Paul L Carmichael

List of Publications by Year in Descending Order

94 papers	3,458 citations	33 h-index	56 g-index
105 ext. papers	3,871 ext. citations	4.7 avg, IF	4.84 L-index

#	Paper	IF	Citations
94	Implementing organ-on-chip in a next-generation risk assessment of chemicals: a review.. *Archives of Toxicology*, **2022**, 96, 711	5.8	5
93	Beyond AOPs: A Mechanistic Evaluation of NAMs in DART Testing.. *Frontiers in Toxicology*, **2022**, 4, 838466	3.6	2
92	Next generation risk assessment of human exposure to anti-androgens using newly defined comparator compound values. *Toxicology in Vitro*, **2021**, 73, 105132	3.6	3
91	Next generation risk assessment (NGRA): Bridging in vitro points-of-departure to human safety assessment using physiologically-based kinetic (PBK) modelling - A case study of doxorubicin with dose metrics considerations. *Toxicology in Vitro*, **2021**, 74, 105171	3.6	1
90	Identifying and Characterizing Stress Pathways of Concern for Consumer Safety in Next-Generation Risk Assessment. *Toxicological Sciences*, **2020**, 176, 11-33	4.4	22
89	Integration of in vitro data from three dimensionally cultured HepaRG cells and physiologically based pharmacokinetic modeling for assessment of acetaminophen hepatotoxicity. *Regulatory Toxicology and Pharmacology*, **2020**, 114, 104661	3.4	6
88	Integrating in vitro testing and physiologically-based pharmacokinetic (PBPK) modelling for chemical liver toxicity assessment-A case study of troglitazone. *Environmental Toxicology and Pharmacology*, **2020**, 74, 103296	5.8	4
87	Vision of a near future: Bridging the human health-environment divide. Toward an integrated strategy to understand mechanisms across species for chemical safety assessment. *Toxicology in Vitro*, **2020**, 62, 104692	3.6	19
86	The Alginate Immobilization of Metabolic Enzymes Platform Retrofits an Estrogen Receptor Transactivation Assay With Metabolic Competence. *Toxicological Sciences*, **2020**, 178, 281-301	4.4	7
85	A Next-Generation Risk Assessment Case Study for Coumarin in Cosmetic Products. *Toxicological Sciences*, **2020**, 176, 236-252	4.4	36
84	Challenges in working towards an internal threshold of toxicological concern (iTTC) for use in the safety assessment of cosmetics: Discussions from the Cosmetics Europe iTTC Working Group workshop. *Regulatory Toxicology and Pharmacology*, **2019**, 103, 63-72	3.4	15
83	A human-derived prostate co-culture microtissue model using epithelial (RWPE-1) and stromal (WPMY-1) cell lines. *Toxicology in Vitro*, **2019**, 60, 203-211	3.6	3
82	Novel approaches to derive points of departure for food chemical risk assessment. *Current Opinion in Food Science*, **2019**, 27, 139-144	9.8	3
81	A mode-of-action ontology model for safety evaluation of chemicals: Outcome of a series of workshops on repeated dose toxicity. *Toxicology in Vitro*, **2019**, 59, 44-50	3.6	13
80	Risk prediction for acute kidney injury in acute medical admissions in the UK. *QJM - Monthly Journal of the Association of Physicians*, **2019**, 112, 197-205	2.7	4
79	Employing Dietary Comparators to Perform Risk Assessments for Anti-Androgens Without Using Animal Data. *Toxicological Sciences*, **2019**, 167, 375-384	4.4	8
78	mRNA transfection retrofits cell-based assays with xenobiotic metabolism. *Journal of Pharmacological and Toxicological Methods*, **2018**, 92, 77-94	1.7	24

