Michael Otmar Hengartner

List of Publications by Year
in descending order

140 papers	33,599 citations	15466 65 h-index	10424 139 g-index
147 all docs	147 docs citations	147 times ranked	39519 citing authors

#	Article	IF	Citations
1	MINA-1 and WAGO-4 are part of regulatory network coordinating germ cell death and RNAi in C. elegans. Cell Death and Differentiation, 2019, 26, 2157-2178.	5.0	6
2	Long-termC. elegansimmobilization enables high resolution developmental studiesin vivo. Lab on A Chip, 2018, 18, 1359-1368.	3.1	30
3	Molecular mechanisms of cell death: recommendations of the Nomenclature Committee on Cell Death 2018. Cell Death and Differentiation, 2018, 25, 486-541.	5.0	4,036
4	Differential regulation of germ line apoptosis and germ cell differentiation by CPEB family members in C. elegans. PLoS ONE, 2017, 12, e0182270.	1.1	5
5	Dimerization of the fungal defense lectin CCL2 is essential for its toxicity against nematodes. Glycobiology, 2016, 27, 486-500.	1.3	17
6	Post-transcriptional control of executioner caspases by RNA-binding proteins. Genes and Development, 2016, 30, 2213-2225.	2.7	15
7	Natural Genetic Variation Differentially Affects the Proteome and Transcriptome in Caenorhabditis elegans. Molecular and Cellular Proteomics, 2016, 15, 1670-1680.	2.5	23
8	Loss of Acetylcholine Signaling Reduces Cell Clearance Deficiencies in Caenorhabditis elegans. PLoS ONE, 2016, 11, e0149274.	1.1	1
9	Natural Genetic Variation Influences Protein Abundances in C. elegans Developmental Signalling Pathways. PLoS ONE, 2016, 11, e0149418.	1.1	28
10	Disruption of the C. elegans Intestinal Brush Border by the Fungal Lectin CCL2 Phenocopies Dietary Lectin Toxicity in Mammals. PLoS ONE, 2015, 10, e0129381.	1.1	37
11	Cooperative target mRNA destabilization and translation inhibition by miR-58 microRNA family in C. elegans. Genome Research, 2015, 25, 1680-1691.	2.4	17
12	Essential versus accessory aspects of cell death: recommendations of the NCCD 2015. Cell Death and Differentiation, 2015, 22, 58-73.	5.0	811
13	DEPDC1/LET-99 participates in an evolutionarily conserved pathway for anti-tubulin drug-induced apoptosis. Nature Cell Biology, 2014, 16, 812-820.	4.6	39
14	A novel mouse model for inhibition of DOHH mediated hypusine modification reveals crucial function for embryonic development, proliferation and oncogenic transformation. DMM Disease Models and Mechanisms, 2014, 7, 963-76.	1.2	46
15	Small GTPase CDC-42 promotes apoptotic cell corpse clearance in response to PAT-2 and CED-1 in C. elegans. Cell Death and Differentiation, 2014, 21, 845-853.	5.0	37
16	Apoptotic Cell Death Under Hypoxia. Physiology, 2014, 29, 168-176.	1.6	127
17	Methylated glycans as conserved targets of animal and fungal innate defense. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E2787-96.	3.3	74
18	Model Organisms Proteomics-From Holobionts to Human Nutrition. Proteomics, 2013, 13, 2537-2541.	1.3	4

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19	Modeling the binding specificity of the RNA-binding protein GLD-1 suggests a function of coding regionâ€“located sites in translational repression. Rna, 2013, 19, 1317-1326.	1.6	21
20	Ribosome Synthesis and MAPK Activity Modulate Ionizing Radiation-Induced Germ Cell Apoptosis in Caenorhabditis elegans. PLoS Genetics, 2013, 9, e1003943.	1.5	27
21	Mitochondria as a Target of Environmental Toxicants. Toxicological Sciences, 2013, 134, 1-17.	1.4	427
