Bevin P Engelward

List of Publications by Year
in descending order

68 papers	3,477 citations	186209 28 h-index	143943 57 g-index
70 all docs	70 docs citations	70 times ranked	5155 citing authors

#	Article	IF	Citations
1	DNA double-strand break repair: From mechanistic understanding to cancer treatment. DNA Repair, 2007, 6, 923-935.	1.3	550
2	The human gut bacterial genotoxin colibactin alkylates DNA. Science, 2019, 363, .	6.0	389
3	Single cell trapping and DNA damage analysis using microwell arrays. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 10008-10013.	3.3	235
4	Inflammation-induced DNA damage, mutations and cancer. DNA Repair, 2019, 83, 102673.	1.3	201
5	Base Excision Repair Intermediates Induce p53-independent Cytotoxic and Genotoxic Responses. Journal of Biological Chemistry, 2003, 278, 39951-39959.	1.6	162
6	High-Throughput Screening Platform for Engineered Nanoparticle-Mediated Genotoxicity Using CometChip Technology. ACS Nano, 2014, 8, 2118-2133.	7.3	140
7	Inflammation-Induced Cell Proliferation Potentiates DNA Damage-Induced Mutations In Vivo. PLoS Genetics, 2015, 11, e1004901.	1.5	120
8	A Chemical and Genetic Approach Together Define the Biological Consequences of 3-Methyladenine Lesions in the Mammalian Genome. Journal of Biological Chemistry, 1998, 273, 5412-5418.	1.6	115
9	<i>Streptococcus pneumoniae</i>secretes hydrogen peroxide leading to DNA damage and apoptosis in lung cells. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E3421-30.	3.3	115
10	House dust miteâ€“induced asthma causes oxidative damage and DNA double-strand breaks in the lungs. Journal of Allergy and Clinical Immunology, 2016, 138, 84-96.e1.	1.5	111
11	Next generation high throughput DNA damage detection platform for genotoxic compound screening. Scientific Reports, 2018, 8, 2771.	1.6	77
12	Recombinational Repair Is Critical for Survival of Escherichia coli Exposed to Nitric Oxide. Journal of Bacteriology, 2001, 183, 131-138.	1.0	67
13	Threshold Effects of Nitric Oxide-Induced Toxicity and Cellular Responses in Wild-Type and p53-Null Human Lymphoblastoid Cells. Chemical Research in Toxicology, 2006, 19, 399-406.	1.7	66
14	Single-cell microarray enables high-throughput evaluation of DNA double-strand breaks and DNA repair inhibitors. Cell Cycle, 2013, 12, 907-915.	1.3	63
15	Influenza infection induces host DNA damage and dynamic DNA damage responses during tissue regeneration. Cellular and Molecular Life Sciences, 2015, 72, 2973-2988.	2.4	62
16	Major Shifts in the Spatio-Temporal Distribution of Lung Antioxidant Enzymes during Influenza Pneumonia. PLoS ONE, 2012, 7, e31494.	1.1	52
17	Pneumococcal Pneumolysin Induces DNA Damage and Cell Cycle Arrest. Scientific Reports, 2016, 6, 22972.	1.6	49
18	Standard fluorescent imaging of live cells is highly genotoxic. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2013, 83A, 552-560.	1.1	47

