

Keith A Houck

List of Publications by Year in descending order

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112
papers

16,925
citations

24978

57
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23472

111
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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. <i>Science</i> , 1992, 255, 989-991. | 6.0 | 1,974 |
| 2 | Molecular and Biological Properties of the Vascular Endothelial Growth Factor Family of Proteins. <i>Endocrine Reviews</i> , 1992, 13, 18-32. | 8.9 | 1,494 |
| 3 | The Vascular Endothelial Growth Factor Family: Identification of a Fourth Molecular Species and Characterization of Alternative Splicing of RNA. <i>Molecular Endocrinology</i> , 1991, 5, 1806-1814. | 3.7 | 1,242 |
| 4 | The ToxCast Program for Prioritizing Toxicity Testing of Environmental Chemicals. <i>Toxicological Sciences</i> , 2007, 95, 5-12. | 1.4 | 851 |
| 5 | The vascular endothelial growth factor family of polypeptides. <i>Journal of Cellular Biochemistry</i> , 1991, 47, 211-218. | 1.2 | 542 |
| 6 | <i>In Vitro</i> Screening of Environmental Chemicals for Targeted Testing Prioritization: The ToxCast Project. <i>Environmental Health Perspectives</i> , 2010, 118, 485-492. | 2.8 | 519 |
| 7 | An environmentally benign antimicrobial nanoparticle based on a silver-infused lignin core. <i>Nature Nanotechnology</i> , 2015, 10, 817-823. | 15.6 | 493 |
| 8 | ToxCast Chemical Landscape: Paving the Road to 21st Century Toxicology. <i>Chemical Research in Toxicology</i> , 2016, 29, 1225-1251. | 1.7 | 456 |
| 9 | The Toxicity Data Landscape for Environmental Chemicals. <i>Environmental Health Perspectives</i> , 2009, 117, 685-695. | 2.8 | 418 |
| 10 | Update on EPA's ToxCast Program: Providing High Throughput Decision Support Tools for Chemical Risk Management. <i>Chemical Research in Toxicology</i> , 2012, 25, 1287-1302. | 1.7 | 410 |
| 11 | Integration of Dosimetry, Exposure, and High-Throughput Screening Data in Chemical Toxicity Assessment. <i>Toxicological Sciences</i> , 2012, 125, 157-174. | 1.4 | 336 |
| 12 | Increased AKT Activity Contributes to Prostate Cancer Progression by Dramatically Accelerating Prostate Tumor Growth and Diminishing p27Kip1 Expression. <i>Journal of Biological Chemistry</i> , 2000, 275, 24500-24505. | 1.6 | 322 |
| 13 | The Vascular Endothelial Growth Factor Proteins: Identification of Biologically Relevant Regions by Neutralizing Monoclonal Antibodies. <i>Growth Factors</i> , 1992, 7, 53-64. | 0.5 | 282 |
| 14 | Endocrine Profiling and Prioritization of Environmental Chemicals Using ToxCast Data. <i>Environmental Health Perspectives</i> , 2010, 118, 1714-1720. | 2.8 | 274 |
| 15 | Zebrafish developmental screening of the ToxCast's Phase I chemical library. <i>Reproductive Toxicology</i> , 2012, 33, 174-187. | 1.3 | 267 |
| 16 | Induction of DNA synthesis in cultured rat hepatocytes through stimulation of alpha 1 adrenoreceptor by norepinephrine. <i>Science</i> , 1985, 227, 749-751. | 6.0 | 256 |
| 17 | Integrated Model of Chemical Perturbations of a Biological Pathway Using <i>In Vitro</i> High-Throughput Screening Assays for the Estrogen Receptor. <i>Toxicological Sciences</i> , 2015, 148, 137-154. | 1.4 | 251 |
| 18 | The Next Generation Blueprint of Computational Toxicology at the U.S. Environmental Protection Agency. <i>Toxicological Sciences</i> , 2019, 169, 317-332. | 1.4 | 225 |