77	Flutamide Induces Hepatic Cell Death and Mitochondrial Dysfunction via Inhibition of Nrf2-Mediated Heme Oxygenase-1. *Oxidative Medicine and Cellular Longevity*, **2018**, 2018, 8017073	6.7	7
76	Doxorubicin-induced mitophagy and mitochondrial damage is associated with dysregulation of the PINK1/parkin pathway. *Toxicology in Vitro*, **2018**, 51, 1-10	3.6	64
75	Case Studies in Cellular Stress: Defining Adversity/Adaptation Tipping Points. *Applied in Vitro Toxicology*, **2017**, 3, 199-210	1.3	7
74	Erythropoietin activates SIRT1 to protect human cardiomyocytes against doxorubicin-induced mitochondrial dysfunction and toxicity. *Toxicology Letters*, **2017**, 275, 28-38	4.4	50
73	Non-cytotoxic concentrations of acetaminophen induced mitochondrial biogenesis and antioxidant response in HepG2 cells. *Environmental Toxicology and Pharmacology*, **2016**, 46, 71-79	5.8	11
72	Pathway Based Toxicology and Fit-for-Purpose Assays. *Advances in Experimental Medicine and Biology*, **2016**, 856, 205-230	3.6	7
71	A PGC-1Œ-Mediated Transcriptional Network Maintains Mitochondrial Redox and Bioenergetic Homeostasis against Doxorubicin-Induced Toxicity in Human Cardiomyocytes: Implementation of TT21C. *Toxicological Sciences*, **2016**, 150, 400-17	4.4	29
70	Contributions of DNA repair and damage response pathways to the non-linear genotoxic responses of alkylating agents. *Mutation Research - Reviews in Mutation Research*, **2016**, 767, 77-91	7	26
69	Suppression of NRF2-ARE activity sensitizes chemotherapeutic agent-induced cytotoxicity in human acute monocytic leukemia cells. *Toxicology and Applied Pharmacology*, **2016**, 292, 1-7	4.6	26
68	International Harmonization and Cooperation in the Validation of Alternative Methods. *Advances in Experimental Medicine and Biology*, **2016**, 856, 343-386	3.6	11
67	Towards a non-animal risk assessment for anti-androgenic effects in humans. *Environment International*, **2015**, 83, 94-106	12.9	18
66	Adaptive Posttranslational Control in Cellular Stress Response Pathways and Its Relationship to Toxicity Testing and Safety Assessment. *Toxicological Sciences*, **2015**, 147, 302-16	4.4	46
65	Classification of agents using Syrian hamster embryo (SHE) cell transformation assay (CTA) with ATR-FTIR spectroscopy and multivariate analysis. *Mutagenesis*, **2015**, 30, 603-12	2.8	4
64	Implementing Toxicity Testing in the 21st Century (TT21C): Making safety decisions using toxicity pathways, and progress in a prototype risk assessment. *Toxicology*, **2015**, 332, 102-11	4.4	100
63	Measuring similarity and improving stability in biomarker identification methods applied to Fourier-transform infrared (FTIR) spectroscopy. *Journal of Biophotonics*, **2014**, 7, 254-65	3.1	23
62	Chemical safety without animals. *Nature Biotechnology*, **2014**, 32, 541-3	44.5	3
61	Reduction of misleading ("false") positive results in mammalian cell genotoxicity assays. III: sensitivity of human cell types to known genotoxic agents. *Mutation Research - Genetic Toxicology and Environmental Mutagenesis*, **2014**, 767, 28-36	3	41
60	Profiling dose-dependent activation of p53-mediated signaling pathways by chemicals with distinct mechanisms of DNA damage. *Toxicological Sciences*, **2014**, 142, 56-73	4.4	38

59	Pathways of Toxicity. *ALTEX: Alternatives To Animal Experimentation*, **2014**, 31, 53-61	4.3	59
58	Assessing dose-dependent differences in DNA-damage, p53 response and genotoxicity for quercetin and curcumin. *Toxicology in Vitro*, **2013**, 27, 1877-87	3.6	26
57	IRootLab: a free and open-source MATLAB toolbox for vibrational biospectroscopy data analysis. *Bioinformatics*, **2013**, 29, 1095-7	7.2	112
56	Genomic phenotyping by barcode sequencing broadly distinguishes between alkylating agents, oxidizing agents, and non-genotoxic agents, and reveals a role for aromatic amino acids in cellular recovery after quinone exposure. *PLoS ONE*, **2013**, 8, e73736	3.7	2
55	China begins to position for leadership on responsible risk-based global chemicals management. *Environmental Pollution*, **2012**, 165, 170-3	9.3	7
54	Integrated in silico approaches for the prediction of Ames test mutagenicity. *Journal of Computer-Aided Molecular Design*, **2012**, 26, 1017-33	4.2	9
53	Reduction of misleading ("false") positive results in mammalian cell genotoxicity assays. I. Choice of cell type. *Mutation Research - Genetic Toxicology and Environmental Mutagenesis*, **2012**, 742, 11-25	3	154
52	Reduction of misleading ("false") positive results in mammalian cell genotoxicity assays. II. Importance of accurate toxicity measurement. *Mutation Research - Genetic Toxicology and Environmental Mutagenesis*, **2012**, 747, 104-117	3	62
51	Extracting biological information with computational analysis of Fourier-transform infrared (FTIR) biospectroscopy datasets: current practices to future perspectives. *Analyst, The*, **2012**, 137, 3202-15	5	167
50	Isolating stem cells in the inter-follicular epidermis employing synchrotron radiation-based Fourier-transform infrared microspectroscopy and focal plane array imaging. *Analytical and Bioanalytical Chemistry*, **2012**, 404, 1745-58	4.4	25
49	Pro-oxidant induced DNA damage in human lymphoblastoid cells: homeostatic mechanisms of genotoxic tolerance. *Toxicological Sciences*, **2012**, 128, 387-97	4.4	27
48	The Syrian hamster embryo (SHE) assay (pH 6.7): mechanisms of cell transformation and application of vibrational spectroscopy to objectively score endpoint alterations. *Mutagenesis*, **2012**, 27, 257-66	2.8	9
47	Cell transformation assays for prediction of carcinogenic potential: state of the science and future research needs. *Mutagenesis*, **2012**, 27, 93-101	2.8	62
46	Classification of test agent-specific effects in the Syrian hamster embryo assay (pH 6.7) using infrared spectroscopy with computational analysis. *Mutagenesis*, **2012**, 27, 375-82	2.8	6
45	Genomic phenotyping of the essential and non-essential yeast genome detects novel pathways for alkylation resistance. *BMC Systems Biology*, **2011**, 5, 157	3.5	17
44	Biospectroscopy to metabolically profile biomolecular structure: a multistage approach linking computational analysis with biomarkers. *Journal of Proteome Research*, **2011**, 10, 1437-48	5.6	140
43	Toxicity testing in the 21 century: defining new risk assessment approaches based on perturbation of intracellular toxicity pathways. *PLoS ONE*, **2011**, 6, e20887	3.7	148
42	Can case study approaches speed implementation of the NRC report: "toxicity testing in the 21st century: a vision and a strategy?". *ALTEX: Alternatives To Animal Experimentation*, **2011**, 28, 175-82	4.3	34

