Bruce A Hay

List of Publications by Year
in descending order

60 papers	9,125 citations	71102 41 h-index	128289 60 g-index
73 all docs	73 docs citations	73 times ranked	7880 citing authors

#	Article	IF	Citations
1	Comparative Genomics of the Eukaryotes. Science, 2000, 287, 2204-2215.	12.6	1,573
2	The Drosophila MicroRNA Mir-14 Suppresses Cell Death and Is Required for Normal Fat Metabolism. Current Biology, 2003, 13, 790-795.	3.9	904
3	Drosophila homologs of baculovirus inhibitor of apoptosis proteins function to block cell death. Cell, 1995, 83, 1253-1262.	28.9	735
4	The Drosophila Caspase Inhibitor DIAP1 Is Essential for Cell Survival and Is Negatively Regulated by HID. Cell, 1999, 98, 453-463.	28.9	477
5	MicroRNAs and the regulation of cell death. Trends in Genetics, 2004, 20, 617-624.	6.7	379
6	Hid, Rpr and Grim negatively regulate DIAP1 levels through distinct mechanisms. Nature Cell Biology, 2002, 4, 416-424.	10.3	356
7	Compensatory Proliferation Induced by Cell Death in the Drosophila Wing Disc Requires Activity of the Apical Cell Death Caspase Dronc in a Nonapoptotic Role. Current Biology, 2004, 14, 1262-1266.	3.9	325
8	A synthetic maternal-effect selfish genetic element drives population replacement in Drosophila. Science, 2007, 316, 597-600.	12.6	218
9	Mapping a multiplexed zoo of mRNA expression. Development (Cambridge), 2016, 143, 3632-3637.	2.5	198
10	The Developmental Transcriptome of the Mosquito Aedes aegypti, an Invasive Species and Major Arbovirus Vector. G3: Genes, Genomes, Genetics, 2013, 3, 1493-1509.	1.8	189
11	A Synthetic Maternal-Effect Selfish Genetic Element Drives Population Replacement in Drosophila. Science, 2007, 316, 597-600.	12.6	188
12	The Drosophila Caspase DRONC Cleaves following Glutamate or Aspartate and Is Regulated by DIAP1, HID, and GRIM. Journal of Biological Chemistry, 2000, 275, 27084-27093.	3.4	184
13	Caspase-Dependent Cell Death inDrosophila. Annual Review of Cell and Developmental Biology, 2006, 22, 623-650.	9.4	179
14	The role of cytochrome c in caspase activation in Drosophila melanogaster cells. Journal of Cell Biology, 2002, 156, 1089-1098.	5.2	178
15	Inactivation of Both foxo and reaper Promotes Long-Term Adult Neurogenesis in Drosophila. Current Biology, 2010, 20, 643-648.	3.9	172
16	Multiple Apoptotic Caspase Cascades Are Required in Nonapoptotic Roles for Drosophila Spermatid Individualization. PLoS Biology, 2003, 2, e15.	5.6	158
17	A Synthetic Gene Drive System for Local, Reversible Modification and Suppression of Insect Populations. Current Biology, 2013, 23, 671-677.	3.9	150
18	A pathway of signals regulating effector and initiator caspases in the developingDrosophilaeye. Development (Cambridge), 2002, 129, 3269-3278.	2.5	149

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19	The Drosophila DIAP1 Protein Is Required to Prevent Accumulation of a Continuously Generated, Processed Form of the Apical Caspase DRONC. Journal of Biological Chemistry, 2002, 277, 49644-49650.	3.4	148
20	Cleave and Rescue, a novel selfish genetic element and general strategy for gene drive. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 6250-6259.	7.1	133
21	Molecular mechanism of Reaper-Grim-Hid-mediated suppression of DIAP1-dependent Dronc ubiquitination. Nature Structural and Molecular Biology, 2003, 10, 892-898.	8.2	131
22	The Drosophila caspase Ice is important for many apoptotic cell deaths and for spermatid individualization, a nonapoptotic process. Development (Cambridge), 2006, 133, 3305-3315.	2.5	130
23	Structural Analysis of a Functional DIAP1 Fragment Bound to Grim and Hid Peptides. Molecular Cell, 2001, 8, 95-104.	9.7	113
24	Cell Death Regulation in Drosophila. Journal of Cell Biology, 2000, 150, F69-F76.	5.2	100
25	Novel Synthetic Medea Selfish Genetic Elements Drive Population Replacement in Drosophila; a Theoretical Exploration of Medea-Dependent Population Suppression. ACS Synthetic Biology, 2014, 3, 915-928.	3.8	98
26	Behavior of homing endonuclease gene drives targeting genes required for viability or female fertility with multiplexed guide RNAs. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E9343-E9352.	7.1	96
27	Confinement of gene drive systems to local populations: A comparative analysis. Journal of Theoretical Biology, 2012, 294, 153-171.	1.7	87
28	The genetics of cell death: approaches, insights and opportunities in Drosophila. Nature Reviews Genetics, 2004, 5, 911-922.	16.3	81
29	The Drosophila Inhibitor of Apoptosis (IAP) DIAP2 Is Dispensable for Cell Survival, Required for the Innate Immune Response to Gram-negative Bacterial Infection, and Can Be Negatively Regulated by the Reaper/Hid/Grim Family of IAP-binding Apoptosis Inducers. Journal of Biological Chemistry, 2007, 282, 2056-2068.	3.4	80
30	Selective removal of deletion-bearing mitochondrial DNA in heteroplasmic Drosophila. Nature Communications, 2016, 7, 13100.	12.8	79
31	Rules of the road for insect gene drive research and testing. Nature Biotechnology, 2017, 35, 716-718.	17.5	74
32	Drosophila Bruce Can Potently Suppress Rpr- and Grim-Dependent but Not Hid-Dependent Cell Death. Current Biology, 2002, 12, 1164-1168.	3.9	72
33	Engineered Reciprocal Chromosome Translocations Drive High Threshold, Reversible Population Replacement in Drosophila. ACS Synthetic Biology, 2018, 7, 1359-1370.	3.8	72
34	MEDEA SELFISH GENETIC ELEMENTS AS TOOLS FOR ALTERING TRAITS OF WILD POPULATIONS: A THEORETICAL ANALYSIS. Evolution; International Journal of Organic Evolution, 2011, 65, 1149-1162.	2.3	66
35	Valosin-containing protein (VCP/p97) inhibitors relieve Mitofusin-dependent mitochondrial defects due to VCP disease mutants. ELife, 2017, 6, .	6.0	63
36	Engineering the Composition and Fate of Wild Populations with Gene Drive. Annual Review of Entomology, 2021, 66, 407-434.	11.8	61

