Keith A Houck

List of Publications by Year
in descending order

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112 papers	16,925 citations	25034 57 h-index	23533 111 g-index
115 all docs	115 docs citations	115 times ranked	12034 citing authors

#	Article	IF	Citations
1	The fms -Like Tyrosine Kinase, a Receptor for Vascular Endothelial Growth Factor. Science, 1992, 255, 989-991.	12.6	1,974
2	Molecular and Biological Properties of the Vascular Endothelial Growth Factor Family of Proteins. Endocrine Reviews, 1992, 13, 18-32.	20.1	1,494
3	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
4	The ToxCast Program for Prioritizing Toxicity Testing of Environmental Chemicals. Toxicological Sciences, 2007, 95, 5-12.	3.1	851
5	The vascular endothelial growth factor family of polypeptides. Journal of Cellular Biochemistry, 1991, 47, 211-218.	2.6	542
6	In Vitro Screening of Environmental Chemicals for Targeted Testing Prioritization: The ToxCast Project. Environmental Health Perspectives, 2010, 118, 485-492.	6.0	519
7	An environmentally benign antimicrobial nanoparticle based on a silver-infused lignin core. Nature Nanotechnology, 2015, 10, 817-823.	31.5	493
8	ToxCast Chemical Landscape: Paving the Road to 21st Century Toxicology. Chemical Research in Toxicology, 2016, 29, 1225-1251.	3.3	456
9	The Toxicity Data Landscape for Environmental Chemicals. Environmental Health Perspectives, 2009, 117, 685-695.	6.0	418
10	Update on EPAâ€™s ToxCast Program: Providing High Throughput Decision Support Tools for Chemical Risk Management. Chemical Research in Toxicology, 2012, 25, 1287-1302.	3.3	410
11	Integration of Dosimetry, Exposure, and High-Throughput Screening Data in Chemical Toxicity Assessment. Toxicological Sciences, 2012, 125, 157-174.	3.1	336
12	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.	3.4	322
13	The Vascular Endothelial Growth Factor Proteins: Identification of Biologically Relevant Regions by Neutralizing Monoclonal Antibodies. Growth Factors, 1992, 7, 53-64.	1.7	282
14	Endocrine Profiling and Prioritization of Environmental Chemicals Using ToxCast Data. Environmental Health Perspectives, 2010, 118, 1714-1720.	6.0	274
15	Zebrafish developmental screening of the ToxCastâ„¢ Phase I chemical library. Reproductive Toxicology, 2012, 33, 174-187.	2.9	267
16	Induction of DNA Synthesis in Cultured Rat Hepatocytes Through Stimulation of Î± ₁ Adrenoreceptor by Norepinephrine. Science, 1985, 227, 749-751.	12.6	256
17	Integrated Model of Chemical Perturbations of a Biological Pathway Using 18In VitroHigh-Throughput Screening Assays for the Estrogen Receptor. Toxicological Sciences, 2015, 148, 137-154.	3.1	251
18	The Next Generation Blueprint of Computational Toxicology at the U.S. Environmental Protection Agency. Toxicological Sciences, 2019, 169, 317-332.	3.1	225