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19	Spontaneous mitotic homologous recombination at an enhanced yellow fluorescent protein (EYFP) cDNA direct repeat in transgenic mice. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 6325-6330.	3.3	46
20	XRCC1 and base excision repair balance in response to nitric oxide. DNA Repair, 2011, 10, 1282-1293.	1.3	46
21	Micropatterned comet assay enables high throughput and sensitive DNA damage quantification. Mutagenesis, 2015, 30, 11-19.	1.0	45
22	Rosa26-GFP Direct Repeat (RaDR-GFP) Mice Reveal Tissue- and Age-Dependence of Homologous Recombination in Mammals In Vivo. PLoS Genetics, 2014, 10, e1004299.	1.5	44
23	Age-dependent accumulation of recombinant cells in the mouse pancreas revealed by in situ fluorescence imaging. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 11862-11867.	3.3	41
24	Nitric Oxide-Induced Homologous Recombination in Escherichia coli Is Promoted by DNA Glycosylases. Journal of Bacteriology, 2002, 184, 3501-3507.	1.0	36
25	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.	2.4	36
26	CometChip: A High-throughput 96-Well Platform for Measuring DNA Damage in Microarrayed Human Cells. Journal of Visualized Experiments, 2014, , e50607.	0.2	34
27	Molecular Analysis of Serum and Bronchoalveolar Lavage in a Mouse Model of Influenza Reveals Markers of Disease Severity That Can Be Clinically Useful in Humans. PLoS ONE, 2014, 9, e86912.	1.1	32
28	Delineation of the Chemical Pathways Underlying Nitric Oxide-Induced Homologous Recombination in Mammalian Cells. Chemistry and Biology, 2005, 12, 357-369.	6.2	31
29	The development and validation of EpiCometâ€Chip, a modified highâ€throughput comet assay for the assessment of DNA methylation status. Environmental and Molecular Mutagenesis, 2017, 58, 508-521.	0.9	29
30	Sensitive CometChip assay for screening potentially carcinogenic DNA adducts by trapping DNA repair intermediates. Nucleic Acids Research, 2020, 48, e13-e13.	6.5	29
31	Interstrand crosslink-induced homologous recombination carries an increased risk of deletions and insertions. DNA Repair, 2005, 4, 594-605.	1.3	26
32	Genotoxicity of 2,6- and 3,5-Dimethylaniline in Cultured Mammalian Cells: The Role of Reactive Oxygen Species. Toxicological Sciences, 2012, 130, 48-59.	1.4	23
33	K13-Mediated Reduced Susceptibility to Artemisinin in Plasmodium falciparum Is Overlaid on a Trait of Enhanced DNA Damage Repair. Cell Reports, 2020, 32, 107996.	2.9	21
34	Global Cancer Risk From Unregulated Polycyclic Aromatic Hydrocarbons. GeoHealth, 2021, 5, e2021GH000401.	1.9	21
35	Peptide targeting and imaging of damaged lung tissue in influenza-infected mice. Future Microbiology, 2013, 8, 257-269.	1.0	20
36	Towards precision prevention: Technologies for identifying healthy individuals with high risk of disease. Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis, 2017, 800-802, 14-28.	0.4	20

