Keith A Houck

List of Publications by Year
in descending order

112 papers	16,925 citations	24978 57 h-index	23472 111 g-index
115 all docs	115 docs citations	115 times ranked	12034 citing authors

#	Article	IF	Citations
1	A gene expression biomarker for predictive toxicology to identify chemical modulators of NF-Î°B. PLoS ONE, 2022, 17, e0261854.	1.1	6
2	Comprehensive assessment of NR ligand polypharmacology by a multiplex reporter NR assay. Scientific Reports, 2022, 12, 3115.	1.6	2
3	Comprehensive interpretation of in vitro micronucleus test results for 292 chemicals: from hazard identification to risk assessment application. Archives of Toxicology, 2022, 96, 2067-2085.	1.9	15
4	The Tox21 10K Compound Library: Collaborative Chemistry Advancing Toxicology. Chemical Research in Toxicology, 2021, 34, 189-216.	1.7	145
5	Evaluation of a multiplexed, multispecies nuclear receptor assay for chemical hazard assessment. Toxicology in Vitro, 2021, 72, 105016.	1.1	8
6	High-throughput toxicogenomic screening of chemicals in the environment using metabolically competent hepatic cell cultures. Npj Systems Biology and Applications, 2021, 7, 7.	1.4	28
7	Quantitative Chemical Proteomics Reveals Interspecies Variations on Binding Schemes of L-FABP with Perfluorooctanesulfonate. Environmental Science & Technology, 2021, 55, 9012-9023.	4.6	4
8	Bioactivity profiling of per- and polyfluoroalkyl substances (PFAS) identifies potential toxicity pathways related to molecular structure. Toxicology, 2021, 457, 152789.	2.0	57
9	Exploration of xenobiotic metabolism within cell lines used for Tox21 chemical screening. Toxicology in Vitro, 2021, 73, 105109.	1.1	10
10	Characterisation and validation of an in vitro transactivation assay based on the 22Rv1/MMTV_GR-KO cell line to detect human androgen receptor agonists and antagonists. Food and Chemical Toxicology, 2021, 152, 112206.	1.8	5
11	Methods for evaluating variability in human health doseâ€“response characterization. Human and Ecological Risk Assessment (HERA), 2020, 26, 1755-1778.	1.7	13
12	Selecting a minimal set of androgen receptor assays for screening chemicals. Regulatory Toxicology and Pharmacology, 2020, 117, 104764.	1.3	15
13	Harmonized Cross-Species Assessment of Endocrine and Metabolic Disruptors by Ecotox FACTORIAL Assay. Environmental Science & Technology, 2020, 54, 12142-12153.	4.6	4
14	Tox21BodyMap: a webtool to map chemical effects on the human body. Nucleic Acids Research, 2020, 48, W472-W476.	6.5	4
15	High-Throughput Screening to Predict Chemical-Assay Interference. Scientific Reports, 2020, 10, 3986.	1.6	28
16	Profiling the ToxCast Library With a Pluripotent Human (H9) Stem Cell Line-Based Biomarker Assay for Developmental Toxicity. Toxicological Sciences, 2020, 174, 189-209.	1.4	34
17	Nontarget Screening of Per- and Polyfluoroalkyl Substances Binding to Human Liver Fatty Acid Binding Protein. Environmental Science & Technology, 2020, 54, 5676-5686.	4.6	45
18	The Key Characteristics of Carcinogens: Relationship to the Hallmarks of Cancer, Relevant Biomarkers, and Assays to Measure Them. Cancer Epidemiology Biomarkers and Prevention, 2020, 29, 1887-1903.	1.1	52

