Keith A Houck

List of Publications by Year in Descending Order

112 papers	14,121 citations	53 h-index	115 g-index
115 ext. papers	15,473 ext. citations	6.9 avg, IF	5.85 L-index

#	Paper	IF	Citations
112	A gene expression biomarker for predictive toxicology to identify chemical modulators of NF-B.. *PLoS ONE*, **2022**, 17, e0261854	3.7	0
111	Comprehensive assessment of NR ligand polypharmacology by a multiplex reporter NR assay.. *Scientific Reports*, **2022**, 12, 3115	4.9	1
110	Comprehensive interpretation of in vitro micronucleus test results for 292 chemicals: from hazard identification to risk assessment application.. *Archives of Toxicology*, **2022**, 1	5.8	2
109	Quantitative Chemical Proteomics Reveals Interspecies Variations on Binding Schemes of L-FABP with Perfluorooctanesulfonate. *Environmental Science & Technology*, **2021**, 55, 9012-9023	10.3	0
108	Bioactivity profiling of per- and polyfluoroalkyl substances (PFAS) identifies potential toxicity pathways related to molecular structure. *Toxicology*, **2021**, 457, 152789	4.4	17
107	Exploration of xenobiotic metabolism within cell lines used for Tox21 chemical screening. *Toxicology in Vitro*, **2021**, 73, 105109	3.6	3
106	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	4.7	1
105	The Tox21 10K Compound Library: Collaborative Chemistry Advancing Toxicology. *Chemical Research in Toxicology*, **2021**, 34, 189-216	4	40
104	Evaluation of a multiplexed, multispecies nuclear receptor assay for chemical hazard assessment. *Toxicology in Vitro*, **2021**, 72, 105016	3.6	2
103	High-throughput toxicogenomic screening of chemicals in the environment using metabolically competent hepatic cell cultures. *Npj Systems Biology and Applications*, **2021**, 7, 7	5	8
102	Tox21BodyMap: a webtool to map chemical effects on the human body. *Nucleic Acids Research*, **2020**, 48, W472-W476	20.1	2
101	High-Throughput Screening to Predict Chemical-Assay Interference. *Scientific Reports*, **2020**, 10, 3986	4.9	14
100	Profiling the ToxCast Library With a Pluripotent Human (H9) Stem Cell Line-Based Biomarker Assay for Developmental Toxicity. *Toxicological Sciences*, **2020**, 174, 189-209	4.4	17
99	Nontarget Screening of Per- and Polyfluoroalkyl Substances Binding to Human Liver Fatty Acid Binding Protein. *Environmental Science & Technology*, **2020**, 54, 5676-5686	10.3	19
98	Selecting a minimal set of androgen receptor assays for screening chemicals. *Regulatory Toxicology and Pharmacology*, **2020**, 117, 104764	3.4	4
97	Harmonized Cross-Species Assessment of Endocrine and Metabolic Disruptors by Ecotox FACTORIAL Assay. *Environmental Science & Technology*, **2020**, 54, 12142-12153	10.3	1
96	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	4	25

95	Limited Chemical Structural Diversity Found to Modulate Thyroid Hormone Receptor in the Tox21 Chemical Library. *Environmental Health Perspectives*, **2019**, 127, 97009	8.4	33
94	The Next Generation Blueprint of Computational Toxicology at the U.S. Environmental Protection Agency. *Toxicological Sciences*, **2019**, 169, 317-332	4.4	121
93	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	3.6	14
92	Workflow for defining reference chemicals for assessing performance of in vitro assays. *ALTEX: Alternatives To Animal Experimentation*, **2019**, 36, 261-276	4.3	7
91	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	10.3	43
90	Assessing bioactivity-exposure profiles of fruit and vegetable extracts in the BioMAP profiling system. *Toxicology in Vitro*, **2019**, 54, 41-57	3.6	6
89	Methods for evaluating variability in human health dose-response characterization. *Human and Ecological Risk Assessment (HERA)*, **2019**, 25, 1-24	4.9	5
88	Confirmation of high-throughput screening data and novel mechanistic insights into VDR-xenobiotic interactions by orthogonal assays. *Scientific Reports*, **2018**, 8, 8883	4.9	5
87	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	5.8	36
86	New approach methods for testing chemicals for endocrine disruption potential. *Current Opinion in Toxicology*, **2018**, 9, 40-47	4.4	10
85	Evaluating biological activity of compounds by transcription factor activity profiling. *Science Advances*, **2018**, 4, eaar4666	14.3	10
84	Comprehensive Analyses and Prioritization of Tox21 10K Chemicals Affecting Mitochondrial Function by in-Depth Mechanistic Studies. *Environmental Health Perspectives*, **2018**, 126, 077010	8.4	44
83	Identifying environmental chemicals as agonists of the androgen receptor by using a quantitative high-throughput screening platform. *Toxicology*, **2017**, 385, 48-58	4.4	22
82	Development and Validation of a Computational Model for Androgen Receptor Activity. *Chemical Research in Toxicology*, **2017**, 30, 946-964	4	114
81	On selecting a minimal set of in vitro assays to reliably determine estrogen agonist activity. *Regulatory Toxicology and Pharmacology*, **2017**, 91, 39-49	3.4	27
80	Comment on "On the Utility of ToxCast and ToxPi as Methods for Identifying New Obesogens". *Environmental Health Perspectives*, **2017**, 125, A8-A11	8.4	6
79	Primary Cell Phenotypic Screening Illuminates ADRs and AOPs. *Cell Chemical Biology*, **2017**, 24, 781-782	8.2	
78	An "EAR" on Environmental Surveillance and Monitoring: A Case Study on the Use of Exposure-Activity Ratios (EARs) to Prioritize Sites, Chemicals, and Bioactivities of Concern in Great Lakes Waters. *Environmental Science & Technology*, **2017**, 51, 8713-8724	10.3	45