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19	Incorporating Human Dosimetry and Exposure into High-ThroughputIn VitroToxicity Screening. Toxicological Sciences, 2010, 117, 348-358.	3.1	222
20	ACToR â€" Aggregated Computational Toxicology Resource. Toxicology and Applied Pharmacology, 2008, 233, 7-13.	2.8	195
21	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.	3.3	190
22	Incorporating High-Throughput Exposure Predictions With Dosimetry-AdjustedIn VitroBioactivity to Inform Chemical Toxicity Testing. Toxicological Sciences, 2015, 148, 121-136.	3.1	190
23	Chemical Genomics Profiling of Environmental Chemical Modulation of Human Nuclear Receptors. Environmental Health Perspectives, 2011, 119, 1142-1148.	6.0	189
24	Estimating Toxicity-Related Biological Pathway Altering Doses for High-Throughput Chemical Risk Assessment. Chemical Research in Toxicology, 2011, 24, 451-462.	3.3	188
25	Phenotypic screening of the ToxCast chemical library to classify toxic and therapeutic mechanisms. Nature Biotechnology, 2014, 32, 583-591.	17.5	175
26	Editor's Highlight: Analysis of the Effects of Cell Stress and Cytotoxicity onIn VitroAssay Activity Across a Diverse Chemical and Assay Space. Toxicological Sciences, 2016, 152, 323-339.	3.1	171
27	Profiling of the Tox21 10K compound library for agonists and antagonists of the estrogen receptor alpha signaling pathway. Scientific Reports, 2014, 4, 5664.	3.3	167
28	Development and Validation of a Computational Model for Androgen Receptor Activity. Chemical Research in Toxicology, 2017, 30, 946-964.	3.3	163
29	Analysis of Eight Oil Spill Dispersants Using Rapid, In Vitro Tests for Endocrine and Other Biological Activity. Environmental Science & Technology, 2010, 44, 5979-5985.	10.0	162
30	Profiling 976 ToxCast Chemicals across 331 Enzymatic and Receptor Signaling Assays. Chemical Research in Toxicology, 2013, 26, 878-895.	3.3	162
31	T0901317 is a dual LXR/FXR agonist. Molecular Genetics and Metabolism, 2004, 83, 184-187.	1.1	160
32	Computational Toxicologyâ€"A State of the Science Mini Review. Toxicological Sciences, 2008, 103, 14-27.	3.1	152
33	The Tox21 10K Compound Library: Collaborative Chemistry Advancing Toxicology. Chemical Research in Toxicology, 2021, 34, 189-216.	3.3	145
34	Predictive Model of Rat Reproductive Toxicity from ToxCast High Throughput Screening1. Biology of Reproduction, 2011, 85, 327-339.	2.7	142
35	Informing Selection of Nanomaterial Concentrations for ToxCast in Vitro Testing Based on Occupational Exposure Potential. Environmental Health Perspectives, 2011, 119, 1539-1546.	6.0	142
36	Molecular and biological properties of the vascular endothelial growth factor family of proteins. , 1992, 13, 18-32.		137

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37	Using in Vitro High Throughput Screening Assays to Identify Potential Endocrine-Disrupting Chemicals. Environmental Health Perspectives, 2013, 121, 7-14.	6.0	134
38	Nanomaterial Categorization for Assessing Risk Potential To Facilitate Regulatory Decision-Making. ACS Nano, 2015, 9, 3409-3417.	14.6	129
39	The Hypolipidemic Natural Product Guggulsterone Is a Promiscuous Steroid Receptor Ligand. Molecular Pharmacology, 2005, 67, 948-954.	2.3	124
40	Activity profiles of 309 ToxCastâ„¢ chemicals evaluated across 292 biochemical targets. Toxicology, 2011, 282, 1-15.	4.2	124
41	Perspectives on validation of high-throughput assays supporting 21st century toxicity testing. ALTEX: Alternatives To Animal Experimentation, 2013, 30, 51-66.	1.5	118
42	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.	2.5	114
43	Evaluation of high-throughput genotoxicity assays used in profiling the US EPA ToxCastâ„¢ chemicals. Regulatory Toxicology and Pharmacology, 2009, 55, 188-199.	2.7	105
44	Profiling Bioactivity of the ToxCast Chemical Library Using BioMAP Primary Human Cell Systems. Journal of Biomolecular Screening, 2009, 14, 1054-1066.	2.6	96
45	Tiered High-Throughput Screening Approach to Identify Thyroperoxidase Inhibitors Within the ToxCast Phase I and II Chemical Libraries. Toxicological Sciences, 2016, 151, 160-180.	3.1	95
46	Multi-well microelectrode array recordings detect neuroactivity of ToxCast compounds. NeuroToxicology, 2014, 44, 204-217.	3.0	91
47	Understanding mechanisms of toxicity: Insights from drug discovery research. Toxicology and Applied Pharmacology, 2008, 227, 163-178.	2.8	90
48	Altered responses of regenerating hepatocytes to norepinephrine and transforming growth factor type Î². Journal of Cellular Physiology, 1989, 141, 503-509.	4.1	81
49	Retinoid X Receptor Is a Nonsilent Major Contributor to Vitamin D Receptor-Mediated Transcriptional Activation. Molecular Endocrinology, 2003, 17, 2320-2328.	3.7	81
50	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.	10.0	81
51	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.	10.0	75
52	Norepinephrine modulates the growthâ€inhibitory effect of transforming growth factorâ€beta in primary rat hepatocyte cultures. Journal of Cellular Physiology, 1988, 135, 551-555.	4.1	73
53	Predictive Endocrine Testing in the 21st Century Using in Vitro Assays of Estrogen Receptor Signaling Responses. Environmental Science & Technology, 2014, 48, 8706-8716.	10.0	71
54	Environmental surveillance and monitoringâ€”The next frontiers for highâ€throughput toxicology. Environmental Toxicology and Chemistry, 2016, 35, 513-525.	4.3	70