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19	Use of high-throughput enzyme-based assay with xenobiotic metabolic capability to evaluate the inhibition of acetylcholinesterase activity by organophosphorous pesticides. Toxicology in Vitro, 2019, 56, 93-100.	1.1	19
20	Limited Chemical Structural Diversity Found to Modulate Thyroid Hormone Receptor in the Tox21 Chemical Library. Environmental Health Perspectives, 2019, 127, 97009.	2.8	56
21	The Next Generation Blueprint of Computational Toxicology at the U.S. Environmental Protection Agency. Toxicological Sciences, 2019, 169, 317-332.	1.4	225
22	Potential Toxicity of Complex Mixtures in Surface Waters from a Nationwide Survey of United States Streams: Identifying in Vitro Bioactivities and Causative Chemicals. Environmental Science & Technology, 2019, 53, 973-983.	4.6	75
23	Assessing bioactivity-exposure profiles of fruit and vegetable extracts in the BioMAP profiling system. Toxicology in Vitro, 2019, 54, 41-57.	1.1	8
24	Workflow for Defining Reference Chemicals for Assessing Performance of In Vitro Assays. ALTEX: Alternatives To Animal Experimentation, 2019, 36, 261-276.	0.9	11
25	Screening the ToxCast phase II libraries for alterations in network function using cortical neurons grown on multi-well microelectrode array (mwMEA) plates. Archives of Toxicology, 2018, 92, 487-500.	1.9	46
26	New approach methods for testing chemicals for endocrine disruption potential. Current Opinion in Toxicology, 2018, 9, 40-47.	2.6	14
27	Evaluating biological activity of compounds by transcription factor activity profiling. Science Advances, 2018, 4, eaar4666.	4.7	16
28	Comprehensive Analyses and Prioritization of Tox21 10K Chemicals Affecting Mitochondrial Function by in-Depth Mechanistic Studies. Environmental Health Perspectives, 2018, 126, 077010.	2.8	60
29	Carcinogenicity of isobutyl nitrite, Î²-picoline, and some acrylates. Lancet Oncology, The, 2018, 19, 1020-1022.	5.1	4
30	Confirmation of high-throughput screening data and novel mechanistic insights into VDR-xenobiotic interactions by orthogonal assays. Scientific Reports, 2018, 8, 8883.	1.6	8
31	Identifying environmental chemicals as agonists of the androgen receptor by using a quantitative high-throughput screening platform. Toxicology, 2017, 385, 48-58.	2.0	24
32	Development and Validation of a Computational Model for Androgen Receptor Activity. Chemical Research in Toxicology, 2017, 30, 946-964.	1.7	163
33	On selecting a minimal set of inÂvitro assays to reliably determine estrogen agonist activity. Regulatory Toxicology and Pharmacology, 2017, 91, 39-49.	1.3	39
34	Primary Cell Phenotypic Screening Illuminates ADRs and AOPs. Cell Chemical Biology, 2017, 24, 781-782.	2.5	1
35	An â€œEARâ€•on Environmental Surveillance and Monitoring: A Case Study on the Use of Exposureâ€“Activity Ratios (EARs) to Prioritize Sites, Chemicals, and Bioactivities of Concern in Great Lakes Waters. Environmental Science & Technology, 2017, 51, 8713-8724.	4.6	81
36	Comment on â€œOn the Utility of ToxCastâ„¢ and ToxPi as Methods for Identifying New Obesogensâ€• Environmental Health Perspectives, 2017, 125, A8-A11.	2.8	6