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|----|--|-----|-----------|
| 19 | Incorporating Human Dosimetry and Exposure into High-Throughput <i>In Vitro</i> Toxicity Screening. <i>Toxicological Sciences</i> , 2010, 117, 348-358. | 1.4 | 222 |
| 20 | ACToR – Aggregated Computational Toxicology Resource. <i>Toxicology and Applied Pharmacology</i> , 2008, 233, 7-13. | 1.3 | 195 |
| 21 | Impact of Environmental Chemicals on Key Transcription Regulators and Correlation to Toxicity End Points within EPA's ToxCast Program. <i>Chemical Research in Toxicology</i> , 2010, 23, 578-590. | 1.7 | 190 |
| 22 | Incorporating High-Throughput Exposure Predictions With Dosimetry-Adjusted <i>In Vitro</i> Bioactivity to Inform Chemical Toxicity Testing. <i>Toxicological Sciences</i> , 2015, 148, 121-136. | 1.4 | 190 |
| 23 | Chemical Genomics Profiling of Environmental Chemical Modulation of Human Nuclear Receptors. <i>Environmental Health Perspectives</i> , 2011, 119, 1142-1148. | 2.8 | 189 |
| 24 | Estimating Toxicity-Related Biological Pathway Altering Doses for High-Throughput Chemical Risk Assessment. <i>Chemical Research in Toxicology</i> , 2011, 24, 451-462. | 1.7 | 188 |
| 25 | Phenotypic screening of the ToxCast chemical library to classify toxic and therapeutic mechanisms. <i>Nature Biotechnology</i> , 2014, 32, 583-591. | 9.4 | 175 |
| 26 | 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. <i>Toxicological Sciences</i> , 2016, 152, 323-339. | 1.4 | 171 |
| 27 | Profiling of the Tox21 10K compound library for agonists and antagonists of the estrogen receptor alpha signaling pathway. <i>Scientific Reports</i> , 2014, 4, 5664. | 1.6 | 167 |
| 28 | Development and Validation of a Computational Model for Androgen Receptor Activity. <i>Chemical Research in Toxicology</i> , 2017, 30, 946-964. | 1.7 | 163 |
| 29 | Analysis of Eight Oil Spill Dispersants Using Rapid, <i>In Vitro</i> Tests for Endocrine and Other Biological Activity. <i>Environmental Science & Technology</i> , 2010, 44, 5979-5985. | 4.6 | 162 |
| 30 | Profiling 976 ToxCast Chemicals across 331 Enzymatic and Receptor Signaling Assays. <i>Chemical Research in Toxicology</i> , 2013, 26, 878-895. | 1.7 | 162 |
| 31 | T0901317 is a dual LXR/FXR agonist. <i>Molecular Genetics and Metabolism</i> , 2004, 83, 184-187. | 0.5 | 160 |
| 32 | Computational Toxicology – A State of the Science Mini Review. <i>Toxicological Sciences</i> , 2008, 103, 14-27. | 1.4 | 152 |
| 33 | The Tox21 10K Compound Library: Collaborative Chemistry Advancing Toxicology. <i>Chemical Research in Toxicology</i> , 2021, 34, 189-216. | 1.7 | 145 |
| 34 | Predictive Model of Rat Reproductive Toxicity from ToxCast High Throughput Screening1. <i>Biology of Reproduction</i> , 2011, 85, 327-339. | 1.2 | 142 |
| 35 | Informing Selection of Nanomaterial Concentrations for ToxCast <i>In Vitro</i> Testing Based on Occupational Exposure Potential. <i>Environmental Health Perspectives</i> , 2011, 119, 1539-1546. | 2.8 | 142 |
| 36 | Molecular and Biological Properties of the Vascular Endothelial Growth Factor Family of Proteins. , 0, . | | 137 |