41	Syrian hamster embryo (SHE) assay (pH 6.7) coupled with infrared spectroscopy and chemometrics towards toxicological assessment. *Analyst, The*, **2010**, 135, 3266-72	5	44
40	A tiered approach to the use of alternatives to animal testing for the safety assessment of cosmetics: genotoxicity. A COLIPA analysis. *Regulatory Toxicology and Pharmacology*, **2010**, 57, 315-24	3.4	50
39	Microspectroscopy of spectral biomarkers associated with human corneal stem cells. *Molecular Vision*, **2010**, 16, 359-68	2.3	30
38	Assuring safety without animal testing: Unilever's ongoing research programme to deliver novel ways to assure consumer safety. *ALTEX: Alternatives To Animal Experimentation*, **2010**, 27, 61-5	4.3	4
37	Discrimination of a transformation phenotype in Syrian golden hamster embryo (SHE) cells using ATR-FTIR spectroscopy. *Toxicology*, **2009**, 258, 33-8	4.4	23
36	A metabolomic and multivariate statistical process to assess the effects of genotoxins in Saccharomyces cerevisiae. *Molecular BioSystems*, **2009**, 5, 1913-24		6
35	Non-animal approaches for consumer safety risk assessments: Unilever's scientific research programme. *ATLA Alternatives To Laboratory Animals*, **2009**, 37, 595-610	2.1	12
34	The carcinoGENOMICS project: critical selection of model compounds for the development of omics-based in vitro carcinogenicity screening assays. *Mutation Research - Reviews in Mutation Research*, **2008**, 659, 202-10	7	50
33	Assuring consumer safety without animal testing: a feasibility case study for skin sensitisation. *ATLA Alternatives To Laboratory Animals*, **2008**, 36, 557-68	2.1	18
32	Evaluation of an automated in vitro micronucleus assay in CHO-K1 cells. *Mutation Research - Genetic Toxicology and Environmental Mutagenesis*, **2007**, 630, 1-13	3	80
31	Development of a human keratinocyte cell line that is up-regulated for the expression of superoxide dismutase 1 (SOD1). *Toxicology*, **2006**, 226, 74-75	4.4	1
30	Validation of a high throughput bacterial screen for mutagenicity: Incorporation of Salmonella typhimurium strain TA102. *Toxicology*, **2006**, 226, 72-73	4.4	2
29	Gene expression changes induced by estrogen and selective estrogen receptor modulators in primary-cultured human endometrial cells: signals that distinguish the human carcinogen tamoxifen. *Toxicology*, **2005**, 206, 91-109	4.4	27
28	Different levels of polybrominated diphenyl ethers (PBDEs) and chlorinated compounds in breast milk from two U.K. Regions. *Environmental Health Perspectives*, **2004**, 112, 1085-91	8.4	180
27	Identification of transcriptional biomarkers induced by SERMS in human endometrial cells using multivariate analysis of DNA microarrays. *Biomarkers*, **2004**, 9, 447-60	2.6	2
26	Electrospray ionization-tandem mass spectrometry and 32P-postlabeling analyses of tamoxifen-DNA adducts in humans. *Journal of the National Cancer Institute*, **2004**, 96, 1099-104	9.7	35
25	Correlation of tumors with DNA adducts from methyl eugenol and tamoxifen in rats. *Toxicological Sciences*, **2004**, 79, 38-40	4.4	15
24	Gene expression profiling of p53(+/-) knockout and wild-type mice following diethylstilbestrol administration. *IUBMB Life*, **2004**, 56, 409-16	4.7	5

