

Thomas Hartung

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7831798/publications.pdf>

Version: 2024-02-01

271
papers

17,898
citations

9786

73
h-index

20358

116
g-index

290
all docs

290
docs citations

290
times ranked

16309
citing authors

#	ARTICLE	IF	CITATIONS
1	Toxicology for the twenty-first century. <i>Nature</i> , 2009, 460, 208-212.	27.8	510
2	Structure–Function Relationship of Cytokine Induction by Lipoteichoic Acid from <i>Staphylococcus aureus</i> . <i>Journal of Experimental Medicine</i> , 2001, 193, 393-398.	8.5	416
3	Lipopolysaccharide and ceramide docking to CD14 provokes ligand-specific receptor clustering in rafts. <i>European Journal of Immunology</i> , 2001, 31, 3153-3164.	2.9	408
4	Multi-tissue interactions in an integrated three-tissue organ-on-a-chip platform. <i>Scientific Reports</i> , 2017, 7, 8837.	3.3	407
5	Guidance on Good Cell Culture Practice. <i>ATLA Alternatives To Laboratory Animals</i> , 2005, 33, 261-287.	1.0	297
6	Applying Adverse Outcome Pathways (AOPs) to support Integrated Approaches to Testing and Assessment (IATA). <i>Regulatory Toxicology and Pharmacology</i> , 2014, 70, 629-640.	2.7	291
7	Adverse outcome pathways: opportunities, limitations and open questions. <i>Archives of Toxicology</i> , 2017, 91, 3477-3505.	4.2	282
8	A Modular Approach to the ECVAM Principles on Test Validity. <i>ATLA Alternatives To Laboratory Animals</i> , 2004, 32, 467-472.	1.0	275
9	“ToxRTool”, a new tool to assess the reliability of toxicological data. <i>Toxicology Letters</i> , 2009, 189, 138-144.	0.8	271
10	The Role of Toll-like Receptors (TLRs) in Bacteria-induced Maturation of Murine Dendritic Cells (DCs). <i>Journal of Biological Chemistry</i> , 2001, 276, 25680-25686.	3.4	254
11	Synthetic Lipoteichoic Acid from <i>Staphylococcus aureus</i> Is a Potent Stimulus of Cytokine Release. <i>Journal of Experimental Medicine</i> , 2002, 195, 1635-1640.	8.5	239
12	Chemical regulators have overreached. <i>Nature</i> , 2009, 460, 1080-1081.	27.8	227
13	Machine Learning of Toxicological Big Data Enables Read-Across Structure Activity Relationships (RASAR) Outperforming Animal Test Reproducibility. <i>Toxicological Sciences</i> , 2018, 165, 198-212.	3.1	220
14	Biology-inspired microphysiological system approaches to solve the prediction dilemma of substance testing. <i>ALTEX: Alternatives To Animal Experimentation</i> , 2016, 33, 272-321.	1.5	214
15	Toxicity testing in the 21st century: progress in the past decade and future perspectives. <i>Archives of Toxicology</i> , 2020, 94, 1-58.	4.2	209
16	A human brain microphysiological system derived from induced pluripotent stem cells to study neurological diseases and toxicity. <i>ALTEX: Alternatives To Animal Experimentation</i> , 2017, 34, 362-376.	1.5	195
17	A roadmap for the development of alternative (non-animal) methods for systemic toxicity testing. <i>ALTEX: Alternatives To Animal Experimentation</i> , 2012, 29, 3-91.	1.5	190
18	Combination therapy with BPTES nanoparticles and metformin targets the metabolic heterogeneity of pancreatic cancer. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, E5328-36.	7.1	180

#	ARTICLE	IF	CITATIONS
19	State-of-the-art of 3D cultures (organs-on-a-chip) in safety testing and pathophysiology. ALTEX: Alternatives To Animal Experimentation, 2014, 31, 441-477.	1.5	166
20	Metabolomics in toxicology and preclinical research. ALTEX: Alternatives To Animal Experimentation, 2013, 30, 209-225.	1.5	164
21	Metabolism: A Bottleneck in <i>In Vitro</i> Toxicological Test Development. ATLA Alternatives To Laboratory Animals, 2006, 34, 49-84.	1.0	161
22	Look back in anger – what clinical studies tell us about preclinical work. ALTEX: Alternatives To Animal Experimentation, 2013, 30, 275-291.	1.5	160
23	Are In Vitro Tests Suitable for Regulatory Use?. Toxicological Sciences, 2009, 111, 233-237.	3.1	156
24	International validation of novel pyrogen tests based on human monocytoïd cells. Journal of Immunological Methods, 2005, 298, 161-173.	1.4	150
25	Review: Toxicometabolomics. Journal of Applied Toxicology, 2013, 33, 1365-1383.	2.8	148
26	From the exposome to mechanistic understanding of chemical-induced adverse effects. Environment International, 2017, 99, 97-106.	10.0	146
27	Workgroup Report: Incorporating In Vitro Alternative Methods for Developmental Neurotoxicity into International Hazard and Risk Assessment Strategies. Environmental Health Perspectives, 2007, 115, 924-931.	6.0	145
28	Inflammatory findings on species extrapolations: humans are definitely no 70-kg mice. Archives of Toxicology, 2013, 87, 563-567.	4.2	140
29	A European perspective on alternatives to animal testing for environmental hazard identification and risk assessment. Regulatory Toxicology and Pharmacology, 2013, 67, 506-530.	2.7	139
30	Toward Good Read-Across Practice (GRAP) guidance. ALTEX: Alternatives To Animal Experimentation, 2016, 33, 149-166.	1.5	134
31	Integrated testing strategies for safety assessments. ALTEX: Alternatives To Animal Experimentation, 2013, 30, 3-18.	1.5	133
32	In vitro acute and developmental neurotoxicity screening: an overview of cellular platforms and high-throughput technical possibilities. Archives of Toxicology, 2017, 91, 1-33.	4.2	132
33	International STakeholder NETwork (ISTNET): creating a developmental neurotoxicity (DNT) testing road map for regulatory purposes. Archives of Toxicology, 2015, 89, 269-287.	4.2	130
34	Prediction of liver toxicity and mode of action using metabolomics in vitro in HepG2 cells. Archives of Toxicology, 2018, 92, 893-906.	4.2	126
35	On mapping the human toxome. ALTEX: Alternatives To Animal Experimentation, 2011, 28, 83-93.	1.5	125
36	ECVAM retrospective validation of in vitro micronucleus test (MNT). Mutagenesis, 2008, 23, 271-283.	2.6	124