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37	The benefits of data mining. ELife, 2017, 6, .	2.8	3
38	Using ToxCastâ„¢ Data to Reconstruct Dynamic Cell State Trajectories and Estimate Toxicological Points of Departure. Environmental Health Perspectives, 2016, 124, 910-919.	2.8	65
39	ToxCast Chemical Landscape: Paving the Road to 21st Century Toxicology. Chemical Research in Toxicology, 2016, 29, 1225-1251.	1.7	456
40	Development of a quantitative morphological assessment of toxicantâ€treated zebrafish larvae using brightfield imaging and highâ€content analysis. Journal of Applied Toxicology, 2016, 36, 1214-1222.	1.4	5
41	Environmental surveillance and monitoringâ€"The next frontiers for highâ€throughput toxicology. Environmental Toxicology and Chemistry, 2016, 35, 513-525.	2.2	70
42	Editor's Highlight: Analysis of the Effects of Cell Stress and Cytotoxicity on<i>In Vitro</i>Assay Activity Across a Diverse Chemical and Assay Space. Toxicological Sciences, 2016, 152, 323-339.	1.4	171
43	Evaluation of food-relevant chemicals in the ToxCast high-throughput screening program. Food and Chemical Toxicology, 2016, 92, 188-196.	1.8	53
44	Tiered High-Throughput Screening Approach to Identify Thyroperoxidase Inhibitors Within the ToxCast Phase I and II Chemical Libraries. Toxicological Sciences, 2016, 151, 160-180.	1.4	95
45	An evaluation of 25 selected <scp>T</scp>ox<scp>C</scp>ast chemicals in mediumâ€throughput assays to detect genotoxicity. Environmental and Molecular Mutagenesis, 2015, 56, 468-476.	0.9	13
46	Integrated Model of Chemical Perturbations of a Biological Pathway Using 18<i>In Vitro</i>High-Throughput Screening Assays for the Estrogen Receptor. Toxicological Sciences, 2015, 148, 137-154.	1.4	251
47	Incorporating High-Throughput Exposure Predictions With Dosimetry-Adjusted<i>In Vitro</i>Bioactivity to Inform Chemical Toxicity Testing. Toxicological Sciences, 2015, 148, 121-136.	1.4	190
48	An environmentally benign antimicrobial nanoparticle based on a silver-infused lignin core. Nature Nanotechnology, 2015, 10, 817-823.	15.6	493
49	Use of Neural Models of Proliferation and Neurite Outgrowth to Screen Environmental Chemicals in the ToxCast Phase I Library. Applied in Vitro Toxicology, 2015, 1, 131-139.	0.6	10
50	Nanomaterial Categorization for Assessing Risk Potential To Facilitate Regulatory Decision-Making. ACS Nano, 2015, 9, 3409-3417.	7.3	129
51	Phenotypic screening of the ToxCast chemical library to classify toxic and therapeutic mechanisms. Nature Biotechnology, 2014, 32, 583-591.	9.4	175
52	<i>In Vitro</i> and Modelling Approaches to Risk Assessment from the U.S. Environmental Protection Agency ToxCast Programme. Basic and Clinical Pharmacology and Toxicology, 2014, 115, 69-76.	1.2	114
53	Multi-well microelectrode array recordings detect neuroactivity of ToxCast compounds. NeuroToxicology, 2014, 44, 204-217.	1.4	91
54	Predictive Endocrine Testing in the 21st Century Using <i>in Vitro</i> Assays of Estrogen Receptor Signaling Responses. Environmental Science & Technology, 2014, 48, 8706-8716.	4.6	71

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55	Profiling of the Tox21 10K compound library for agonists and antagonists of the estrogen receptor alpha signaling pathway. Scientific Reports, 2014, 4, 5664.	1.6	167
56	Quantitative High-Throughput Profiling of Environmental Chemicals and Drugs that Modulate Farnesoid X Receptor. Scientific Reports, 2014, 4, 6437.	1.6	51
57	Identification of Thyroid Hormone Receptor Active Compounds Using a Quantitative High-Throughput Screening Platform. Current Chemical Genomics and Translational Medicine, 2014, 8, 36-46.	4.3	21
58	Characterization ofÂphysicochemical properties ofÂnanomaterials and their immediate environments inÂhighâ€‘throughput screening ofÂnanomaterial biological activity. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2013, 5, 430-448.	3.3	10
59	Profiling 976 ToxCast Chemicals across 331 Enzymatic and Receptor Signaling Assays. Chemical Research in Toxicology, 2013, 26, 878-895.	1.7	162
60	Real-Time Growth Kinetics Measuring Hormone Mimicry for ToxCast Chemicals in T-47D Human Ductal Carcinoma Cells. Chemical Research in Toxicology, 2013, 26, 1097-1107.	1.7	41
61	Dosimetric Anchoring of In Vivo and In Vitro Studies for Perfluorooctanoate and Perfluorooctanesulfonate. Toxicological Sciences, 2013, 136, 308-327.	1.4	44
62	In Vitro Perturbations of Targets in Cancer Hallmark Processes Predict Rodent Chemical Carcinogenesis. Toxicological Sciences, 2013, 131, 40-55.	1.4	67
63	Using <i>in Vitro</i> High Throughput Screening Assays to Identify Potential Endocrine-Disrupting Chemicals. Environmental Health Perspectives, 2013, 121, 7-14.	2.8	134
64	Perspectives on validation of high-throughput assays supporting 21st century toxicity testing. ALTEX: Alternatives To Animal Experimentation, 2013, 30, 51-66.	0.9	118
65	Integration of Dosimetry, Exposure, and High-Throughput Screening Data in Chemical Toxicity Assessment. Toxicological Sciences, 2012, 125, 157-174.	1.4	336
66	Incorporating Biological, Chemical, and Toxicological Knowledge Into Predictive Models of Toxicity. Toxicological Sciences, 2012, 130, 440-441.	1.4	21
67	Update on EPAâ€™s ToxCast Program: Providing High Throughput Decision Support Tools for Chemical Risk Management. Chemical Research in Toxicology, 2012, 25, 1287-1302.	1.7	410
68	Zebrafish developmental screening of the ToxCastâ„¢ Phase I chemical library. Reproductive Toxicology, 2012, 33, 174-187.	1.3	267
69	Estimating Toxicity-Related Biological Pathway Altering Doses for High-Throughput Chemical Risk Assessment. Chemical Research in Toxicology, 2011, 24, 451-462.	1.7	188
70	Predictive Model of Rat Reproductive Toxicity from ToxCast High Throughput Screening1. Biology of Reproduction, 2011, 85, 327-339.	1.2	142
71	Informing Selection of Nanomaterial Concentrations for ToxCast <i>in Vitro</i> Testing Based on Occupational Exposure Potential. Environmental Health Perspectives, 2011, 119, 1539-1546.	2.8	142
72	Using Nuclear Receptor Activity to Stratify Hepatocarcinogens. PLoS ONE, 2011, 6, e14584.	1.1	48