77	The benefits of data mining. *ELife*, **2017**, 6,	8.9	1
76	Tiered High-Throughput Screening Approach to Identify Thyroperoxidase Inhibitors Within the ToxCast Phase I and II Chemical Libraries. *Toxicological Sciences*, **2016**, 151, 160-80	4.4	67
75	Using ToxCastÐ Data to Reconstruct Dynamic Cell State Trajectories and Estimate Toxicological Points of Departure. *Environmental Health Perspectives*, **2016**, 124, 910-9	8.4	55
74	ToxCast Chemical Landscape: Paving the Road to 21st Century Toxicology. *Chemical Research in Toxicology*, **2016**, 29, 1225-51	4	301
73	Development of a quantitative morphological assessment of toxicant-treated zebrafish larvae using brightfield imaging and high-content analysis. *Journal of Applied Toxicology*, **2016**, 36, 1214-22	4.1	4
72	Environmental surveillance and monitoring--The next frontiers for high-throughput toxicology. *Environmental Toxicology and Chemistry*, **2016**, 35, 513-25	3.8	50
71	EditorS Highlight: Analysis of the Effects of Cell Stress and Cytotoxicity on In Vitro Assay Activity Across a Diverse Chemical and Assay Space. *Toxicological Sciences*, **2016**, 152, 323-39	4.4	125
70	Evaluation of food-relevant chemicals in the ToxCast high-throughput screening program. *Food and Chemical Toxicology*, **2016**, 92, 188-96	4.7	44
69	An environmentally benign antimicrobial nanoparticle based on a silver-infused lignin core. *Nature Nanotechnology*, **2015**, 10, 817-23	28.7	373
68	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	1.3	10
67	Nanomaterial categorization for assessing risk potential to facilitate regulatory decision-making. *ACS Nano*, **2015**, 9, 3409-17	16.7	119
66	An evaluation of 25 selected ToxCast chemicals in medium-throughput assays to detect genotoxicity. *Environmental and Molecular Mutagenesis*, **2015**, 56, 468-76	3.2	11
65	Integrated Model of Chemical Perturbations of a Biological Pathway Using 18 In Vitro High-Throughput Screening Assays for the Estrogen Receptor. *Toxicological Sciences*, **2015**, 148, 137-54	4.4	201
64	Incorporating High-Throughput Exposure Predictions With Dosimetry-Adjusted In Vitro Bioactivity to Inform Chemical Toxicity Testing. *Toxicological Sciences*, **2015**, 148, 121-36	4.4	148
63	Quantitative high-throughput profiling of environmental chemicals and drugs that modulate farnesoid X receptor. *Scientific Reports*, **2014**, 4, 6437	4.9	33
62	Multi-well microelectrode array recordings detect neuroactivity of ToxCast compounds. *NeuroToxicology*, **2014**, 44, 204-17	4.4	75
61	Predictive endocrine testing in the 21st century using in vitro assays of estrogen receptor signaling responses. *Environmental Science & Technology*, **2014**, 48, 8706-16	10.3	64
60	Profiling of the Tox21 10K compound library for agonists and antagonists of the estrogen receptor alpha signaling pathway. *Scientific Reports*, **2014**, 4, 5664	4.9	113