#	ARTICLE	IF	CITATIONS
37	Biology-inspired microphysiological systems to advance medicines for patient benefit and animal welfare. ALTEX: Alternatives To Animal Experimentation, 2020, 37, 365-394.	1.5	123
38	Brain-on-a-chip model enables analysis of human neuronal differentiation and chemotaxis. Lab on A Chip, 2016, 16, 4152-4162.	6.0	119
39	Perspectives on validation of high-throughput assays supporting 21st century toxicity testing. ALTEX: Alternatives To Animal Experimentation, 2013, 30, 51-66.	1.5	118
40	Improved Innate Immunity of Endotoxin-Tolerant Mice Increases Resistance to Salmonella enterica Serovar Typhimurium Infection despite Attenuated Cytokine Response. Infection and Immunity, 2001, 69, 463-471.	2.2	115
41	Consensus report on the future of animal-free systemic toxicity testing. ALTEX: Alternatives To Animal Experimentation, 2014, 31, 341-356.	1.5	113
42	Infectability of Human BrainSphere Neurons Suggests Neurotropism of SARS-CoV-2*. ALTEX: Alternatives To Animal Experimentation, 2020, 37, 665-671.	1.5	112
43	The Practical Application of Three Validated <i>In Vitro</i> Embryotoxicity Tests. ATLA Alternatives To Laboratory Animals, 2006, 34, 527-538.	1.0	111
44	Non-animal models of epithelial barriers (skin, intestine and lung) in research, industrial applications and regulatory toxicology. ALTEX: Alternatives To Animal Experimentation, 2015, 32, 327-378.	1.5	108
45	Animal testing and its alternatives – the most important omics is economics. ALTEX: Alternatives To Animal Experimentation, 2018, 35, 275-305.	1.5	105
46	Thoughts on limitations of animal models. Parkinsonism and Related Disorders, 2008, 14, S81-S83.	2.2	104
47	Developmental neurotoxicity – Challenges in the 21st Century and In Vitro Opportunities. ALTEX: Alternatives To Animal Experimentation, 2014, 31, 129-56.	1.5	103
48	Biological and medical applications of a brain-on-a-chip. Experimental Biology and Medicine, 2014, 239, 1096-1107.	2.4	103
49	Rotenone exerts developmental neurotoxicity in a human brain spheroid model. Toxicology and Applied Pharmacology, 2018, 354, 101-114.	2.8	102
50	Towards quality assurance and quality control in untargeted metabolomics studies. Metabolomics, 2019, 15, 4.	3.0	101
51	COVID-19 pandemic and alcohol consumption: Impacts and interconnections. Toxicology Reports, 2021, 8, 529-535.	3.3	101
52	ECVAM Good Cell Culture Practice Task Force Report 1. ATLA Alternatives To Laboratory Animals, 2002, 30, 407-414.	1.0	96
53	Reference compounds for alternative test methods to indicate developmental neurotoxicity (DNT) potential of chemicals: example lists and criteria for their selection and use. ALTEX: Alternatives To Animal Experimentation, 2017, 34, 49-74.	1.5	94
54	Systems Toxicology: Real World Applications and Opportunities. Chemical Research in Toxicology, 2017, 30, 870-882.	3.3	93

#	ARTICLE	IF	CITATIONS
55	mRNA Expression is a Relevant Tool to Identify Developmental Neurotoxicants Using an In Vitro Approach. <i>Toxicological Sciences</i> , 2010, 113, 95-115.	3.1	91
56	Read-across approaches - misconceptions, promises and challenges ahead. <i>ALTEX: Alternatives To Animal Experimentation</i> , 2014, 31, 387-396.	1.5	90
57	Microglia Increase Inflammatory Responses in iPSC-Derived Human BrainSpheres. <i>Frontiers in Microbiology</i> , 2018, 9, 2766.	3.5	88
58	A novel in vitro metabolomics approach for neurotoxicity testing, proof of principle for methyl mercury chloride and caffeine. <i>NeuroToxicology</i> , 2008, 29, 1-12.	3.0	87
59	Advanced Good Cell Culture Practice for human primary, stem cell-derived and organoid models as well as microphysiological systems. <i>ALTEX: Alternatives To Animal Experimentation</i> , 2018, 35, 353-378.	1.5	87
60	21st Century Cell Culture for 21st Century Toxicology. <i>Chemical Research in Toxicology</i> , 2017, 30, 43-52.	3.3	86
61	Antifungal drug itraconazole targets VDAC1 to modulate the AMPK/mTOR signaling axis in endothelial cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, E7276-85.	7.1	84
62	Arsenic Exposure and Immunotoxicity: a Review Including the Possible Influence of Age and Sex. <i>Current Environmental Health Reports</i> , 2016, 3, 1-12.	6.7	84
63	Inflammatory neurodegeneration induced by lipoteichoic acid from <i>Staphylococcus aureus</i> is mediated by glia activation, nitrosative and oxidative stress, and caspase activation. <i>Journal of Neurochemistry</i> , 2005, 95, 1132-1143.	3.9	83
64	A Toxicology for the 21st Centuryâ€”Mapping the Road Ahead. <i>Toxicological Sciences</i> , 2009, 109, 18-23.	3.1	82
65	Good Cell Culture Practice for stem cells and stem-cell-derived models. <i>ALTEX: Alternatives To Animal Experimentation</i> , 2017, 34, 95-132.	1.5	81
66	Food for thought â€” on the evolution of toxicology and the phasing out of animal testing. <i>ALTEX: Alternatives To Animal Experimentation</i> , 2008, 25, 91-96.	1.5	81
67	Food for thought â€” on in silico methods in toxicology. <i>ALTEX: Alternatives To Animal Experimentation</i> , 2009, 26, 155-166.	1.5	81
68	Comparison of Lipoteichoic Acid from Different Serotypes of <i>Streptococcus pneumoniae</i> . <i>Journal of Biological Chemistry</i> , 2006, 281, 33849-33859.	3.4	80
69	Improved strategies to counter the COVID-19 pandemic: Lockdowns vs. primary and community healthcare. <i>Toxicology Reports</i> , 2021, 8, 1-9.	3.3	80
70	Supporting read-across using biological data. <i>ALTEX: Alternatives To Animal Experimentation</i> , 2016, 33, 167-182.	1.5	78
71	The Integrated Project ReProTect: A novel approach in reproductive toxicity hazard assessment. <i>Reproductive Toxicology</i> , 2005, 20, 441-452.	2.9	75
72	From alternative methods to a new toxicology. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2011, 77, 338-349.	4.3	75

