatal mouse testis fragments is similar to that of animals during the first wave of spermatogenesis. <i>Birth Defects Research</i> , 2019, 111, 270-280.	0.8	12
81	Discriminant Function Analyses of Liver-Specific Carcinogens. <i>Journal of Chemical Information and Computer Sciences</i> , 2004, 44, 1107-1110.	2.8	11
82	Complementary PLS and KNN algorithms for improved 3D-QSDAR consensus modeling of AhR binding. <i>Journal of Cheminformatics</i> , 2013, 5, 47.	2.8	11
83	3D-SDAR modeling of hERG potassium channel affinity: A case study in model design and toxicophore identification. <i>Journal of Molecular Graphics and Modelling</i> , 2017, 72, 246-255.	1.3	10
84	Comparative structural connectivity spectra analysis (CoSCoSA) models of steroids binding to the aromatase enzyme. <i>Journal of Molecular Recognition</i> , 2002, 15, 154-162.	1.1	9
85	The use of carbon thirteen nuclear magnetic resonance spectra to predict dioxin and furan binding affinities to the aryl hydrocarbon receptor. <i>Environmental Toxicology and Chemistry</i> , 2003, 22, 501-509.	2.2	9
86	Computational modeling of biologically active molecules using NMR spectra. <i>Drug Discovery Today</i> , 2006, 11, 429-435.	3.2	9
87	Discovery of early urinary biomarkers in preclinical study of gentamicin-induced kidney injury and recovery in rats. <i>Metabolomics</i> , 2012, 8, 1181-1193.	1.4	9
88	Models of Steroid Binding Based on the Minimum Deviation of Structurally Assigned <sup>13</sup> C NMR Spectra Analysis (MiDSASA). <i>Journal of Chemical Information and Computer Sciences</i> , 2004, 44, 1489-1496.	2.8	8
89	Metabolomics: a tool for personalizing medicine?. <i>Personalized Medicine</i> , 2008, 5, 495-504.	0.8	8
90	Targeted metabolomic profiling indicates structure-based perturbations in serum phospholipids in children with acetaminophen overdose. <i>Toxicology Reports</i> , 2016, 3, 747-755.	1.6	8

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91	Serum metabolite profiles predict outcomes in critically ill patients receiving renal replacement therapy. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2021, 1187, 123024.	1.2	8
92	Pharmacometabolomics in drug safety and drug-exposome interactions. <i>Metabolomics</i> , 2016, 12, 1.	1.4	7
93	Comparison of Effects of Diet on Mammary Cancer: Efficacy of Various Preventive Agents and Metabolomic Changes of Different Diets and Agents. <i>Cancer Prevention Research</i> , 2018, 11, 831-840.	0.7	7
94	Bile Acid Profile and its Changes in Response to Cefoperazone Treatment in MR1 Deficient Mice. <i>Metabolites</i> , 2020, 10, 127.	1.3	7
95	<sup>13</sup> C NMR Distance Matrix Descriptors: Optimal Abstract 3D Space Granularity for Predicting Estrogen Binding. <i>Journal of Chemical Information and Modeling</i> , 2012, 52, 1854-1864.	2.5	6
96	Computational identification of structural factors affecting the mutagenic potential of aromatic amines: study design and experimental validation. <i>Archives of Toxicology</i> , 2018, 92, 2369-2384.	1.9	6
97	Pharmacometabolomic Pathway Response of Effective Anticancer Agents on Different Diets in Rats with Induced Mammary Tumors. <i>Metabolites</i> , 2019, 9, 149.	1.3	6
98	Comprehensive analysis of alterations in lipid and bile acid metabolism by carbon tetrachloride using integrated transcriptomics and metabolomics. <i>Metabolomics</i> , 2014, 10, 1293-1304.	1.4	5
99	Rigorous 3-dimensional spectral data activity relationship approach modeling strategy for ToxCast estrogen receptor data classification, validation, and feature extraction. <i>Environmental Toxicology and Chemistry</i> , 2017, 36, 823-830.	2.2	4
100	Distinct lipid signatures are identified in the plasma of rats with chronic inflammation induced by estradiol benzoate and sex hormones. <i>Metabolomics</i> , 2020, 16, 95.	1.4	4
101	Quantitative structure-toxicity relationships in translational toxicology. <i>Current Opinion in Toxicology</i> , 2020, 23-24, 46-49.	2.6	4
102	Metabolomics-based pathway changes in testis fragments treated with ethinylestradiol in vitro. <i>Birth Defects Research</i> , 2019, 111, 1643-1654.	0.8	2
103	Determination of structural factors affecting binding to mu, kappa and delta opioid receptors. <i>Archives of Toxicology</i> , 2020, 94, 1215-1227.	1.9	2
104	Targeted <sup>13</sup> C-Labeled Tracer Fate Associations for Drug Efficacy Testing in Cancer. , 2015, , 349-372.		2
105	Evaluating Cefoperazone-Induced Gut Metabolic Functional Changes in MR1-Deficient Mice. <i>Metabolites</i> , 2022, 12, 380.	1.3	1
106	Identification of structural factors that affect binding to cannabinoid receptor type 1. <i>Journal of Molecular Structure</i> , 2022, 1249, 131589.	1.8	0
107	An Aptamer-Based Approach to Assess the Human Plasma Proteome for Pre-Analytical Variability. <i>FASEB Journal</i> , 2018, 32, 802.5.	0.2	0