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55	In Vitro Perturbations of Targets in Cancer Hallmark Processes Predict Rodent Chemical Carcinogenesis. Toxicological Sciences, 2013, 131, 40-55.	3.1	67
56	Using ToxCastâ„¢ Data to Reconstruct Dynamic Cell State Trajectories and Estimate Toxicological Points of Departure. Environmental Health Perspectives, 2016, 124, 910-919.	6.0	65
57	Comprehensive Analyses and Prioritization of Tox21 10K Chemicals Affecting Mitochondrial Function by in-Depth Mechanistic Studies. Environmental Health Perspectives, 2018, 126, 077010.	6.0	60
58	A Natural Product Ligand of the Oxysterol Receptor, Liver X Receptor. Journal of Pharmacology and Experimental Therapeutics, 2003, 307, 291-296.	2.5	58
59	Bioactivity profiling of per- and polyfluoroalkyl substances (PFAS) identifies potential toxicity pathways related to molecular structure. Toxicology, 2021, 457, 152789.	4.2	57
60	Limited Chemical Structural Diversity Found to Modulate Thyroid Hormone Receptor in the Tox21 Chemical Library. Environmental Health Perspectives, 2019, 127, 97009.	6.0	56
61	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.	6.5	53
62	Evaluation of food-relevant chemicals in the ToxCast high-throughput screening program. Food and Chemical Toxicology, 2016, 92, 188-196.	3.6	53
63	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.	2.5	52
64	Quantitative High-Throughput Profiling of Environmental Chemicals and Drugs that Modulate Farnesoid X Receptor. Scientific Reports, 2014, 4, 6437.	3.3	51
65	Using Nuclear Receptor Activity to Stratify Hepatocarcinogens. PLoS ONE, 2011, 6, e14584.	2.5	48
66	Proline is required for the stimulation of DNA synthesis in hepatocyte cultures by EGF. In Vitro, 1985, 21, 121-124.	1.2	47
67	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.	4.2	46
68	Nontarget Screening of Per- and Polyfluoroalkyl Substances Binding to Human Liver Fatty Acid Binding Protein. Environmental Science & Technology, 2020, 54, 5676-5686.	10.0	45
69	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.	1.9	44
70	Dosimetric Anchoring of In Vivo and In Vitro Studies for Perfluorooctanoate and Perfluorooctanesulfonate. Toxicological Sciences, 2013, 136, 308-327.	3.1	44
71	High-Content Screening Assay for Activators of the Wnt/Fzd Pathway in Primary Human Cells. Assay and Drug Development Technologies, 2005, 3, 133-141.	1.2	43
72	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.	3.3	41

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73	On selecting a minimal set of inÂvitro assays to reliably determine estrogen agonist activity. Regulatory Toxicology and Pharmacology, 2017, 91, 39-49.	2.7	39
74	Acidic fibroblast growth factor (HBGF-1) stimulates DNA synthesis in primary rat hepatocyte cultures. Journal of Cellular Physiology, 1990, 143, 129-132.	4.1	37
75	Profiling the ToxCast Library With a Pluripotent Human (H9) Stem Cell Line-Based Biomarker Assay for Developmental Toxicity. Toxicological Sciences, 2020, 174, 189-209.	3.1	34
76	High-Throughput Screening to Predict Chemical-Assay Interference. Scientific Reports, 2020, 10, 3986.	3.3	28
77	High-throughput toxicogenomic screening of chemicals in the environment using metabolically competent hepatic cell cultures. Npj Systems Biology and Applications, 2021, 7, 7.	3.0	28
78	Identifying environmental chemicals as agonists of the androgen receptor by using a quantitative high-throughput screening platform. Toxicology, 2017, 385, 48-58.	4.2	24
79	Conditional transformation of rat embryo fibroblast cells by a cyclin D1-cdk4 fusion gene. Oncogene, 1999, 18, 6343-6356.	5.9	21
80	Incorporating Biological, Chemical, and Toxicological Knowledge Into Predictive Models of Toxicity. Toxicological Sciences, 2012, 130, 440-441.	3.1	21
81	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
82	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.	2.4	19
83	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.	4.2	17
84	Evaluating biological activity of compounds by transcription factor activity profiling. Science Advances, 2018, 4, eaar4666.	10.3	16
85	Selecting a minimal set of androgen receptor assays for screening chemicals. Regulatory Toxicology and Pharmacology, 2020, 117, 104764.	2.7	15
86	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.	4.2	15
87	New approach methods for testing chemicals for endocrine disruption potential. Current Opinion in Toxicology, 2018, 9, 40-47.	5.0	14
88	Cyclic AMP-independent activation of CYP3A4 gene expression by forskolin. European Journal of Pharmacology, 2005, 512, 9-13.	3.5	13
89	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.	2.2	13
90	Methods for evaluating variability in human health doseâ€“response characterization. Human and Ecological Risk Assessment (HERA), 2020, 26, 1755-1778.	3.4	13