#	ARTICLE	IF	CITATIONS
73	Pathways of Toxicity. ALTEX: Alternatives To Animal Experimentation, 2014, 31, 53-61.	1.5	75
74	Evidence-based absorption, distribution, metabolism, excretion (ADME) and its interplay with alternative toxicity methods. ALTEX: Alternatives To Animal Experimentation, 2016, 33, 343-358.	1.5	75
75	Systems toxicology. ALTEX: Alternatives To Animal Experimentation, 2012, 29, 119-128.	1.5	75
76	Toxicity testing in the 21st century beyond environmental chemicals. ALTEX: Alternatives To Animal Experimentation, 2015, 32, 171-181.	1.5	74
77	Re-evaluation of animal numbers and costs for in vivo tests to accomplish REACH legislation requirements for chemicals - a report by the transatlantic think tank for toxicology (t(4)). ALTEX: Alternatives To Animal Experimentation, 2009, 26, 187-208.	1.5	74
78	Uncovering the Role of N-Acetyl-Aspartyl-Glutamate as a Glutamate Reservoir in Cancer. Cell Reports, 2019, 27, 491-501.e6.	6.4	73
79	Gene expression as a sensitive endpoint to evaluate cell differentiation and maturation of the developing central nervous system in primary cultures of rat cerebellar granule cells (CGCs) exposed to pesticides. Toxicology and Applied Pharmacology, 2009, 235, 268-286.	2.8	71
80	C9orf72 regulates energy homeostasis by stabilizing mitochondrial complex I assembly. Cell Metabolism, 2021, 33, 531-546.e9.	16.2	70
81	Food for thought ... on cell culture. ALTEX: Alternatives To Animal Experimentation, 2007, 24, 143-147.	1.5	70
82	Food for thought ... on animal tests. ALTEX: Alternatives To Animal Experimentation, 2008, 25, 3-9.	1.5	70
83	Electrophysiological recording of re-aggregating brain cell cultures on multi-electrode arrays to detect acute neurotoxic effects. NeuroToxicology, 2007, 28, 1136-1146.	3.0	69
84	Skin Sensitisation and Epidermal Disposition: The Relevance of Epidermal Disposition for Sensitisation Hazard Identification and Risk Assessment. ATLA Alternatives To Laboratory Animals, 2007, 35, 137-154.	1.0	69
85	Toward a 3D model of human brain development for studying gene/environment interactions. Stem Cell Research and Therapy, 2013, 4, S4.	5.5	68
86	A primer on systematic reviews in toxicology. Archives of Toxicology, 2017, 91, 2551-2575.	4.2	68
87	Analysis of Draize eye irritation testing and its prediction by mining publicly available 2008-2014 REACH data. ALTEX: Alternatives To Animal Experimentation, 2016, 33, 123-34.	1.5	67
88	Genetic variability in a frozen batch of MCF-7 cells invisible in routine authentication affecting cell function. Scientific Reports, 2016, 6, 28994.	3.3	67
89	Green Toxicology: a strategy for sustainable chemical and material development. Environmental Sciences Europe, 2017, 29, 16.	5.5	67
90	Suitability of 3D human brain spheroid models to distinguish toxic effects of gold and poly-lactic acid nanoparticles to assess biocompatibility for brain drug delivery. Particle and Fibre Toxicology, 2019, 16, 22.	6.2	67

#	ARTICLE	IF	CITATIONS
91	Food for Thought â€” Mechanistic Validation. ALTEX: Alternatives To Animal Experimentation, 2013, 30, 119-130.	1.5	66
92	Diagnosis: Toxic! â€” Trying to Apply Approaches of Clinical Diagnostics and Prevalence in Toxicology Considerations. Toxicological Sciences, 2005, 85, 422-428.	3.1	65
93	The Mammalian Malonyl-CoA Synthetase ACSF3 Is Required for Mitochondrial Protein Malonylation and Metabolic Efficiency. Cell Chemical Biology, 2017, 24, 673-684.e4.	5.2	65
94	Making big sense from big data in toxicology by read-across. ALTEX: Alternatives To Animal Experimentation, 2016, 33, 83-93.	1.5	64
95	Lessons Learned from Alternative Methods and their Validation for a New Toxicology in the 21st Century. Journal of Toxicology and Environmental Health - Part B: Critical Reviews, 2010, 13, 277-290.	6.5	63
96	Alternative in vitro assays in nanomaterial toxicology. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2011, 3, 545-573.	6.1	63
97	Loss of Hepatic Mitochondrial Long-Chain Fatty Acid Oxidation Confers Resistance to Diet-Induced Obesity and Glucose Intolerance. Cell Reports, 2017, 20, 655-667.	6.4	62
98	Food for thought ... on alternative methods for cosmetics safety testing. ALTEX: Alternatives To Animal Experimentation, 2008, 25, 147-162.	1.5	62
99	A Human iPSC-derived 3D platform using primary brain cancer cells to study drug development and personalized medicine. Scientific Reports, 2019, 9, 1407.	3.3	61
100	Food for thought ... on validation. ALTEX: Alternatives To Animal Experimentation, 2007, 24, 67-73.	1.5	60
101	Physiologically-based Kinetic Modelling (PBK Modelling): Meeting the 3Rs Agenda. ATLA Alternatives To Laboratory Animals, 2007, 35, 661-671.	1.0	59
102	Validation and quality control of replacement alternatives â€” current status and future challenges. Toxicology Research, 2012, 1, 8-22.	2.1	59
103	Immune protection against septic peritonitis in endotoxin-primed mice is related to reduced neutrophil apoptosis. European Journal of Immunology, 2001, 31, 1268-1277.	2.9	58
104	Guidance on assessing the methodological and reporting quality of toxicologically relevant studies: A scoping review. Environment International, 2016, 92-93, 630-646.	10.0	58
105	Food for thought... on the economics of animal testing. ALTEX: Alternatives To Animal Experimentation, 2009, 26, 3-16.	1.5	57
106	Effect of filgrastim treatment on inflammatory cytokines and lymphocyte functions*1. Clinical Pharmacology and Therapeutics, 1999, 66, 415-424.	4.7	56
107	Alzheimer disease research in the 21st century: past and current failures, new perspectives and funding priorities. Oncotarget, 2016, 7, 38999-39016.	1.8	56
108	Nonanimal Models for Acute Toxicity Evaluations: Applying Data-Driven Profiling and Read-Across. Environmental Health Perspectives, 2019, 127, 47001.	6.0	56