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37	Reaper Is Regulated by IAP-mediated Ubiquitination. Journal of Biological Chemistry, 2003, 278, 4028-4034.	3.4	60
38	Semele: A Killer-Male, Rescue-Female System for Suppression and Replacement of Insect Disease Vector Populations. Genetics, 2011, 187, 535-551.	2.9	55
39	Engineering the genomes of wild insect populations: Challenges, and opportunities provided by synthetic Medea selfish genetic elements. Journal of Insect Physiology, 2010, 56, 1402-1413.	2.0	51
40	Structure and Activation Mechanism of the Drosophila Initiator Caspase Dronc. Journal of Biological Chemistry, 2006, 281, 8667-8674.	3.4	45
41	Identification of novel genes involved in light-dependent CRY degradation through a genome-wide RNAi screen. Genes and Development, 2008, 22, 1522-1533.	5.9	44
42	Coupling Cell Growth, Proliferation, and Death. Developmental Cell, 2003, 5, 361-363.	7.0	43
43	Inverse Medea as a Novel Gene Drive System for Local Population Replacement: A Theoretical Analysis. Journal of Heredity, 2011, 102, 336-341.	2.4	42
44	Gene drive and resilience through renewal with next generationCleave and Rescueselfish genetic elements. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 9013-9021.	7.1	42
45	Drosophila caspases involved in developmentally regulated programmed cell death of peptidergic neurons during early metamorphosis. Journal of Comparative Neurology, 2011, 519, 34-48.	1.6	38
46	GENERAL PRINCIPLES OF SINGLEâ€CONSTRUCT CHROMOSOMAL GENE DRIVE. Evolution; International Journal of Organic Evolution, 2012, 66, 2150-2166.	2.3	37
47	Identification of germline transcriptional regulatory elements in Aedes aegypti. Scientific Reports, 2014, 4, 3954.	3.3	35
48	Medusa: A Novel Gene Drive System for Confined Suppression of Insect Populations. PLoS ONE, 2014, 9, e102694.	2.5	27
49	Split versions of Cleave and Rescue selfish genetic elements for measured self limiting gene drive. PLoS Genetics, 2021, 17, e1009385.	3.5	23
50	Essential role of grim-led programmed cell death for the establishment of corazonin-producing peptidergic nervous system during embryogenesis and metamorphosis in Drosophila melanogaster. Biology Open, 2013, 2, 283-294.	1.2	20
51	Clueless/CLUH regulates mitochondrial fission by promoting recruitment of Drp1 to mitochondria. Nature Communications, 2022, 13, 1582.	12.8	20
52	A drug-inducible sex-separation technique for insects. Nature Communications, 2020, 11, 2106.	12.8	19
53	Identification of Genes Uniquely Expressed in the Germ-Line Tissues of the Jewel Wasp Nasonia vitripennis. G3: Genes, Genomes, Genetics, 2015, 5, 2647-2653.	1.8	16
54	Monitoring Activity of Caspases and Their Regulators in Yeast Saccharomyces cerevisiae. Methods in Enzymology, 2000, 322, 162-174.	1.0	15

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55	Vectored antibody gene delivery mediates long-term contraception. Current Biology, 2015, 25, R820-R822.	3.9	14
56	Vectored gene delivery for lifetime animal contraception: Overview and hurdles to implementation. Theriogenology, 2018, 112, 63-74.	2.1	13
57	echinus, required for interommatidial cell sorting and cell death in the Drosophila pupal retina, encodes a protein with homology to ubiquitin-specific proteases. BMC Developmental Biology, 2007, 7, 82.	2.1	10
58	Identifying MicroRNA Regulators of Cell Death in Drosophila. , 2006, 342, 229-240.		9
59	Gene drive that results in addiction to a temperature-sensitive version of an essential gene triggers population collapse in Drosophila. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	7
60	Sculpture of a fly's head. Nature, 2002, 418, 926-927.	27.8	3