22	A Network of HSPG Core Proteins and HS Modifying Enzymes Regulates Netrin-Dependent Guidance of D-Type Motor Neurons in Caenorhabditis elegans. PLoS ONE, 2013, 8, e74908.	1.1	25
23	WormQTLâ€”public archive and analysis web portal for natural variation data in Caenorhabditis spp. Nucleic Acids Research, 2012, 41, D738-D743.	6.5	33
24	RIP-chip-SRMâ€”a new combinatorial large-scale approach identifies a set of translationally regulated bantam/miR-58 targets in C. elegans. Genome Research, 2012, 22, 1360-1371.	2.4	18
25	Analysis of C. elegans intestinal gene expression and polyadenylation by fluorescence-activated nuclei sorting and 3â€²-end-seq. Nucleic Acids Research, 2012, 40, 6304-6318.	6.5	69
26	Plasticity of the Î²-Trefoil Protein Fold in the Recognition and Control of Invertebrate Predators and Parasites by a Fungal Defence System. PLoS Pathogens, 2012, 8, e1002706.	2.1	65
27	PaxDb, a Database of Protein Abundance Averages Across All Three Domains of Life. Molecular and Cellular Proteomics, 2012, 11, 492-500.	2.5	413
28	Cleaning up the mess: cell corpse clearance in Caenorhabditis elegans. Current Opinion in Cell Biology, 2012, 24, 881-888.	2.6	20
29	Nonapoptotic Role for Apaf-1 in the DNA Damage Checkpoint. Molecular Cell, 2012, 48, 322-324.	4.5	0
30	Differential regulation of DNA damage response activation between somatic and germline cells in Caenorhabditis elegans. Cell Death and Differentiation, 2012, 19, 1847-1855.	5.0	65
31	Molecular definitions of cell death subroutines: recommendations of the Nomenclature Committee on Cell Death 2012. Cell Death and Differentiation, 2012, 19, 107-120.	5.0	2,144
32	LEM-3 â€“ A LEM Domain Containing Nuclease Involved in the DNA Damage Response in C. elegans. PLoS ONE, 2012, 7, e24555.	1.1	43
33	The HUPO initiative on Model Organism Proteomes, iMOP. Proteomics, 2012, 12, 340-345.	1.3	9
34	Generic Comparison of Protein Inference Engines. Molecular and Cellular Proteomics, 2012, 11, O110.007088.	2.5	20
35	A Dynamic Physical Model of Cell Migration, Differentiation and Apoptosis in Caenorhabditis elegans. Advances in Experimental Medicine and Biology, 2012, 736, 211-233.	0.8	5
36	Predictive Modelling of Stem Cell Differentiation and Apoptosis in C. elegans. Lecture Notes in Computer Science, 2012, , 99-104.	1.0	2

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37	Nematotoxicity of Marasmius oreades Agglutinin (MOA) Depends on Glycolipid Binding and Cysteine Protease Activity. Journal of Biological Chemistry, 2011, 286, 30337-30343.	1.6	42
38	Functional Identification of Optimized RNAi Triggers Using a Massively Parallel Sensor Assay. Molecular Cell, 2011, 41, 733-746.	4.5	193
39	A Conserved Role for SNX9-Family Members in the Regulation of Phagosome Maturation during Engulfment of Apoptotic Cells. PLoS ONE, 2011, 6, e18325.	1.1	25
40	A lectinâ€mediated resistance of higher fungi against predators and parasites. Molecular Ecology, 2011, 20, 3056-3070.	2.0	92
41	Loss of the RhoGAP SRGP-1 promotes the clearance of dead and injured cells in Caenorhabditis elegans. Nature Cell Biology, 2011, 13, 79-86.	4.6	59
42	mProphet: automated data processing and statistical validation for large-scale SRM experiments. Nature Methods, 2011, 8, 430-435.	9.0	481
43	The future of model organisms in human disease research. Nature Reviews Genetics, 2011, 12, 575-582.	7.7	66