#	ARTICLE	IF	CITATIONS
109	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.	3.0	56
110	Nutrition and the ageing brain: Moving towards clinical applications. <i>Ageing Research Reviews</i> , 2020, 62, 101079.	10.9	56
111	Keratinocyte growth factor protects murine hepatocytes from tumor necrosis factor-induced apoptosis in vivo and in vitro. <i>Hepatology</i> , 1998, 27, 1584-1591.	7.3	55
112	Big-data and machine learning to revamp computational toxicology and its use in risk assessment. <i>Toxicology Research</i> , 2018, 7, 732-744.	2.1	55
113	Internalization and Coreceptor Expression Are Critical for TLR2-Mediated Recognition of Lipoteichoic Acid in Human Peripheral Blood. <i>Journal of Immunology</i> , 2010, 185, 3708-3717.	0.8	54
114	Novel Advanced <i>In Vitro</i> Methods for Long-term Toxicity Testing. <i>ATLA Alternatives To Laboratory Animals</i> , 2001, 29, 393-426.	1.0	52
115	The Human Toxome Project. <i>ALTEX: Alternatives To Animal Experimentation</i> , 2015, 32, 112-124.	1.5	52
116	Thresholds of Toxicological Concern – Setting a threshold for testing below which there is little concern. <i>ALTEX: Alternatives To Animal Experimentation</i> , 2017, 34, 331-351.	1.5	52
117	Highly purified lipoteichoic acid induced pro-inflammatory signalling in primary culture of rat microglia through Toll-like receptor 2: selective potentiation of nitric oxide production by muramyl dipeptide. <i>Journal of Neurochemistry</i> , 2006, 99, 596-607.	3.9	51
118	Perspectives on <i>In Vitro</i> to <i>In Vivo</i> Extrapolations. <i>Applied in Vitro Toxicology</i> , 2018, 4, 305-316.	1.1	51
119	From ‘‘weight of evidence’’ to quantitative data integration using multicriteria decision analysis and Bayesian methods. <i>ALTEX: Alternatives To Animal Experimentation</i> , 2015, 32, 3-8.	1.5	50
120	3S - Systematic, systemic, and systems biology and toxicology. <i>ALTEX: Alternatives To Animal Experimentation</i> , 2018, 35, 139-162.	1.5	50
121	Global analysis of publicly available safety data for 9,801 substances registered under REACH from 2008-2014. <i>ALTEX: Alternatives To Animal Experimentation</i> , 2016, 33, 95-109.	1.5	49
122	Characterization of three human cell line models for high-throughput neuronal cytotoxicity screening. <i>Journal of Applied Toxicology</i> , 2017, 37, 167-180.	2.8	49
123	Internationalization of read-across as a validated new approach method (NAM) for regulatory toxicology. <i>ALTEX: Alternatives To Animal Experimentation</i> , 2020, 37, 579-606.	1.5	48
124	Development, validation and applications of the monocyte activation test for pyrogens based on human whole blood. <i>ALTEX: Alternatives To Animal Experimentation</i> , 2009, 26, 265-277.	1.5	48
125	Requirement for the Mitochondrial Pyruvate Carrier in Mammalian Development Revealed by a Hypomorphic Allelic Series. <i>Molecular and Cellular Biology</i> , 2016, 36, 2089-2104.	2.3	47
126	Antidepressant Paroxetine Exerts Developmental Neurotoxicity in an iPSC-Derived 3D Human Brain Model. <i>Frontiers in Cellular Neuroscience</i> , 2020, 14, 25.	3.7	47