59	Phenotypic screening of the ToxCast chemical library to classify toxic and therapeutic mechanisms. *Nature Biotechnology*, **2014**, 32, 583-91	44.5	141
58	In vitro 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	3.1	96
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		18
56	Characterization of physicochemical properties of nanomaterials and their immediate environments in high-throughput screening of nanomaterial biological activity. *Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology*, **2013**, 5, 430-48	9.2	9
55	Profiling 976 ToxCast chemicals across 331 enzymatic and receptor signaling assays. *Chemical Research in Toxicology*, **2013**, 26, 878-95	4	145
54	ToxCast: Predicting Toxicity Potential Through High-Throughput Bioactivity Profiling **2013**, 1-31		1
53	Real-time growth kinetics measuring hormone mimicry for ToxCast chemicals in T-47D human ductal carcinoma cells. *Chemical Research in Toxicology*, **2013**, 26, 1097-107	4	34
52	Dosimetric anchoring of in vivo and in vitro studies for perfluorooctanoate and perfluorooctanesulfonate. *Toxicological Sciences*, **2013**, 136, 308-27	4.4	39
51	In vitro perturbations of targets in cancer hallmark processes predict rodent chemical carcinogenesis. *Toxicological Sciences*, **2013**, 131, 40-55	4.4	60
50	Using in vitro high throughput screening assays to identify potential endocrine-disrupting chemicals. *Environmental Health Perspectives*, **2013**, 121, 7-14	8.4	119
49	Perspectives on validation of high-throughput assays supporting 21st century toxicity testing. *ALTEX: Alternatives To Animal Experimentation*, **2013**, 30, 51-6	4.3	105
48	Incorporating biological, chemical, and toxicological knowledge into predictive models of toxicity. *Toxicological Sciences*, **2012**, 130, 440-1; author reply 442-3	4.4	20
47	Update on EPA's ToxCast program: providing high throughput decision support tools for chemical risk management. *Chemical Research in Toxicology*, **2012**, 25, 1287-302	4	357
46	Zebrafish developmental screening of the ToxCast Phase I chemical library. *Reproductive Toxicology*, **2012**, 33, 174-87	3.4	228
45	Integration of dosimetry, exposure, and high-throughput screening data in chemical toxicity assessment. *Toxicological Sciences*, **2012**, 125, 157-74	4.4	280
44	Predictive model of rat reproductive toxicity from ToxCast high throughput screening. *Biology of Reproduction*, **2011**, 85, 327-39	3.9	122
43	Informing selection of nanomaterial concentrations for ToxCast in vitro testing based on occupational exposure potential. *Environmental Health Perspectives*, **2011**, 119, 1539-46	8.4	135
42	Using nuclear receptor activity to stratify hepatocarcinogens. *PLoS ONE*, **2011**, 6, e14584	3.7	43

41	Estimating toxicity-related biological pathway altering doses for high-throughput chemical risk assessment. *Chemical Research in Toxicology*, **2011**, 24, 451-62	4	166
40	Activity profiles of 309 ToxCast chemicals evaluated across 292 biochemical targets. *Toxicology*, **2011**, 282, 1-15	4.4	115
39	Chemical genomics profiling of environmental chemical modulation of human nuclear receptors. *Environmental Health Perspectives*, **2011**, 119, 1142-8	8.4	150
38	In vitro screening of environmental chemicals for targeted testing prioritization: the ToxCast project. *Environmental Health Perspectives*, **2010**, 118, 485-92	8.4	439
37	Endocrine profiling and prioritization of environmental chemicals using ToxCast data. *Environmental Health Perspectives*, **2010**, 118, 1714-20	8.4	231
36	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, 329-46	8.6	47
35	Impact of environmental chemicals on key transcription regulators and correlation to toxicity end points within EPA's ToxCast program. *Chemical Research in Toxicology*, **2010**, 23, 578-90	4	164
34	Incorporating human dosimetry and exposure into high-throughput in vitro toxicity screening. *Toxicological Sciences*, **2010**, 117, 348-58	4.4	189
33	Analysis of eight oil spill dispersants using rapid, in vitro tests for endocrine and other biological activity. *Environmental Science & Technology*, **2010**, 44, 5979-85	10.3	127
32	Evaluation of high-throughput genotoxicity assays used in profiling the US EPA ToxCast chemicals. *Regulatory Toxicology and Pharmacology*, **2009**, 55, 188-99	3.4	89
31	Profiling bioactivity of the ToxCast chemical library using BioMAP primary human cell systems. *Journal of Biomolecular Screening*, **2009**, 14, 1054-66		88
30	The toxicity data landscape for environmental chemicals. *Environmental Health Perspectives*, **2009**, 117, 685-95	8.4	340
29	Understanding mechanisms of toxicity: insights from drug discovery research. *Toxicology and Applied Pharmacology*, **2008**, 227, 163-78	4.6	81
28	ACToR--Aggregated Computational Toxicology Resource. *Toxicology and Applied Pharmacology*, **2008**, 233, 7-13	4.6	164
27	Computational toxicology--a state of the science mini review. *Toxicological Sciences*, **2008**, 103, 14-27	4.4	121
26	The ToxCast program for prioritizing toxicity testing of environmental chemicals. *Toxicological Sciences*, **2007**, 95, 5-12	4.4	678
25	Screening for activators of the wingless type/Frizzled pathway by automated fluorescent microscopy. *Methods in Enzymology*, **2006**, 414, 140-50	1.7	7
24	A 15-ketosterol is a liver X receptor ligand that suppresses sterol-responsive element binding protein-2 activity. *Journal of Lipid Research*, **2006**, 47, 1037-44	6.3	12