44	NER and HR pathways act sequentially to promote UV-C-induced germ cell apoptosis in Caenorhabditis elegans. Cell Death and Differentiation, 2011, 18, 897-906.	5.0	45
45	The phosphoinositide phosphatase MTM-1 regulates apoptotic cell corpse clearance through CED-5â€“CED-12 in C. elegans. Development (Cambridge), 2011, 138, 2003-2014.	1.2	44
46	Microtubule-associated protein 1 light chain 3 alpha (LC3)-associated phagocytosis is required for the efficient clearance of dead cells. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 17396-17401.	3.3	585
47	A worm rich in protein: Quantitative, differential, and global proteomics in Caenorhabditis elegans. Journal of Proteomics, 2010, 73, 2186-2197.	1.2	14
48	Shotgun proteomics data from multiple organisms reveals remarkable quantitative conservation of the eukaryotic core proteome. Proteomics, 2010, 10, 1297-1306.	1.3	58
49	HIF-1 antagonizes p53-mediated apoptosis through a secreted neuronal tyrosinase. Nature, 2010, 465, 577-583.	13.7	179
50	Alteration of the nuclear pore complex in Ca2+-mediated cell death. Cell Death and Differentiation, 2010, 17, 119-133.	5.0	42
51	A quantitative targeted proteomics approach to validate predicted microRNA targets in C. elegans. Nature Methods, 2010, 7, 837-842.	9.0	80
52	ccz-1mediates the digestion of apoptotic corpses inC. elegans. Journal of Cell Science, 2010, 123, 2001-2007.	1.2	30
53	Caenorhabditis elegans N-glycan Core Î²-galactoside Confers Sensitivity towards Nematotoxic Fungal Galectin CGL2. PLoS Pathogens, 2010, 6, e1000717.	2.1	95
54	The Wnt Pathway Controls Cell Death Engulfment, Spindle Orientation, and Migration through CED-10/Rac. PLoS Biology, 2010, 8, e1000297.	2.6	90

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55	Nuclear pore complex during neuronal degeneration. Nucleus, 2010, 1, 136-138.	0.6	4
56	Biotoxicity Assays for Fruiting Body Lectins and Other Cytoplasmic Proteins. Methods in Enzymology, 2010, 480, 141-150.	0.4	21
57	Deficiency of FANCD2-Associated Nuclease KIAA1018/FAN1 Sensitizes Cells to Interstrand Crosslinking Agents. Cell, 2010, 142, 77-88.	13.5	256
58	Protection of C. elegans from Anoxia by HYL-2 Ceramide Synthase. Science, 2009, 324, 381-384.	6.0	159
59	Comparative Analysis Reveals Conserved Protein Phosphorylation Networks Implicated in Multiple Diseases. Science Signaling, 2009, 2, ra39.	1.6	171
60	Molecular Basis for Galactosylation of Core Fucose Residues in Invertebrates. Journal of Biological Chemistry, 2009, 284, 36223-36233.	1.6	48
61	Classification of cell death: recommendations of the Nomenclature Committee on Cell Death 2009. Cell Death and Differentiation, 2009, 16, 3-11.	5.0	2,572
62	Guidelines for the use and interpretation of assays for monitoring cell death in higher eukaryotes. Cell Death and Differentiation, 2009, 16, 1093-1107.	5.0	599
63	Protein Identification False Discovery Rates for Very Large Proteomics Data Sets Generated by Tandem Mass Spectrometry. Molecular and Cellular Proteomics, 2009, 8, 2405-2417.	2.5	282
64	Comparative Functional Analysis of the Caenorhabditis elegans and Drosophila melanogaster Proteomes. PLoS Biology, 2009, 7, e1000048.	2.6	208
65	Dying to hold you. Nature, 2008, 451, 530-531.	13.7	7
66	No death without life: vital functions of apoptotic effectors. Cell Death and Differentiation, 2008, 15, 1113-1123.	5.0	221