#	ARTICLE	IF	CITATIONS
127	Food for thought – on alternative methods for chemical safety testing. ALTEX: Alternatives To Animal Experimentation, 2010, 27, 3-14.	1.5	47
128	Evidence-based toxicology – the toolbox of validation for the 21st century?. ALTEX: Alternatives To Animal Experimentation, 2010, 27, 253-263.	1.5	47
129	Cellular resilience. ALTEX: Alternatives To Animal Experimentation, 2015, 32, 247-260.	1.5	46
130	Toward good in vitro reporting standards. ALTEX: Alternatives To Animal Experimentation, 2019, 36, 3-17.	1.5	46
131	The effect of chronic vitamin deficiency and long term very low dose exposure to 6 pesticides mixture on neurological outcomes – A real-life risk simulation approach. Toxicology Letters, 2019, 315, 96-106.	0.8	45
132	The exposome – a new approach for risk assessment. ALTEX: Alternatives To Animal Experimentation, 2020, 37, 3-23.	1.5	45
133	Immunotoxicology: challenges in the 21st century and in vitro opportunities. ALTEX: Alternatives To Animal Experimentation, 2013, 30, 411-426.	1.5	45
134	First alternative method validated by a retrospective weight-of-evidence approach to replace the Draize eye test for the identification of non-irritant substances for a defined applicability domain. ALTEX: Alternatives To Animal Experimentation, 2010, 27, 43-51.	1.5	44
135	Estimation of acute oral toxicity using the No Observed Adverse Effect Level (NOAEL) from the 28 day repeated dose toxicity studies in rats. Regulatory Toxicology and Pharmacology, 2009, 53, 16-19.	2.7	43
136	Weighted Gene Correlation Network Analysis (WGCNA) Reveals Novel Transcription Factors Associated With Bisphenol A Dose-Response. Frontiers in Genetics, 2018, 9, 508.	2.3	43
137	Analysis of publically available skin sensitization data from REACH registrations 2008-2014. ALTEX: Alternatives To Animal Experimentation, 2016, 33, 135-48.	1.5	43
138	Food for thought – on alternative methods for nanoparticle safety testing. ALTEX: Alternatives To Animal Experimentation, 2010, 27, 87-95.	1.5	43
139	Reference materials for MS-based untargeted metabolomics and lipidomics: a review by the metabolomics quality assurance and quality control consortium (mQACC). Metabolomics, 2022, 18, 24.	3.0	43
140	COVID-19 vaccines: ethical framework concerning human challenge studies. DARU, Journal of Pharmaceutical Sciences, 2020, 28, 807-812.	2.0	42
141	Current approaches and future role of high content imaging in safety sciences and drug discovery. ALTEX: Alternatives To Animal Experimentation, 2014, 31, 479-493.	1.5	42
142	Green Toxicology. ALTEX: Alternatives To Animal Experimentation, 2014, 31, 243-249.	1.5	42
143	https://www.altex.org/index.php/altex/article/view/1339 . ALTEX: Alternatives To Animal Experimentation, 2019, 36, 682-699.	1.5	42
144	Food for thought – on evidence-based toxicology. ALTEX: Alternatives To Animal Experimentation, 2009, 26, 75-82.	1.5	42

#	ARTICLE	IF	CITATIONS
145	Alternative approaches for medical countermeasures to biological and chemical terrorism and warfare. ALTEX: Alternatives To Animal Experimentation, 2012, 29, 251-260.	1.5	42
146	Evidence-based toxicology for the 21st century: Opportunities and challenges. ALTEX: Alternatives To Animal Experimentation, 2013, 30, 74-104.	1.5	42
147	Mapping the Human Toxome by Systems Toxicology. Basic and Clinical Pharmacology and Toxicology, 2014, 115, 24-31.	2.5	41
148	Gene-Environment Interactions in Developmental Neurotoxicity: a Case Study of Synergy between Chlorpyrifos and CHD8 Knockout in Human Brain Spheres. Environmental Health Perspectives, 2021, 129, 77001.	6.0	41
149	Computational approaches to chemical hazard assessment. ALTEX: Alternatives To Animal Experimentation, 2017, 34, 459-478.	1.5	41
150	Metabolomics Reveals Metabolic Alterations by Intrauterine Growth Restriction in the Fetal Rabbit Brain. PLoS ONE, 2013, 8, e64545.	2.5	40
151	Systematic Review of Membrane Components of Gram-Positive Bacteria Responsible as Pyrogens for Inducing Human Monocyte/Macrophage Cytokine Release. Frontiers in Pharmacology, 2012, 3, 56.	3.5	39
152	Good cell culture practices & in vitro toxicology. Toxicology in Vitro, 2017, 45, 272-277.	2.4	39
153	Points of Reference in the Validation Process. ATLA Alternatives To Laboratory Animals, 2008, 36, 343-352.	1.0	38
154	Avoiding Regrettable Substitutions: Green Toxicology for Sustainable Chemistry. ACS Sustainable Chemistry and Engineering, 2021, 9, 7749-7758.	6.7	38
155	From in vivo to in vitro: The medical device testing paradigm shift. ALTEX: Alternatives To Animal Experimentation, 2017, 34, 479-500.	1.5	38
156	Optimizing drug discovery by Investigative Toxicology: Current and future trends. ALTEX: Alternatives To Animal Experimentation, 2019, 36, 289-313.	1.5	38
157	Cellular Recognition of Trimyristoylated Peptide or Enterobacterial Lipopolysaccharide via Both TLR2 and TLR4. Journal of Biological Chemistry, 2007, 282, 13190-13198.	3.4	37
158	An expert consortium review of the EC-commissioned report "Alternative (Non-Animal) Methods for Cosmetics Testing: Current Status and Future Prospects" 2010. ALTEX: Alternatives To Animal Experimentation, 2011, 28, 183-209.	1.5	37
159	[Detection of Pyrogens using human whole blood]. ALTEX: Alternatives To Animal Experimentation, 1995, 12, 70-75.	1.5	37
160	The dawning of a new age of toxicology. ALTEX: Alternatives To Animal Experimentation, 2008, 25, 103-14.	1.5	36
161	A Perspective and a New Integrated Computational Strategy for Skin Sensitization Assessment. ACS Sustainable Chemistry and Engineering, 2018, 6, 2845-2859.	6.7	35
162	Organophosphorus flame retardants are developmental neurotoxicants in a rat primary brain sphere in vitro model. Archives of Toxicology, 2021, 95, 207-228.	4.2	35