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73	Activity profiles of 309 ToxCastâ„¢ chemicals evaluated across 292 biochemical targets. Toxicology, 2011, 282, 1-15.	2.0	124
74	Chemical Genomics Profiling of Environmental Chemical Modulation of Human Nuclear Receptors. Environmental Health Perspectives, 2011, 119, 1142-1148.	2.8	189
75	<i>In Vitro</i> Screening of Environmental Chemicals for Targeted Testing Prioritization: The ToxCast Project. Environmental Health Perspectives, 2010, 118, 485-492.	2.8	519
76	Endocrine Profiling and Prioritization of Environmental Chemicals Using ToxCast Data. Environmental Health Perspectives, 2010, 118, 1714-1720.	2.8	274
77	Xenobiotic-Metabolizing Enzyme and Transporter Gene Expression in Primary Cultures of Human Hepatocytes Modulated by Toxcast Chemicals. Journal of Toxicology and Environmental Health - Part B: Critical Reviews, 2010, 13, 329-346.	2.9	53
78	Impact of Environmental Chemicals on Key Transcription Regulators and Correlation to Toxicity End Points within EPAâ€™s ToxCast Program. Chemical Research in Toxicology, 2010, 23, 578-590.	1.7	190
79	Incorporating Human Dosimetry and Exposure into High-Throughput<i>In Vitro</i>Toxicity Screening. Toxicological Sciences, 2010, 117, 348-358.	1.4	222
80	Analysis of Eight Oil Spill Dispersants Using Rapid, In Vitro Tests for Endocrine and Other Biological Activity. Environmental Science & Technology, 2010, 44, 5979-5985.	4.6	162
81	The Toxicity Data Landscape for Environmental Chemicals. Environmental Health Perspectives, 2009, 117, 685-695.	2.8	418
82	Evaluation of high-throughput genotoxicity assays used in profiling the US EPA ToxCastâ„¢ chemicals. Regulatory Toxicology and Pharmacology, 2009, 55, 188-199.	1.3	105
83	Profiling Bioactivity of the ToxCast Chemical Library Using BioMAP Primary Human Cell Systems. Journal of Biomolecular Screening, 2009, 14, 1054-1066.	2.6	96
84	Understanding mechanisms of toxicity: Insights from drug discovery research. Toxicology and Applied Pharmacology, 2008, 227, 163-178.	1.3	90
85	ACToR â€” Aggregated Computational Toxicology Resource. Toxicology and Applied Pharmacology, 2008, 233, 7-13.	1.3	195
86	Computational Toxicologyâ€"A State of the Science Mini Review. Toxicological Sciences, 2008, 103, 14-27.	1.4	152
87	The ToxCast Program for Prioritizing Toxicity Testing of Environmental Chemicals. Toxicological Sciences, 2007, 95, 5-12.	1.4	851
88	A 15-ketosterol is a liver X receptor ligand that suppresses sterol-responsive element binding protein-2 activity. Journal of Lipid Research, 2006, 47, 1037-1044.	2.0	17
89	Screening for Activators of the Wingless Type/Frizzled Pathway by Automated Fluorescent Microscopy. Methods in Enzymology, 2006, 414, 140-150.	0.4	7
90	Cyclic AMP-independent activation of CYP3A4 gene expression by forskolin. European Journal of Pharmacology, 2005, 512, 9-13.	1.7	13