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37	The Parallel Transformations of Polycyclic Aromatic Hydrocarbons in the Body and in the Atmosphere. Environmental Health Perspectives, 2022, 130, 25004.	2.8	19
38	SpheroidChip: Patterned Agarose Microwell Compartments Harboring HepG2 Spheroids are Compatible with Genotoxicity Testing. ACS Biomaterials Science and Engineering, 2020, 6, 2427-2439.	2.6	18
39	Nitric oxide induced S-nitrosation causes base excision repair imbalance. DNA Repair, 2018, 68, 25-33.	1.3	17
40	A Modern Genotoxicity Testing Paradigm: Integration of the High-Throughput CometChipÂ® and the TGx-DDI Transcriptomic Biomarker in Human HepaRGâ„¢ Cell Cultures. Frontiers in Public Health, 2021, 9, 694834.	1.3	17
41	<i>In vivo</i> Recombination After Chronic Damage Exposure Falls to Below Spontaneous Levels in â€œRecombomiceâ€. Molecular Cancer Research, 2004, 2, 567-573.	1.5	17
42	DNA glycosylase activity and cell proliferation are key factors in modulating homologous recombination in vivo. Carcinogenesis, 2014, 35, 2495-2502.	1.3	16
43	Fluorescence Sheds Light on DNA Damage, DNA Repair, and Mutations. Trends in Cancer, 2021, 7, 240-248.	3.8	16
44	Excision of mutagenic replication-blocking lesions suppresses cancer but promotes cytotoxicity and lethality in nitrosamine-exposed mice. Cell Reports, 2021, 34, 108864.	2.9	16
45	Integrated one- and two-photon imaging platform reveals clonal expansion as a major driver of mutation load. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 10314-10319.	3.3	15
46	Cytoplasmic and nuclear toxicity of 3,5-dimethylaminophenol and potential protection by selenocompounds. Food and Chemical Toxicology, 2014, 72, 98-110.	1.8	15
47	Applications of Fluorescence for Detecting Rare Sequence Rearrangements In Vivo. Cell Cycle, 2006, 5, 2715-2719.	1.3	13
48	Tissue-specific differences in the accumulation of sequence rearrangements with age. DNA Repair, 2008, 7, 694-703.	1.3	12
49	p53 null Fluorescent Yellow Direct Repeat (FYDR) mice have normal levels of homologous recombination. DNA Repair, 2011, 10, 1294-1299.	1.3	11
50	Applications of CometChip for Environmental Health Studies. Chemical Research in Toxicology, 2020, 33, 1528-1538.	1.7	11
51	CometChip analysis of human primary lymphocytes enables quantification of inter-individual differences in the kinetics of repair of oxidative DNA damage. Free Radical Biology and Medicine, 2021, 174, 89-99.	1.3	10
52	Automated fluorescence intensity and gradient analysis enables detection of rare fluorescent mutant cells deep within the tissue of RaDR mice. Scientific Reports, 2018, 8, 12108.	1.6	7
53	Microcolony Size Distribution Assay Enables High-Throughput Cell Survival Quantitation. Cell Reports, 2019, 26, 1668-1678.e4.	2.9	7
54	CometChip enables parallel analysis of multiple DNA repair activities. DNA Repair, 2021, 106, 103176.	1.3	7

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55	Antioxidants and selenocompounds inhibit 3,5-dimethylaminophenol toxicity to human urothelial cells. Arhiv Za Higijenu Rada I Toksikologiju, 2019, 70, 18-29.	0.4	7
56	Recombinant cells in the lung increase with age via de novo recombination events and clonal expansion. Environmental and Molecular Mutagenesis, 2017, 58, 135-145.	0.9	6
57	Implications of an epidemiological study showing an association between in utero <scp>NDMA</scp> exposure and childhood cancer. Environmental and Molecular Mutagenesis, 2021, 62, 288-292.	0.9	6
58	Open Access to Research Is in the Public Interest. PLoS Biology, 2007, 5, e48.	2.6	5
59	Analysis of mutations in tumor and normal adjacent tissue via fluorescence detection. Environmental and Molecular Mutagenesis, 2021, 62, 108-123.	0.9	3
60	The flap about ATM and MRE11. Cell Cycle, 2010, 9, 3156-3160.	1.3	2
61	HTS-Compatible CometChip Enables Genetic Screening for Modulators of Apoptosis and DNA Double-Strand Break Repair. SLAS Discovery, 2020, 25, 906-922.	1.4	2
62	MalariaCometChip for high-throughput quantification of DNA damage in Plasmodium falciparum. STAR Protocols, 2021, 2, 100797.	0.5	1
63	DNA Damage after Continuous Irradiation: Yanch and Engelward Respond. Environmental Health Perspectives, 2012, 120, .	2.8	0
64	Radiation Dose-Rate: Engelward and Yanch Respond. Environmental Health Perspectives, 2012, 120, .	2.8	0
65	O21 â€•The role of DNA damage and repair in allergic airway inflammation. Clinical and Translational Allergy, 2014, 4, O21.	1.4	0
66	Visualizing homologous recombination and illustrating DNA repair pathway interaction in vivo via a bioengineered fluorescent reporter system. FASEB Journal, 2012, 26, 454.3.	0.2	0
67	Using the novel RADR mouse to visualize the effects of age and environment on DNA repair in vivo in multiple tissues. FASEB Journal, 2013, 27, 446.3.	0.2	0
68	Recombinant cell-detecting RaDR-GFP in mice reveals an association between genomic instability and radiation-induced-thymic lymphoma.. American Journal of Cancer Research, 2022, 12, 562-573.	1.4	0