#	ARTICLE	IF	CITATIONS
163	Long-term effects of chromium on morphological and immunological parameters of Wistar rats. Food and Chemical Toxicology, 2019, 133, 110748.	3.6	34
164	Animal use for science in Europe. ALTEX: Alternatives To Animal Experimentation, 2015, 32, 261-274.	1.5	34
165	MPTP's Pathway of Toxicity Indicates Central Role of Transcription Factor SP1. Archives of Toxicology, 2015, 89, 743-755.	4.2	33
166	Safer chemicals using less animals: kick-off of the European ONTOX project. Toxicology, 2021, 458, 152846.	4.2	33
167	Analysis of public oral toxicity data from REACH registrations 2008-2014. ALTEX: Alternatives To Animal Experimentation, 2016, 33, 111-22.	1.5	32
168	Harnessing the power of novel animal-free test methods for the development of COVID-19 drugs and vaccines. Archives of Toxicology, 2020, 94, 2263-2272.	4.2	32
169	Opinion versus evidence for the need to move away from animal testing. ALTEX: Alternatives To Animal Experimentation, 2017, 34, 193-200.	1.5	31
170	Comment on "Not Lipoteichoic Acid but Lipoproteins Appear to Be the Dominant Immunobiologically Active Compounds in <i>Staphylococcus aureus</i> ". Journal of Immunology, 2007, 178, 2610-2610.	0.8	30
171	Probabilistic hazard assessment for skin sensitization potency by dose-response modeling using feature elimination instead of quantitative structure-activity relationships. Journal of Applied Toxicology, 2015, 35, 1361-1371.	2.8	30
172	The human whole blood pyrogen test " lessons learned in twenty years. ALTEX: Alternatives To Animal Experimentation, 2015, 32, 79-100.	1.5	30
173	Systems Toxicology. International Journal of Toxicology, 2015, 34, 346-348.	1.2	30
174	Advances in 3D neuronal microphysiological systems: towards a functional nervous system on a chip. In Vitro Cellular and Developmental Biology - Animal, 2021, 57, 191-206.	1.5	30
175	Quality assurance of metabolomics. ALTEX: Alternatives To Animal Experimentation, 2015, 32, 319-326.	1.5	30
176	Stage-specific metabolic features of differentiating neurons: Implications for toxicant sensitivity. Toxicology and Applied Pharmacology, 2018, 354, 64-80.	2.8	29
177	Human iPSC-Derived Model to Study Myelin Disruption. International Journal of Molecular Sciences, 2021, 22, 9473.	4.1	28
178	Probabilistic risk assessment " the keystone for the future of toxicology. ALTEX: Alternatives To Animal Experimentation, 2022, 39, 3-29.	1.5	28
179	ClIPro: a new read-across portal to fill data gaps using public large-scale chemical and biological data. Bioinformatics, 2017, 33, 464-466.	4.1	27
180	Toxicity, recovery, and resilience in a 3D dopaminergic neuronal in vitro model exposed to rotenone. Archives of Toxicology, 2018, 92, 2587-2606.	4.2	27

#	ARTICLE	IF	CITATIONS
181	Immunomodulatory action of G-CSF In a rat model of endotoxin-induced liver injury: an intravital microscopic analysis of Kupffer cell and leukocyte response. Journal of Leukocyte Biology, 1997, 62, 710-718.	3.3	26
182	Endotoxin-inducible granulocyte-mediated hepatocytotoxicity requires adhesion and serine protease release. Journal of Leukocyte Biology, 1996, 60, 633-643.	3.3	25
183	Green Toxicologyâ€”Know Early About and Avoid Toxic Product Liabilities. Toxicological Sciences, 2018, 161, 285-289.	3.1	25
184	Information-dependent enrichment analysis reveals time-dependent transcriptional regulation of the estrogen pathway of toxicity. Archives of Toxicology, 2017, 91, 1749-1762.	4.2	24
185	Temporal Sequence of Pulmonary and Systemic Inflammatory Responses to Graded Polymicrobial Peritonitis in Mice. Infection and Immunity, 1999, 67, 5642-5650.	2.2	24
186	Good Cell and Tissue Culture Practice 2.0 (GCCP 2.0) â€“ Draft for Stakeholder Discussion and Call for Action. ALTEX: Alternatives To Animal Experimentation, 2020, 37, 490-492.	1.5	24
187	High sensitivity pyrogen testing in water and dialysis solutions. Journal of Immunological Methods, 2008, 336, 64-70.	1.4	22
188	FutureTox III: Bridges for Translation. Toxicological Sciences, 2017, 155, 22-31.	3.1	22
189	Evolution of toxicological science: the need for change. International Journal of Risk Assessment and Management, 2017, 20, 21.	0.1	22
190	Lessons learned, challenges, and opportunities: The U.S. Endocrine Disruptor Screening Program. ALTEX: Alternatives To Animal Experimentation, 2014, 31, 63-78.	1.5	22
191	New European Union statistics on laboratory animal use â€“ what really counts!. ALTEX: Alternatives To Animal Experimentation, 2020, 37, 167-186.	1.5	22
192	ECVAMâ€™s ongoing activities in the area of acute oral toxicity. Toxicology in Vitro, 2009, 23, 1535-1540.	2.4	21
193	3D Differentiation of LUHMES Cell Line to Study Recovery and Delayed Neurotoxic Effects. Current Protocols in Toxicology / Editorial Board, Mahin D Maines (editor-in-chief) [et Al], 2017, 73, 11.23.1-11.23.28.	1.1	21
194	Challenges and Scientific Prospects of the Newest Generation of mRNA-Based Vaccines against SARS-CoV-2. Life, 2021, 11, 907.	2.4	20
195	Rebooting the generally recognized as safe (GRAS) approach for food additive safety in the US. ALTEX: Alternatives To Animal Experimentation, 2018, 35, 3-25.	1.5	20
196	How to leverage an endogenous immune defense mechanism: The example of granulocyte colony-stimulating factor. Critical Care Medicine, 2003, 31, S65-S75.	0.9	19
197	3D â€“ A new dimension of in vitro research. Advanced Drug Delivery Reviews, 2014, 69-70, vi.	13.7	19
198	Key read across framework components and biology based improvements. Mutation Research - Genetic Toxicology and Environmental Mutagenesis, 2020, 853, 503172.	1.7	19

