Darren J Baker

List of Publications by Year
in descending order

54 papers	15,757 citations	109264 35 h-index	161767 54 g-index
58 all docs	58 docs citations	58 times ranked	15340 citing authors

#	Article	IF	Citations
1	Clearance of p16Ink4a-positive senescent cells delays ageing-associated disorders. Nature, 2011, 479, 232-236.	13.7	2,806
2	Naturally occurring p16Ink4a-positive cells shorten healthy lifespan. Nature, 2016, 530, 184-189.	13.7	2,016
3	Cellular senescence in aging and age-related disease: from mechanisms to therapy. Nature Medicine, 2015, 21, 1424-1435.	15.2	1,547
4	Local clearance of senescent cells attenuates the development of post-traumatic osteoarthritis and creates a pro-regenerative environment. Nature Medicine, 2017, 23, 775-781.	15.2	994
5	Senescent intimal foam cells are deleterious at all stages of atherosclerosis. Science, 2016, 354, 472-477.	6.0	824
6	Cellular senescence in ageing: from mechanisms to therapeutic opportunities. Nature Reviews Molecular Cell Biology, 2021, 22, 75-95.	16.1	812
7	Clearance of senescent glial cells prevents tau-dependent pathology and cognitive decline. Nature, 2018, 562, 578-582.	13.7	803
8	Senescent cells: an emerging target for diseases of ageing. Nature Reviews Drug Discovery, 2017, 16, 718-735.	21.5	788
9	BubR1 insufficiency causes early onset of aging-associated phenotypes and infertility in mice. Nature Genetics, 2004, 36, 744-749.	9.4	663
10	Senescence and apoptosis: dueling or complementary cell fates?. EMBO Reports, 2014, 15, 1139-1153.	2.0	643
11	Opposing roles for p16Ink4a and p19Arf in senescence and ageing caused by BubR1 insufficiency. Nature Cell Biology, 2008, 10, 825-836.	4.6	338
12	Rae1 is an essential mitotic checkpoint regulator that cooperates with Bub3 to prevent chromosome missegregation. Journal of Cell Biology, 2003, 160, 341-353.	2.3	337
13	Cellular senescence in brain aging and neurodegenerative diseases: evidence and perspectives. Journal of Clinical Investigation, 2018, 128, 1208-1216.	3.9	289
14	Cellular senescence in renal ageing and disease. Nature Reviews Nephrology, 2017, 13, 77-89.	4.1	243
15	Increased expression of BubR1 protects against aneuploidy and cancer and extends healthy lifespan. Nature Cell Biology, 2013, 15, 96-102.	4.6	229
16	Whole Chromosome Instability Caused by Bub1 Insufficiency Drives Tumorigenesis through Tumor Suppressor Gene Loss of Heterozygosity. Cancer Cell, 2009, 16, 475-486.	7.7	198
17	<scp>SIRT</scp>2 induces the checkpoint kinase BubR1 to increase lifespan. EMBO Journal, 2014, 33, 1438-1453.	3.5	195
18	Exercise Prevents Diet-Induced Cellular Senescence in Adipose Tissue. Diabetes, 2016, 65, 1606-1615.	0.3	185