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|----|--|-----|-----------|
| 37 | Using <i>in Vitro</i> High Throughput Screening Assays to Identify Potential Endocrine-Disrupting Chemicals. <i>Environmental Health Perspectives</i> , 2013, 121, 7-14. | 2.8 | 134 |
| 38 | Nanomaterial Categorization for Assessing Risk Potential To Facilitate Regulatory Decision-Making. <i>ACS Nano</i> , 2015, 9, 3409-3417. | 7.3 | 129 |
| 39 | The Hypolipidemic Natural Product Guggulsterone Is a Promiscuous Steroid Receptor Ligand. <i>Molecular Pharmacology</i> , 2005, 67, 948-954. | 1.0 | 124 |
| 40 | Activity profiles of 309 ToxCast chemicals evaluated across 292 biochemical targets. <i>Toxicology</i> , 2011, 282, 1-15. | 2.0 | 124 |
| 41 | Perspectives on validation of high-throughput assays supporting 21st century toxicity testing. <i>ALTEX: Alternatives To Animal Experimentation</i> , 2013, 30, 51-66. | 0.9 | 118 |
| 42 | <i>In Vitro</i> and Modelling Approaches to Risk Assessment from the U.S. Environmental Protection Agency ToxCast Programme. <i>Basic and Clinical Pharmacology and Toxicology</i> , 2014, 115, 69-76. | 1.2 | 114 |
| 43 | Evaluation of high-throughput genotoxicity assays used in profiling the US EPA ToxCast chemicals. <i>Regulatory Toxicology and Pharmacology</i> , 2009, 55, 188-199. | 1.3 | 105 |
| 44 | Profiling Bioactivity of the ToxCast Chemical Library Using BioMAP Primary Human Cell Systems. <i>Journal of Biomolecular Screening</i> , 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. <i>Toxicological Sciences</i> , 2016, 151, 160-180. | 1.4 | 95 |
| 46 | Multi-well microelectrode array recordings detect neuroactivity of ToxCast compounds. <i>NeuroToxicology</i> , 2014, 44, 204-217. | 1.4 | 91 |
| 47 | Understanding mechanisms of toxicity: Insights from drug discovery research. <i>Toxicology and Applied Pharmacology</i> , 2008, 227, 163-178. | 1.3 | 90 |
| 48 | Altered responses of regenerating hepatocytes to norepinephrine and transforming growth factor type β . <i>Journal of Cellular Physiology</i> , 1989, 141, 503-509. | 2.0 | 81 |
| 49 | Retinoid X Receptor Is a Nonsilent Major Contributor to Vitamin D Receptor-Mediated Transcriptional Activation. <i>Molecular Endocrinology</i> , 2003, 17, 2320-2328. | 3.7 | 81 |
| 50 | 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. <i>Environmental Science & Technology</i> , 2017, 51, 8713-8724. | 4.6 | 81 |
| 51 | Potential Toxicity of Complex Mixtures in Surface Waters from a Nationwide Survey of United States Streams: Identifying <i>in Vitro</i> Bioactivities and Causative Chemicals. <i>Environmental Science & Technology</i> , 2019, 53, 973-983. | 4.6 | 75 |
| 52 | Norepinephrine modulates the growth-inhibitory effect of transforming growth factor-beta in primary rat hepatocyte cultures. <i>Journal of Cellular Physiology</i> , 1988, 135, 551-555. | 2.0 | 73 |
| 53 | Predictive Endocrine Testing in the 21st Century Using <i>in Vitro</i> Assays of Estrogen Receptor Signaling Responses. <i>Environmental Science & Technology</i> , 2014, 48, 8706-8716. | 4.6 | 71 |
| 54 | Environmental surveillance and monitoringâ€”The next frontiers for high-throughput toxicology. <i>Environmental Toxicology and Chemistry</i> , 2016, 35, 513-525. | 2.2 | 70 |

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|----|---|-----|-----------|