23	High-content screening assay for activators of the Wnt/Fzd pathway in primary human cells. *Assay and Drug Development Technologies*, **2005**, 3, 133-41	2.1	41
22	Cyclic AMP-independent activation of CYP3A4 gene expression by forskolin. *European Journal of Pharmacology*, **2005**, 512, 9-13	5.3	12
21	The hypolipidemic natural product guggulsterone is a promiscuous steroid receptor ligand. *Molecular Pharmacology*, **2005**, 67, 948-54	4.3	110
20	T0901317 is a dual LXR/FXR agonist. *Molecular Genetics and Metabolism*, **2004**, 83, 184-7	3.7	147
19	The discovery of a new structural class of cyclin-dependent kinase inhibitors, aminoimidazo[1,2-a]pyridines. *Molecular Cancer Therapeutics*, **2004**, 3, 1-9	6.1	8
18	A natural product ligand of the oxysterol receptor, liver X receptor. *Journal of Pharmacology and Experimental Therapeutics*, **2003**, 307, 291-6	4.7	55
17	Retinoid X receptor is a nonsilent major contributor to vitamin D receptor-mediated transcriptional activation. *Molecular Endocrinology*, **2003**, 17, 2320-8		67
16	Increased AKT activity contributes to prostate cancer progression by dramatically accelerating prostate tumor growth and diminishing p27Kip1 expression. *Journal of Biological Chemistry*, **2000**, 275, 24500-5	5.4	283
15	Conditional transformation of rat embryo fibroblast cells by a cyclin D1-cdk4 fusion gene. *Oncogene* , **1999**, 18, 6343-56	9.2	19
14	Molecular and biological properties of the vascular endothelial growth factor family of proteins. *Endocrine Reviews*, **1992**, 13, 18-32	27.2	1353
13	The vascular endothelial growth factor proteins: identification of biologically relevant regions by neutralizing monoclonal antibodies. *Growth Factors*, **1992**, 7, 53-64	1.6	260
12	The fms-like tyrosine kinase, a receptor for vascular endothelial growth factor. *Science*, **1992**, 255, 989-91	33.3	1809
11	Hepatopoietins A and B and hepatocyte growth. *Digestive Diseases and Sciences*, **1991**, 36, 681-6	4	5
10	The vascular endothelial growth factor family of polypeptides. *Journal of Cellular Biochemistry*, **1991**, 47, 211-8	4.7	476
9	The vascular endothelial growth factor family: identification of a fourth molecular species and characterization of alternative splicing of RNA. *Molecular Endocrinology*, **1991**, 5, 1806-14		1150
8	Acidic fibroblast growth factor (HBGF-1) stimulates DNA synthesis in primary rat hepatocyte cultures. *Journal of Cellular Physiology*, **1990**, 143, 129-32	7	34
7	Altered responses of regenerating hepatocytes to norepinephrine and transforming growth factor type beta. *Journal of Cellular Physiology*, **1989**, 141, 503-9	7	68
6	Norepinephrine modulates the growth-inhibitory effect of transforming growth factor-beta in primary rat hepatocyte cultures. *Journal of Cellular Physiology*, **1988**, 135, 551-5	7	64

5	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	3.5	
4	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	3.5	44
3	Proline is required for the stimulation of DNA synthesis in hepatocyte cultures by EGF. *In Vitro*, **1985**, 21, 121-4		43
2	Induction of DNA synthesis in cultured rat hepatocytes through stimulation of alpha 1 adrenoreceptor by norepinephrine. *Science*, **1985**, 227, 749-51	33.3	230
1	Molecular and Biological Properties of the Vascular Endothelial Growth Factor Family of Proteins		136