23	Percutaneous penetration and genotoxicity of 4,4Smethylenedianiline through rat and human skin in vitro. *Toxicology*, **2004**, 196, 65-75	4.4	18
22	A comparison of gene expression changes in response to diethylstilbestrol treatment in wild-type and p53+/- hemizygous knockout mice using focussed arrays. *Toxicology*, **2003**, 185, 49-57	4.4	10
21	Correspondence regarding M. Sharma et al., "Antioxidant inhibits tamoxifen-DNA adducts in endometrial explant culture". *Biochemical and Biophysical Research Communications*, **2003**, 310, 1039	3.4	4
20	Mechanisms of hormonal carcinogenesis in the p53+/- hemizygous knockout mouse: studies with diethylstilbestrol. *Toxicologic Pathology*, **2001**, 29 Suppl, 155-60	2.1	12
19	N-demethylation accompanies alpha-hydroxylation in the metabolic activation of tamoxifen in rat liver cells. *Carcinogenesis*, **1999**, 20, 2003-9	4.6	26
18	Comparison of the formation of 8-hydroxy-2Sdeoxyguanosine and single- and double-strand breaks in DNA mediated by fenton reactions. *Chemical Research in Toxicology*, **1998**, 11, 420-7	4	123
17	Mechanisms of action of antiestrogens: relevance to clinical benefits and risks. *Cancer Investigation*, **1998**, 16, 604-11	2.1	23
16	Detection of low levels of DNA damage arising from exposure of humans to chemical carcinogens. *Archives of Toxicology Supplement*, **1998**, 20, 199-205		1
15	Generation of putative intrastrand cross-links and strand breaks in DNA by transition metal ion-mediated oxygen radical attack. *Chemical Research in Toxicology*, **1997**, 10, 393-400	4	145
14	Anergic T cells effect linked suppression. *European Journal of Immunology*, **1997**, 27, 3191-7	6.1	76
13	Metabolic activation and DNA binding of food mutagens and other environmental carcinogens in human mammary epithelial cells. *Carcinogenesis*, **1996**, 17, 1769-72	4.6	40
12	Activation of tamoxifen and its metabolite alpha-hydroxytamoxifen to DNA-binding products: comparisons between human, rat and mouse hepatocytes. *Carcinogenesis*, **1996**, 17, 89-94	4.6	86
11	Analysis of tamoxifen and its metabolites by on-line capillary electrophoresis-electrospray ionization mass spectrometry employing nonaqueous media containing surfactants. *Analytical Chemistry*, **1996**, 68, 668-74	7.8	122
10	Tamoxifen does not form detectable DNA adducts in white blood cells of breast cancer patients. *Carcinogenesis*, **1996**, 17, 1149-52	4.6	25
9	Detection of bulky DNA lesions in the liver of patients with WilsonS disease and primary haemochromatosis. *Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis*, **1995**, 326, 235-43	3.3	51
8	Induction of activating mutations in the human c-Ha-ras-1 proto-oncogene by oxygen free radicals. *Molecular Carcinogenesis*, **1994**, 11, 170-5	5	68
7	Genotoxic effects of subacute treatments with wood dust extracts on the nasal epithelium of rats: assessment by the micronucleus and 32P-postlabelling. *Archives of Toxicology*, **1993**, 67, 586-9	5.8	19
6	Detection and characterization by 32P-postlabelling of DNA adducts induced by a Fenton-type oxygen radical-generating system. *Carcinogenesis*, **1992**, 13, 1127-35	4.6	71

5	DNA adduct formation in mice following treatment with used engine oil and identification of some of the major adducts by 32P-postlabelling. *Cancer Letters*, **1992**, 64, 137-44	9.9	16
4	Differences in susceptibility between crystallins and non-lenticular proteins to copper and H2O2-mediated peptide bond cleavage. *Free Radical Research Communications*, **1991**, 15, 101-10		6
3	Analysis of the polycyclic aromatic hydrocarbon content of petrol and diesel engine lubricating oils and determination of DNA adducts in topically treated mice by 32P-postlabelling. *Carcinogenesis*, **1990**, 11, 2025-32	4.6	54
2	Catabolism of aberrant crystallin in cell-free extracts of bovine lens: effects of animal age. *Biochemical Society Transactions*, **1989**, 17, 181-182	5.1	
1	Differential susceptibility of crystallin and other proteins to free-radical-induced peptide bond cleavage. *Biochemical Society Transactions*, **1989**, 17, 494-495	5.1	