#	ARTICLE	IF	CITATIONS
199	Correlating in vitro data to in vivo findings for risk assessment. ALTEX: Alternatives To Animal Experimentation, 2014, 31, 79-90.	1.5	18
200	Nanotoxicology: “the end of the beginning” Signs on the roadmap to a strategy for assuring the safe application and use of nanomaterials. ALTEX: Alternatives To Animal Experimentation, 2011, 28, 236-241.	1.5	18
201	Towards tailored assays for cell-based approaches to toxicity testing. ALTEX: Alternatives To Animal Experimentation, 2012, 29, 359-372.	1.5	18
202	Guidance document on Good Cell and Tissue Culture Practice 2.0 (GCCP 2.0). ALTEX: Alternatives To Animal Experimentation, 2021, , .	1.5	18
203	Assessment of a new cell culture perfusion apparatus for in vitro chronic toxicity testing. Part 2: toxicological evaluation. ALTEX: Alternatives To Animal Experimentation, 2004, 21, 61-6.	1.5	18
204	Utility of the adverse outcome pathway concept in drug development. Expert Opinion on Drug Metabolism and Toxicology, 2017, 13, 1-3.	3.3	17
205	Induction of IL-10 balanced immune profiles following exposure to LTA from <i>Staphylococcus epidermidis</i> . Experimental Dermatology, 2018, 27, 318-326.	2.9	17
206	Human Oligodendrocytes and Myelin In Vitro to Evaluate Developmental Neurotoxicity. International Journal of Molecular Sciences, 2021, 22, 7929.	4.1	17
207	Pyrogen testing revisited on occasion of the 25th anniversary of the whole blood monocyte activation test. ALTEX: Alternatives To Animal Experimentation, 2021, 38, 3-19.	1.5	17
208	Applicability of the Monocyte Activation Test (MAT) for hyperimmune sera in the routine of the quality control laboratory: Comparison with the Rabbit Pyrogen Test (RPT). Toxicology in Vitro, 2016, 32, 70-75.	2.4	16
209	Predicting toxicity of chemicals: software beats animal testing. EFSA Journal, 2019, 17, e170710.	1.8	16
210	<i>Staphylococcus aureus</i> derived lipoteichoic acid induces temporary T-cell paralysis independent of Toll-like receptor 2. Journal of Allergy and Clinical Immunology, 2016, 138, 780-790.e6.	2.9	15
211	Making Big Sense From Big Data. Frontiers in Big Data, 2018, 1, 5.	2.9	15
212	E-cigarettes and the need and opportunities for alternatives to animal testing. ALTEX: Alternatives To Animal Experimentation, 2016, 33, 211-224.	1.5	15
213	Comparison and Validation of Novel Pyrogen Tests Based on the Human Fever Reaction. ATLA Alternatives To Laboratory Animals, 2002, 30, 49-51.	1.0	14
214	Functionally Enigmatic Genes in Cancer: Using TCGA Data to Map the Limitations of Annotations. Scientific Reports, 2020, 10, 4106.	3.3	14
215	Continuing animal tests on cosmetic ingredients for REACH in the EU. ALTEX: Alternatives To Animal Experimentation, 2021, 38, 653-668.	1.5	14
216	The need for strategic development of safety sciences. ALTEX: Alternatives To Animal Experimentation, 2017, 34, 3-21.	1.5	14

#	ARTICLE	IF	CITATIONS
217	Replacement of animal testing by integrated approaches to testing and assessment (IATA): a call for in vitro. Archives of Toxicology, 2022, 96, 1935-1950.	4.2	14
218	Metabolomic network analysis of estrogen-stimulated MCF-7 cells: a comparison of overrepresentation analysis, quantitative enrichment analysis and pathway analysis versus metabolite network analysis. Archives of Toxicology, 2017, 91, 217-230.	4.2	13
219	The state of the scientific revolution in toxicology. ALTEX: Alternatives To Animal Experimentation, 2021, 38, 379-386.	1.5	13
220	Building Shared Experience to Advance Practical Application of Pathway-Based Toxicology: Liver Toxicity Mode-of-Action. ALTEX: Alternatives To Animal Experimentation, 2014, 31, 500-19.	1.5	13
221	Optimisation of the Post-validation Process. ATLA Alternatives To Laboratory Animals, 2008, 36, 353-366.	1.0	12
222	Pathway-Based Approaches for Environmental Monitoring and Risk Assessment. Environmental Science & Technology, 2016, 50, 10295-10296.	10.0	12
223	Organotypic Models to Study Human Glioblastoma: Studying the Beast in Its Ecosystem. IScience, 2020, 23, 101633.	4.1	12
224	Evaluation of the global performance of eight in silico skin sensitization models using human data. ALTEX: Alternatives To Animal Experimentation, 2021, 38, 33-48.	1.5	12
225	Assessment of a new cell culture perfusion apparatus for in vitro chronic toxicity testing. Part 1: technical description. ALTEX: Alternatives To Animal Experimentation, 2004, 21, 51-60.	1.5	12
226	Human iPSC 3D brain model as a tool to study chemical-induced dopaminergic neuronal toxicity. Neurobiology of Disease, 2022, 169, 105719.	4.4	12
227	Polypropylene glycol is a selective binding inhibitor for LTA and other structurally related TLR2 agonists. European Journal of Immunology, 2008, 38, 797-808.	2.9	11
228	A Modular Approach to the Extended One-generation Reproduction Toxicity Study. ATLA Alternatives To Laboratory Animals, 2009, 37, 219-225.	1.0	11
229	Mapping Chemical Respiratory Sensitization: How Useful Are Our Current Computational Tools?. Chemical Research in Toxicology, 2021, 34, 473-482.	3.3	11
230	The Rise of Three Rs Centres and Platforms in Europe*. ATLA Alternatives To Laboratory Animals, 2022, 50, 90-120.	1.0	11
231	iPS, organoids and 3D models as advanced tools for in vitro toxicology. ALTEX: Alternatives To Animal Experimentation, 2020, 37, 136-140.	1.5	10
232	Pathway-Based Approaches for Environmental Monitoring and Risk Assessment. Chemical Research in Toxicology, 2016, 29, 1789-1790.	3.3	9
233	Adaptation of the Systematic Review Framework to the Assessment of Toxicological Test Methods: Challenges and Lessons Learned With the Zebrafish Embryotoxicity Test. Toxicological Sciences, 2019, 171, 56-68.	3.1	9
234	Food for thought – on education in alternative methods in toxicology. ALTEX: Alternatives To Animal Experimentation, 2009, 26, 255-263.	1.5	9