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19	Early agingâ€"associated phenotypes in Bub3/Rae1 haploinsufficient mice. Journal of Cell Biology, 2006, 172, 529-540.	2.3	168
20	Vascular Cell Senescence Contributes to Bloodâ€"Brain Barrier Breakdown. Stroke, 2016, 47, 1068-1077.	1.0	167
21	CD38 ecto-enzyme in immune cells is induced during aging and regulates NAD+ and NMN levels. Nature Metabolism, 2020, 2, 1284-1304.	5.1	157
22	p21 produces a bioactive secretome that places stressed cells under immunosurveillance. Science, 2021, 374, eabb3420.	6.0	112
23	p21 Both Attenuates and Drives Senescence and Aging in BubR1 Progeroid Mice. Cell Reports, 2013, 3, 1164-1174.	2.9	110
24	Spartan deficiency causes accumulation of Topoisomerase 1 cleavage complexes and tumorigenesis. Nucleic Acids Research, 2017, 45, 4564-4576.	6.5	91
25	Spartan deficiency causes genomic instability and progeroid phenotypes. Nature Communications, 2014, 5, 5744.	5.8	89
26	Expansion of myeloid-derived suppressor cells with aging in the bone marrow of mice through a NF-ÎºB-dependent mechanism. Aging Cell, 2017, 16, 480-487.	3.0	80
27	Circulating levels of monocyte chemoattractant proteinâ€1 as a potential measure of biological age in mice and frailty in humans. Aging Cell, 2018, 17, e12706.	3.0	77
28	Therapy-Induced Senescence Drives Bone Loss. Cancer Research, 2020, 80, 1171-1182.	0.4	69
29	Cellular Senescence and the Immune System in Cancer. Gerontology, 2019, 65, 505-512.	1.4	66
30	Cyclin A2 is an RNA binding protein that controls <i>Mre11</i> mRNA translation. Science, 2016, 353, 1549-1552.	6.0	64
31	Endonucleases: new tools to edit the mouse genome. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2014, 1842, 1942-1950.	1.8	56
32	Implicating endothelial cell senescence to dysfunction in the ageing and diseased brain. Basic and Clinical Pharmacology and Toxicology, 2020, 127, 102-110.	1.2	52
33	Probing the depths of cellular senescence. Journal of Cell Biology, 2013, 202, 11-13.	2.3	47
34	The yin and yang of the Cdkn2a locus in senescence and aging. Cell Cycle, 2008, 7, 2795-2802.	1.3	44
35	Biphasic Modeling of Mitochondrial Metabolism Dysregulation during Aging. Trends in Biochemical Sciences, 2017, 42, 702-711.	3.7	36
36	Senescent cells suppress innate smooth muscle cell repair functions in atherosclerosis. Nature Aging, 2021, 1, 698-714.	5.3	34

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37	Age-related decline in BubR1 impairs adult hippocampal neurogenesis. Aging Cell, 2017, 16, 598-601.	3.0	31
38	Pak2 kinase promotes cellular senescence and organismal aging. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 13311-13319.	3.3	30
39	Chromosome missegregation causes colon cancer by<i>APC</i>loss of heterozygosity. Cell Cycle, 2010, 9, 1711-1716.	1.3	28
40	Glomerular endothelial cell senescence drives ageâ€related kidney disease through PAIâ€1. EMBO Molecular Medicine, 2021, 13, e14146.	3.3	27
41	The progeroid gene BubR1 regulates axon myelination and motor function. Aging, 2016, 8, 2667-2688.	1.4	23
42	Insights from In Vivo Studies of Cellular Senescence. Cells, 2020, 9, 954.	1.8	21
43	Untangling senescent and damageâ€associated microglia in the aging and diseased brain. FEBS Journal, 2023, 290, 1326-1339.	2.2	20
44	Whole chromosome aneuploidy in the brain of Bub1bH/Hand Ercc1â^'/Î"7mice. Human Molecular Genetics, 2016, 25, 755-765.	1.4	17
45	Senescence in aging and disorders of the central nervous system. Translational Medicine of Aging, 2019, 3, 17-25.	0.6	17
46	Cellular Identification and Quantification of Senescence-Associated Î²-Galactosidase Activity In Vivo. Methods in Molecular Biology, 2019, 1896, 31-38.	0.4	16
47	Senescent cells limit p53 activity via multiple mechanisms to remain viable. Nature Communications, 2022, 13, .	5.8	16
48	BubR1 alterations that reinforce mitotic surveillance act against aneuploidy and cancer. ELife, 2016, 5, .	2.8	15
49	The Spindle Assembly Checkpoint Is Required for Hematopoietic Progenitor Cell Engraftment. Stem Cell Reports, 2017, 9, 1359-1368.	2.3	10
50	NF-ÎºB p65 serine 467 phosphorylation sensitizes mice to weight gain and TNFÎ±-or diet-induced inflammation. Biochimica Et Biophysica Acta - Molecular Cell Research, 2017, 1864, 1785-1798.	1.9	9
51	Chemotherapy-induced cellular senescence suppresses progression of Notch-driven T-ALL. PLoS ONE, 2019, 14, e0224172.	1.1	6
52	FoxM1 insufficiency hyperactivates Ect2â€"RhoAâ€"mDia1 signaling to drive cancer. Nature Cancer, 2020, 1, 1010-1024.	5.7	6
53	Hypomorphic Mice. Methods in Molecular Biology, 2011, 693, 233-244.	0.4	2
54	The Role of Stem Cell Genomic Instability in Aging. Current Stem Cell Reports, 2015, 1, 151-161.	0.7	0