67	A pathway for phagosome maturation during engulfment of apoptotic cells. Nature Cell Biology, 2008, 10, 556-566.	4.6	243
68	Establishing a Blueprint for CED-3-dependent Killing through Identification of Multiple Substrates for This Protease. Journal of Biological Chemistry, 2007, 282, 15011-15021.	1.6	32
69	Nonapoptotic Role for Apaf-1 in the DNA Damage Checkpoint. Molecular Cell, 2007, 28, 624-637.	4.5	116
70	Epigenetic Regulation of Histone H3 Serine 10 Phosphorylation Status by HCF-1 Proteins in C. elegans and Mammalian Cells. PLoS ONE, 2007, 2, e1213.	1.1	21
71	Identification of two signaling submodules within the CrkII/ELMO/Dock180 pathway regulating engulfment of apoptotic cells. Cell Death and Differentiation, 2007, 14, 963-972.	5.0	49
72	The nucleotide excision repair pathway is required for UV-C-induced apoptosis in Caenorhabditis elegans. Cell Death and Differentiation, 2007, 14, 1129-1138.	5.0	97

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73	Regulation of nicotinic receptor trafficking by the transmembrane Golgi protein UNC-50. EMBO Journal, 2007, 26, 4313-4323.	3.5	65
74	Aminophospholipid Translocase TAT-1 Promotes Phosphatidylserine Exposure during C. elegans Apoptosis. Current Biology, 2007, 17, 994-999.	1.8	76
75	Deleted in cancer 1 (DICE1) is an essential protein controlling the topology of the inner mitochondrial membrane in C. elegans. Development (Cambridge), 2006, 133, 3597-3606.	1.2	18
76	Sugar Antennae for Guidance Signals: Syndecans and Glypicans Integrate Directional Cues for Navigating Neurons. Scientific World Journal, The, 2006, 6, 1024-1036.	0.8	21
77	The short coiled-coil domain-containing protein UNC-69 cooperates with UNC-76 to regulate axonal outgrowth and normal presynaptic organization in Caenorhabditis elegans. Journal of Biology, 2006, 5, 9.	2.7	28
78	Finding function in novel targets: C. elegans as a model organism. Nature Reviews Drug Discovery, 2006, 5, 387-399.	21.5	847
79	Developmental apoptosis in C. elegans: a complex CEDnario. Nature Reviews Molecular Cell Biology, 2006, 7, 97-108.	16.1	269
80	miRNAs and apoptosis: RNAs to die for. Oncogene, 2006, 25, 6176-6187.	2.6	467
81	URI-1 is required for DNA stability in C. elegans. Development (Cambridge), 2006, 133, 621-629.	1.2	56
82	C. elegans GLA-3 is a novel component of the MAP kinase MPK-1 signaling pathway required for germ cell survival. Genes and Development, 2006, 20, 2279-2292.	2.7	53
83	Two pathways converge at CED-10 to mediate actin rearrangement and corpse removal in C. elegans. Nature, 2005, 434, 93-99.	13.7	238
84	Divide and conquer. Nature, 2005, 433, 692-693.	13.7	7
85	A Steric-Inhibition Model for Regulation of Nucleotide Exchange via the Dock180 Family of GEFs. Current Biology, 2005, 15, 371-377.	1.8	96
86	Syndecan regulates cell migration and axon guidance in C. elegans. Development (Cambridge), 2005, 132, 4621-4633.	1.2	106
87	Translational Repression of C. elegans p53 by GLD-1 Regulates DNA Damage-Induced Apoptosis. Cell, 2005, 120, 357-368.	13.5	195
88	Dock180 and ELMO1 Proteins Cooperate to Promote Evolutionarily Conserved Rac-dependent Cell Migration. Journal of Biological Chemistry, 2004, 279, 6087-6097.	1.6	193
89	CELL BIOLOGY: Tickling Macrophages, a Serious Business. Science, 2004, 304, 1123-1124.	6.0	14