#	ARTICLE	IF	CITATIONS
235	Glossary of reference terms for alternative test methods and their validation. ALTEX: Alternatives To Animal Experimentation, 2008, 31, 319-335.	1.5	9
236	A human-derived 3D brain organoid model to study JC virus infection. Journal of NeuroVirology, 2022, 28, 17-26.	2.1	9
237	The Human Toxome Collaboratorium: A Shared Environment for Multi-Omic Computational Collaboration within a Consortium. Frontiers in Pharmacology, 2016, 6, 322.	3.5	8
238	Standardized pyrogen testing of medical products with the bacterial endotoxin test (BET) as a substitute for rabbit Pyrogen testing (RPT): A scoping review. Toxicology in Vitro, 2021, 74, 105160.	2.4	8
239	Assessment of the combined effects of chromium and benzene on the rat neuroendocrine and immune systems. Environmental Research, 2022, 207, 112096.	7.5	8
240	Joint Bounding of Peaks Across Samples Improves Differential Analysis in Mass Spectrometry-Based Metabolomics. Analytical Chemistry, 2017, 89, 3517-3523.	6.5	7
241	Alternative Approaches for Carcinogenicity and Reproductive Toxicity. , 2019, , 209-217.		7
242	Social injustice in environmental health: A call for fortitude. Environmental Research, 2021, 194, 110675.	7.5	7
243	A Systematic Review to Compare Chemical Hazard Predictions of the Zebrafish Embryotoxicity Test With Mammalian Prenatal Developmental Toxicity. Toxicological Sciences, 2021, 183, 14-35.	3.1	7
244	Editorial: Artificial Intelligence for Precision Medicine. Frontiers in Artificial Intelligence, 2021, 4, 834645.	3.4	7
245	Whole Blood Cytokine Response to Local Traffic-Related Particulate Matter in Peruvian Children With and Without Asthma. Frontiers in Pharmacology, 2017, 8, 157.	3.5	6
246	Missing the Difference Between Big Data and Artificial Intelligence in RASAR Versus Traditional QSAR. Toxicological Sciences, 2019, 167, 4-5.	3.1	6
247	Using the monocyte activation test as a stand-alone release test for medical devices. ALTEX: Alternatives To Animal Experimentation, 2021, 38, 151-156.	1.5	6
248	Similarities and Differences in Gene Expression Networks Between the Breast Cancer Cell Line Michigan Cancer Foundation-7 and Invasive Human Breast Cancer Tissues. Frontiers in Artificial Intelligence, 2021, 4, 674370.	3.4	6
249	COVID-19 “ prime time for microphysiological systems, as illustrated for the brain. ALTEX: Alternatives To Animal Experimentation, 2021, 38, 535-549.	1.5	6
250	Novel chemical hazard characterisation approaches. EFSA Journal, 2016, 14, e00506.	1.8	3
251	Systems Toxicology II: A Special Issue. Chemical Research in Toxicology, 2017, 30, 869-869.	3.3	3
252	The Center for Alternatives to Animal Testing in the USA and Europe. , 2019, , 109-117.		3

#	ARTICLE	IF	CITATIONS
253	Systematic review in evidence-based risk assessment. ALTEX: Alternatives To Animal Experimentation, 2021, , .	1.5	3
254	Food for thought – the first ten years. ALTEX: Alternatives To Animal Experimentation, 2017, 34, 187-192.	1.5	3
255	Evidence-Based Toxicology. Advances in Experimental Medicine and Biology, 2016, 856, 231-241.	1.6	2
256	Twenty-First Century In Vitro Toxicology Testing Methods and the Assessment of e-Cigarettes. Applied in Vitro Toxicology, 2017, 3, 3-9.	1.1	2
257	Evidence Integration in the Era of Information Flooding – The Advent of the Comprehensive Review. Frontiers in Public Health, 2021, 9, 763828.	2.7	2
258	Human 3D In Vitro Models for Developmental Neurotoxicity. , 2018, , 163-172.		1
259	Brain Organoids to Study SARS-Cov-2 Infection of Developing CNS. Toxicology Letters, 2021, 350, S69.	0.8	1
260	Fine and Ultrafine Particles Differentially Affect the PFA-100-Times and Raise Proinflammatory Cytokines in Human Blood.. Blood, 2005, 106, 2640-2640.	1.4	1
261	The Humane Research and Testing Act: Advancing science by creating a new Center for Alternatives at the US National Institutes of Health. ALTEX: Alternatives To Animal Experimentation, 2021, 38, 678-680.	1.5	1
262	When the boundaries between science and politics are blurred. Toxicology Reports, 2020, 7, 1607.	3.3	1
263	Metabolic flux analysis in human dopaminergic neurons under toxicant stress. Toxicology Letters, 2017, 280, S148.	0.8	0
264	Can TTIP Improve Laboratory Animal Welfare in Safety Testing and 3Rs?. ILAR Journal, 2017, 57, 358-367.	1.8	0
265	The exposome – a new paradigm for non-animal toxicology and integrated risk assessment. , 2021, , 23-30.		0
266	Safety science in the 21st century – a scientific revolution in its making. , 2021, , 51-59.		0
267	Quantification of Oligodendrocytes and Myelin in Human iPSC-Derived 3D Brain Cell Cultures (BrainSpheres). Neuromethods, 2021, , 459-471.	0.3	0
268	Green Toxicology Meets Nanotoxicology: The Process of Sustainable Nanomaterial Development and Use. , 2019, , 495-506.		0
269	Open letter: Selection of a new Executive Director of the European Chemicals Agency (ECHA) provides an opportunity for the EU to lead in the field of chemicals management and implementation of innovative science. ALTEX: Alternatives To Animal Experimentation, 2021, , .	1.5	0
270	EFSA – Johns Hopkins Food Safety Symposium 2019. ALTEX: Alternatives To Animal Experimentation, 2020, 37, 312-314.	1.5	0

#	ARTICLE	IF	CITATIONS
271	Alternative methods and citizen science. ALTEX: Alternatives To Animal Experimentation, 2022, 39, 159-160.	1.5	0