| 55 | In Vitro Perturbations of Targets in Cancer Hallmark Processes Predict Rodent Chemical Carcinogenesis. <i>Toxicological Sciences</i> , 2013, 131, 40-55. | 1.4 | 67 |
| 56 | Using ToxCast [®] Data to Reconstruct Dynamic Cell State Trajectories and Estimate Toxicological Points of Departure. <i>Environmental Health Perspectives</i> , 2016, 124, 910-919. | 2.8 | 65 |
| 57 | Comprehensive Analyses and Prioritization of Tox21 10K Chemicals Affecting Mitochondrial Function by in-Depth Mechanistic Studies. <i>Environmental Health Perspectives</i> , 2018, 126, 077010. | 2.8 | 60 |
| 58 | A Natural Product Ligand of the Oxysterol Receptor, Liver X Receptor. <i>Journal of Pharmacology and Experimental Therapeutics</i> , 2003, 307, 291-296. | 1.3 | 58 |
| 59 | Bioactivity profiling of per- and polyfluoroalkyl substances (PFAS) identifies potential toxicity pathways related to molecular structure. <i>Toxicology</i> , 2021, 457, 152789. | 2.0 | 57 |
| 60 | Limited Chemical Structural Diversity Found to Modulate Thyroid Hormone Receptor in the Tox21 Chemical Library. <i>Environmental Health Perspectives</i> , 2019, 127, 97009. | 2.8 | 56 |
| 61 | Xenobiotic-Metabolizing Enzyme and Transporter Gene Expression in Primary Cultures of Human Hepatocytes Modulated by Toxcast Chemicals. <i>Journal of Toxicology and Environmental Health - Part B: Critical Reviews</i> , 2010, 13, 329-346. | 2.9 | 53 |
| 62 | Evaluation of food-relevant chemicals in the ToxCast high-throughput screening program. <i>Food and Chemical Toxicology</i> , 2016, 92, 188-196. | 1.8 | 53 |
| 63 | The Key Characteristics of Carcinogens: Relationship to the Hallmarks of Cancer, Relevant Biomarkers, and Assays to Measure Them. <i>Cancer Epidemiology Biomarkers and Prevention</i> , 2020, 29, 1887-1903. | 1.1 | 52 |
| 64 | Quantitative High-Throughput Profiling of Environmental Chemicals and Drugs that Modulate Farnesoid X Receptor. <i>Scientific Reports</i> , 2014, 4, 6437. | 1.6 | 51 |
| 65 | Using Nuclear Receptor Activity to Stratify Hepatocarcinogens. <i>PLoS ONE</i> , 2011, 6, e14584. | 1.1 | 48 |
| 66 | Proline is required for the stimulation of DNA synthesis in hepatocyte cultures by EGF. <i>In Vitro</i> , 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. <i>Archives of Toxicology</i> , 2018, 92, 487-500. | 1.9 | 46 |
| 68 | Nontarget Screening of Per- and Polyfluoroalkyl Substances Binding to Human Liver Fatty Acid Binding Protein. <i>Environmental Science & Technology</i> , 2020, 54, 5676-5686. | 4.6 | 45 |
| 69 | Differential effect of growth factors on growth stimulation and phenotypic stability of glutamine-synthetase-positive and -negative hepatocytes in primary culture. <i>Differentiation</i> , 1986, 33, 45-55. | 1.0 | 44 |
| 70 | Dosimetric Anchoring of In Vivo and In Vitro Studies for Perfluorooctanoate and Perfluorooctanesulfonate. <i>Toxicological Sciences</i> , 2013, 136, 308-327. | 1.4 | 44 |
| 71 | High-Content Screening Assay for Activators of the Wnt/Fzd Pathway in Primary Human Cells. <i>Assay and Drug Development Technologies</i> , 2005, 3, 133-141. | 0.6 | 43 |
| 72 | Real-Time Growth Kinetics Measuring Hormone Mimicry for ToxCast Chemicals in T-47D Human Ductal Carcinoma Cells. <i>Chemical Research in Toxicology</i> , 2013, 26, 1097-1107. | 1.7 | 41 |