90	Tales of Cannibalism, Suicide, and Murder: Programmed Cell Death in C. elegans. Current Topics in Developmental Biology, 2004, 65, 1-45.	1.0	36

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91	Caenorhabditis elegans ABL-1 antagonizes p53-mediated germline apoptosis after ionizing irradiation. Nature Genetics, 2004, 36, 906-912.	9.4	74
92	Death and more: DNA damage response pathways in the nematode C. elegans. Cell Death and Differentiation, 2004, 11, 21-28.	5.0	135
93	Genome-wide RNAi identifies p53-dependent and -independent regulators of germ cell apoptosis in C. elegans. Cell Death and Differentiation, 2004, 11, 1198-1203.	5.0	95
94	PH domain of ELMO functions in trans to regulate Rac activation via Dock180. Nature Structural and Molecular Biology, 2004, 11, 756-762.	3.6	121
95	Phagocytosis of Apoptotic Cells Is Regulated by a UNC-73/TRIO-MIG-2/RhoG Signaling Module and Armadillo Repeats of CED-12/ELMO. Current Biology, 2004, 14, 2208-2216.	1.8	185
96	eor-1 and eor-2 are required for cell-specific apoptotic death in C. elegans. Developmental Biology, 2004, 274, 125-138.	0.9	26
97	Caenorhabditis elegans DNA mismatch repair gene msh-2 is required for microsatellite stability and maintenance of genome integrity. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 2158-2163.	3.3	68
98	The genes pme-1 and pme-2 encode two poly(ADP-ribose) polymerases in Caenorhabditis elegans. Biochemical Journal, 2002, 368, 263-271.	1.7	27
99	Caenorhabditis elegans HUS-1 Is a DNA Damage Checkpoint Protein Required for Genome Stability and EGL-1-Mediated Apoptosis. Current Biology, 2002, 12, 1908-1918.	1.8	244
100	The C. elegans LAR-like receptor tyrosine phosphatase PTP-3 and the VAB-1 Eph receptor tyrosine kinase have partly redundant functions in morphogenesis. Development (Cambridge), 2002, 129, 2141-53.	1.2	25
101	Apoptosis. Cell, 2001, 104, 325-328.	13.5	168
102	CED-12/ELMO, a Novel Member of the CrkII/Dock180/Rac Pathway, Is Required for Phagocytosis and Cell Migration. Cell, 2001, 107, 27-41.	13.5	520
103	Dynamic expression of a glutamate decarboxylase gene in multiple non-neural tissues during mouse development. , 2001, 1, 1.		45
104	Calcium dynamics during fertilization in C. elegans. BMC Developmental Biology, 2001, 1, 8.	2.1	46
105	jkk-1 and mek-1 regulate body movement coordination and response to heavy metals through jnk-1 in Caenorhabditis elegans. EMBO Journal, 2001, 20, 5114-5128.	3.5	59
106	How the worm removes corpses: the nematode C. elegans as a model system to study engulfment. Cell Death and Differentiation, 2001, 8, 564-568.	5.0	58
107	DNA destroyers. Nature, 2001, 412, 27-29.	13.7	66
108	Engulfment genes cooperate with ced-3 to promote cell death in Caenorhabditis elegans. Nature, 2001, 412, 202-206.	13.7	282

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109	C. elegans RAD-5/CLK-2 defines a new DNA damage checkpoint protein. Current Biology, 2001, 11, 1934-1944.	1.8	154
110	Programmed cell death: alive and well in the new millennium. Trends in Cell Biology, 2001, 11, 526-534.	3.6	603
111	The biochemistry of apoptosis. Nature, 2000, 407, 770-776.	13.7	6,505
112	A common set of engulfment genes mediates removal of both apoptotic and necrotic cell corpses in C. elegans. Nature Cell Biology, 2000, 2, 931-937.	4.6	157
113	Identification and Characterization of a Dimerization Domain in CED-6, an Adapter Protein Involved in Engulfment of Apoptotic Cells. Journal of Biological Chemistry, 2000, 275, 9542-9549.	1.6	48