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91	The Hypolipidemic Natural Product Guggulsterone Is a Promiscuous Steroid Receptor Ligand. Molecular Pharmacology, 2005, 67, 948-954.	1.0	124
92	High-Content Screening Assay for Activators of the Wnt/Fzd Pathway in Primary Human Cells. Assay and Drug Development Technologies, 2005, 3, 133-141.	0.6	43
93	T0901317 is a dual LXR/FXR agonist. Molecular Genetics and Metabolism, 2004, 83, 184-187.	0.5	160
94	The discovery of a new structural class of cyclin-dependent kinase inhibitors, aminoimidazo[1,2-a]pyridines. Molecular Cancer Therapeutics, 2004, 3, 1-9.	1.9	8
95	A Natural Product Ligand of the Oxysterol Receptor, Liver X Receptor. Journal of Pharmacology and Experimental Therapeutics, 2003, 307, 291-296.	1.3	58
96	Retinoid X Receptor Is a Nonsilent Major Contributor to Vitamin D Receptor-Mediated Transcriptional Activation. Molecular Endocrinology, 2003, 17, 2320-2328.	3.7	81
97	Increased AKT Activity Contributes to Prostate Cancer Progression by Dramatically Accelerating Prostate Tumor Growth and Diminishing p27Kip1 Expression. Journal of Biological Chemistry, 2000, 275, 24500-24505.	1.6	322
98	Conditional transformation of rat embryo fibroblast cells by a cyclin D1-cdk4 fusion gene. Oncogene, 1999, 18, 6343-6356.	2.6	21
99	Molecular and Biological Properties of the Vascular Endothelial Growth Factor Family of Proteins. Endocrine Reviews, 1992, 13, 18-32.	8.9	1,494
100	The Vascular Endothelial Growth Factor Proteins: Identification of Biologically Relevant Regions by Neutralizing Monoclonal Antibodies. Growth Factors, 1992, 7, 53-64.	0.5	282
101	The fms-like tyrosine kinase, a receptor for vascular endothelial growth factor. Science, 1992, 255, 989-991.	6.0	1,974
102	The Vascular Endothelial Growth Factor Family: Identification of a Fourth Molecular Species and Characterization of Alternative Splicing of RNA. Molecular Endocrinology, 1991, 5, 1806-1814.	3.7	1,242
103	Hepatopoietins A and B and hepatocyte growth. Digestive Diseases and Sciences, 1991, 36, 681-686.	1.1	5
104	The vascular endothelial growth factor family of polypeptides. Journal of Cellular Biochemistry, 1991, 47, 211-218.	1.2	542
105	Acidic fibroblast growth factor (HBGF-1) stimulates DNA synthesis in primary rat hepatocyte cultures. Journal of Cellular Physiology, 1990, 143, 129-132.	2.0	37
106	Altered responses of regenerating hepatocytes to norepinephrine and transforming growth factor type ?. Journal of Cellular Physiology, 1989, 141, 503-509.	2.0	81
107	Norepinephrine modulates the growth-inhibitory effect of transforming growth factor-beta in primary rat hepatocyte cultures. Journal of Cellular Physiology, 1988, 135, 551-555.	2.0	73
108	Differential effect of growth factors on growth stimulation and phenotypic stability of glutamine-synthetase-positive and -negative hepatocytes in primary culture. Differentiation, 1987, 33, 45-55.	1.0	0

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109	Differential effect of growth factors on growth stimulation and phenotypic stability of glutamine-synthetase-positive and -negative hepatocytes in primary culture. Differentiation, 1986, 33, 45-55.	1.0	44
110	Proline is required for the stimulation of DNA synthesis in hepatocyte cultures by EGF. In Vitro, 1985, 21, 121-124.	1.2	47
111	Induction of DNA synthesis in cultured rat hepatocytes through stimulation of alpha 1 adrenoreceptor by norepinephrine. Science, 1985, 227, 749-751.	6.0	256
112	Molecular and Biological Properties of the Vascular Endothelial Growth Factor Family of Proteins. , 0, .		137