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|----|--|-----|-----------|
| 73 | On selecting a minimal set of inÂvitro assays to reliably determine estrogen agonist activity. <i>Regulatory Toxicology and Pharmacology</i> , 2017, 91, 39-49. | 1.3 | 39 |
| 74 | Acidic fibroblast growth factor (HBGF-1) stimulates DNA synthesis in primary rat hepatocyte cultures. <i>Journal of Cellular Physiology</i> , 1990, 143, 129-132. | 2.0 | 37 |
| 75 | Profiling the ToxCast Library With a Pluripotent Human (H9) Stem Cell Line-Based Biomarker Assay for Developmental Toxicity. <i>Toxicological Sciences</i> , 2020, 174, 189-209. | 1.4 | 34 |
| 76 | High-Throughput Screening to Predict Chemical-Assay Interference. <i>Scientific Reports</i> , 2020, 10, 3986. | 1.6 | 28 |
| 77 | High-throughput toxicogenomic screening of chemicals in the environment using metabolically competent hepatic cell cultures. <i>Npj Systems Biology and Applications</i> , 2021, 7, 7. | 1.4 | 28 |
| 78 | Identifying environmental chemicals as agonists of the androgen receptor by using a quantitative high-throughput screening platform. <i>Toxicology</i> , 2017, 385, 48-58. | 2.0 | 24 |
| 79 | Conditional transformation of rat embryo fibroblast cells by a cyclin D1-cdk4 fusion gene. <i>Oncogene</i> , 1999, 18, 6343-6356. | 2.6 | 21 |
| 80 | Incorporating Biological, Chemical, and Toxicological Knowledge Into Predictive Models of Toxicity. <i>Toxicological Sciences</i> , 2012, 130, 440-441. | 1.4 | 21 |
| 81 | Identification of Thyroid Hormone Receptor Active Compounds Using a Quantitative High-Throughput Screening Platform. <i>Current Chemical Genomics and Translational Medicine</i> , 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. <i>Toxicology in Vitro</i> , 2019, 56, 93-100. | 1.1 | 19 |
| 83 | A 15-ketosterol is a liver X receptor ligand that suppresses sterol-responsive element binding protein-2 activity. <i>Journal of Lipid Research</i> , 2006, 47, 1037-1044. | 2.0 | 17 |
| 84 | Evaluating biological activity of compounds by transcription factor activity profiling. <i>Science Advances</i> , 2018, 4, eaar4666. | 4.7 | 16 |
| 85 | Selecting a minimal set of androgen receptor assays for screening chemicals. <i>Regulatory Toxicology and Pharmacology</i> , 2020, 117, 104764. | 1.3 | 15 |
| 86 | Comprehensive interpretation of in vitro micronucleus test results for 292 chemicals: from hazard identification to risk assessment application. <i>Archives of Toxicology</i> , 2022, 96, 2067-2085. | 1.9 | 15 |
| 87 | New approach methods for testing chemicals for endocrine disruption potential. <i>Current Opinion in Toxicology</i> , 2018, 9, 40-47. | 2.6 | 14 |
| 88 | Cyclic AMP-independent activation of CYP3A4 gene expression by forskolin. <i>European Journal of Pharmacology</i> , 2005, 512, 9-13. | 1.7 | 13 |
| 89 | An evaluation of 25 selected <sc>T</sc>ox<sc>C</sc>ast chemicals in mediumâ€throughput assays to detect genotoxicity. <i>Environmental and Molecular Mutagenesis</i> , 2015, 56, 468-476. | 0.9 | 13 |
| 90 | Methods for evaluating variability in human health doseâ€™response characterization. <i>Human and Ecological Risk Assessment (HERA)</i> , 2020, 26, 1755-1778. | 1.7 | 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. | 0.9 | 11 |
| 92 | 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, 430-448. | 3.3 | 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. | 0.6 | 10 |
| 94 | Exploration of xenobiotic metabolism within cell lines used for Tox21 chemical screening. Toxicology in Vitro, 2021, 73, 105109. | 1.1 | 10 |
| 95 | 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 |
| 96 | Assessing bioactivity-exposure profiles of fruit and vegetable extracts in the BioMAP profiling system. Toxicology in Vitro, 2019, 54, 41-57. | 1.1 | 8 |
| 97 | Evaluation of a multiplexed, multispecies nuclear receptor assay for chemical hazard assessment. Toxicology in Vitro, 2021, 72, 105016. | 1.1 | 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. | 1.9 | 8 |
| 99 | Screening for Activators of the Wnt/Wingless Type/ Frizzled Pathway by Automated Fluorescent Microscopy. Methods in Enzymology, 2006, 414, 140-150. | 0.4 | 7 |
| 100 | Comment on "On the Utility of ToxCast, ToxPi as Methods for Identifying New Obesogens". Environmental Health Perspectives, 2017, 125, A8-A11. | 2.8 | 6 |
| 101 | A gene expression biomarker for predictive toxicology to identify chemical modulators of NF- κ B. PLoS ONE, 2022, 17, e0261854. | 1.1 | 6 |
| 102 | Hepatopoietins A and B and hepatocyte growth. Digestive Diseases and Sciences, 1991, 36, 681-686. | 1.1 | 5 |
| 103 | Development of a quantitative morphological assessment of toxicant-treated zebrafish larvae using brightfield imaging and high-content analysis. Journal of Applied Toxicology, 2016, 36, 1214-1222. | 1.4 | 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. | 1.8 | 5 |
| 105 | Carcinogenicity of isobutyl nitrite, β -picoline, and some acrylates. Lancet Oncology, The, 2018, 19, 1020-1022. | 5.1 | 4 |
| 106 | Harmonized Cross-Species Assessment of Endocrine and Metabolic Disruptors by Ecotox FACTORIAL Assay. Environmental Science & Technology, 2020, 54, 12142-12153. | 4.6 | 4 |
| 107 | Tox21BodyMap: a webtool to map chemical effects on the human body. Nucleic Acids Research, 2020, 48, W472-W476. | 6.5 | 4 |
| 108 | Quantitative Chemical Proteomics Reveals Interspecies Variations on Binding Schemes of L-FABP with Perfluorooctanesulfonate. Environmental Science & Technology, 2021, 55, 9012-9023. | 4.6 | 4 |

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|-----|---|-----|-----------|
| 109 | The benefits of data mining. <i>ELife</i> , 2017, 6, . | 2.8 | 3 |
| 110 | Comprehensive assessment of NR ligand polypharmacology by a multiplex reporter NR assay. <i>Scientific Reports</i> , 2022, 12, 3115. | 1.6 | 2 |
| 111 | Primary Cell Phenotypic Screening Illuminates ADRs and AOPs. <i>Cell Chemical Biology</i> , 2017, 24, 781-782. | 2.5 | 1 |
| 112 | Differential effect of growth factors on growth stimulation and phenotypic stability of glutamine-synthetase-positive and -negative hepatocytes in primary culture. <i>Differentiation</i> , 1987, 33, 45-55. | 1.0 | 0 |