114	A Conserved Checkpoint Pathway Mediates DNA Damageâ€“Induced Apoptosis and Cell Cycle Arrest in C. elegans. Molecular Cell, 2000, 5, 435-443.	4.5	476
115	The Molecular Mechanism of Programmed Cell Death in C. elegans. Annals of the New York Academy of Sciences, 1999, 887, 92-104.	1.8	86
116	Human CED-6 encodes a functional homologue of the Caenorhabditis elegans engulfment protein CED-6. Current Biology, 1999, 9, 1347-1350.	1.8	70
117	Caenorhabditis elegans inhibitor of apoptosis protein (IAP) homologue BIR-1 plays a conserved role in cytokinesis. Current Biology, 1999, 9, 292-302.	1.8	227
118	Selected Elements of Herpes Simplex Virus Accessory Factor HCF Are Highly Conserved in Caenorhabditis elegans. Molecular and Cellular Biology, 1999, 19, 909-915.	1.1	21
119	Death cycle and Swiss army knives. Nature, 1998, 391, 441-442.	13.7	113
120	Candidate Adaptor Protein CED-6 Promotes the Engulfment of Apoptotic Cells in C. elegans. Cell, 1998, 93, 961-972.	13.5	194
121	Caenorhabditis elegansContains Two Distinct Acid Sphingomyelinases. Journal of Biological Chemistry, 1998, 273, 14374-14379.	1.6	36
122	Advances in apoptosis research. Proceedings of the National Academy of Sciences of the United States of America, 1997, 94, 12736-12737.	3.3	168
123	Genetics of Apoptosis. Advances in Pharmacology, 1997, 41, 35-56.	1.2	7
124	Interaction between the C. elegans cell-death regulators CED-9 and CED-4. Nature, 1997, 385, 653-656.	13.7	300
125	Apoptosis CED-4 is a stranger no more. Nature, 1997, 388, 714-715.	13.7	88
126	Genetic control of programmed cell death and aging in the nematode Caenorhabditis elegans. Experimental Gerontology, 1997, 32, 363-374.	1.2	28

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127	Mutations in the alpha 1 subunit of an L-type voltage-activated Ca2+ channel cause myotonia in Caenorhabditis elegans. EMBO Journal, 1997, 16, 6066-6076.	3.5	199
128	Apoptosis and the shape of death. , 1997, 21, 245-248.		15
129	C. elegans as a Model system for Germ Cell Death. , 1997, , 8-18.		1
130	Programmed cell death in invertebrates. Current Opinion in Genetics and Development, 1996, 6, 34-38.	1.5	94
131	Celebrating life (and death). Trends in Genetics, 1996, 12, 487.	2.9	0
132	Transcriptional regulator of programmed cell death encoded by Caenorhabditis elegans gene ces-2. Nature, 1996, 382, 545-547.	13.7	163
133	Out-of body experiences: Cell-free cell death. BioEssays, 1995, 17, 549-552.	1.2	4
134	The ins and outs of programmed cell death during C. elegans development. , 1995, , 7-10.		0
135	Activation of C. elegans cell death protein CED-9 by an ammo-acid substitution in a domain conserved in Bcl-2. Nature, 1994, 369, 318-320.	13.7	172
136	Programmed Cell Death: A rich harvest. Current Biology, 1994, 4, 950-952.	1.8	16
137	C. elegans cell survival gene ced-9 encodes a functional homolog of the mammalian proto-oncogene bcl-2. Cell, 1994, 76, 665-676.	13.5	1,141
138	Programmed cell death in Caenorhabditis elegans. Current Opinion in Genetics and Development, 1994, 4, 581-586.	1.5	357
139	The Genetics of Programmed Cell Death in the Nematode Caenorhabditis elegans. Cold Spring Harbor Symposia on Quantitative Biology, 1994, 59, 377-385.	2.0	170
140	Caenorhabditis elegans gene ced-9 protects cells from programmed cell death. Nature, 1992, 356, 494-499.	13.7	847