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91	Workflow for Defining Reference Chemicals for Assessing Performance of In Vitro Assays. ALTEX: Alternatives To Animal Experimentation, 2019, 36, 261-276.	1.5	11
92	Characterization ofÂphysicochemical properties ofÂnanomaterials and their immediate environments inÂhighâ€throughput screening ofÂnanomaterial biological activity. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2013, 5, 430-448.	6.1	10
93	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.	1.1	10
94	Exploration of xenobiotic metabolism within cell lines used for Tox21 chemical screening. Toxicology in Vitro, 2021, 73, 105109.	2.4	10
95	Confirmation of high-throughput screening data and novel mechanistic insights into VDR-xenobiotic interactions by orthogonal assays. Scientific Reports, 2018, 8, 8883.	3.3	8
96	Assessing bioactivity-exposure profiles of fruit and vegetable extracts in the BioMAP profiling system. Toxicology in Vitro, 2019, 54, 41-57.	2.4	8
97	Evaluation of a multiplexed, multispecies nuclear receptor assay for chemical hazard assessment. Toxicology in Vitro, 2021, 72, 105016.	2.4	8
98	The discovery of a new structural class of cyclin-dependent kinase inhibitors, aminoimidazo[1,2-a]pyridines. Molecular Cancer Therapeutics, 2004, 3, 1-9.	4.1	8
99	Screening for Activators of the Wingless Type/Frizzled Pathway by Automated Fluorescent Microscopy. Methods in Enzymology, 2006, 414, 140-150.	1.0	7
100	Comment on â€œOn the Utility of ToxCastâ„¢ and ToxPi as Methods for Identifying New Obesogensâ€. Environmental Health Perspectives, 2017, 125, A8-A11.	6.0	6
101	A gene expression biomarker for predictive toxicology to identify chemical modulators of NF-Î²B. PLoS ONE, 2022, 17, e0261854.	2.5	6
102	Hepatopoietins A and B and hepatocyte growth. Digestive Diseases and Sciences, 1991, 36, 681-686.	2.3	5
103	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.	2.8	5
104	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.	3.6	5
105	Carcinogenicity of isobutyl nitrite, Î²-picoline, and some acrylates. Lancet Oncology, The, 2018, 19, 1020-1022.	10.7	4
106	Harmonized Cross-Species Assessment of Endocrine and Metabolic Disruptors by Ecotox FACTORIAL Assay. Environmental Science & Technology, 2020, 54, 12142-12153.	10.0	4
107	Tox21BodyMap: a webtool to map chemical effects on the human body. Nucleic Acids Research, 2020, 48, W472-W476.	14.5	4
108	Quantitative Chemical Proteomics Reveals Interspecies Variations on Binding Schemes of L-FABP with Perfluorooctanesulfonate. Environmental Science & Technology, 2021, 55, 9012-9023.	10.0	4

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109	The benefits of data mining. ELife, 2017, 6, .	6.0	3
110	Comprehensive assessment of NR ligand polypharmacology by a multiplex reporter NR assay. Scientific Reports, 2022, 12, 3115.	3.3	2
111	Primary Cell Phenotypic Screening Illuminates ADRs and AOPs. Cell Chemical Biology, 2017, 24, 781-782.	5.2	1
112	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.	1.9	0