

# Vadim N Gladyshev

## List of Publications by Year in Descending Order

**Source:** <https://exaly.com/author-pdf/2573037/vadim-n-gladyshev-publications-by-year.pdf>

**Version:** 2024-04-26

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

176  
papers

11,066  
citations

52  
h-index

103  
g-index

192  
ext. papers

14,013  
ext. citations

10.2  
avg, IF

6.82  
L-index

#	Paper	IF	Citations
176	Epigenetic aging of the demographically non-aging naked mole-rat.. <i>Nature Communications</i> , <b>2022</b> , 13, 355	17.4	2
175	Selenophosphate synthetase 1 deficiency exacerbates osteoarthritis by dysregulating redox homeostasis.. <i>Nature Communications</i> , <b>2022</b> , 13, 779	17.4	4
174	In vivo cyclic induction of the FOXM1 transcription factor delays natural and progeroid aging phenotypes and extends healthspan. <i>Nature Aging</i> , <b>2022</b> , 2, 397-411		1
173	Profiling epigenetic age in single cells. <i>Nature Aging</i> , <b>2021</b> , 1, 1189-1201		6
172	Emerging rejuvenation strategies-Reducing the biological age.. <i>Aging Cell</i> , <b>2021</b> , e13538	9.9	2
171	Historical Roles of Selenium and Selenoproteins in Health and Development: The Good, the Bad and the Ugly.. <i>International Journal of Molecular Sciences</i> , <b>2021</b> , 23,	6.3	4
170	Genomic expansion of Aldh1a1 protects beavers against high metabolic aldehydes from lipid oxidation. <i>Cell Reports</i> , <b>2021</b> , 37, 109965	10.6	2
169	Evolution of natural lifespan variation and molecular strategies of extended lifespan in yeast. <i>ELife</i> , <b>2021</b> , 10,	8.9	3
168	Genetic and phenotypic analysis of the causal relationship between aging and COVID-19. <i>Communications Medicine</i> , <b>2021</b> , 1,		6
167	Identification of Signaling Pathways for Early Embryonic Lethality and Developmental Retardation in Mice. <i>International Journal of Molecular Sciences</i> , <b>2021</b> , 22,	6.3	2
166	Maintenance of genome sequence integrity in long- and short-lived rodent species. <i>Science Advances</i> , <b>2021</b> , 7, eabj3284	14.3	2
165	James R. Mitchell (1971-2020). <i>Cell Metabolism</i> , <b>2021</b> , 33, 458-461	24.6	
164	Development of a novel fluorescent biosensor for dynamic monitoring of metabolic methionine redox status in cells and tissues. <i>Biosensors and Bioelectronics</i> , <b>2021</b> , 178, 113031	11.8	4
163	A pig BodyMap transcriptome reveals diverse tissue physiologies and evolutionary dynamics of transcription. <i>Nature Communications</i> , <b>2021</b> , 12, 3715	17.4	7
162	Epigenetic clocks reveal a rejuvenation event during embryogenesis followed by aging. <i>Science Advances</i> , <b>2021</b> , 7,	14.3	17
161	The Ground Zero of Organismal Life and Aging. <i>Trends in Molecular Medicine</i> , <b>2021</b> , 27, 11-19	11.5	15
160	Translation elongation rate varies among organs and decreases with age. <i>Nucleic Acids Research</i> , <b>2021</b> , 49, e9	20.1	10

159	Measuring Organ-Specific Translation Elongation Rate in Mice. <i>Methods in Molecular Biology</i> , <b>2021</b> , 2252, 189-200	1.4	1
158	A standard knockout procedure alters expression of adjacent loci at the translational level. <i>Nucleic Acids Research</i> , <b>2021</b> , 49, 11134-11144	20.1	2
157	Naked mole rat TRF1 safeguards glycolytic capacity and telomere replication under low oxygen. <i>Science Advances</i> , <b>2021</b> , 7,	14.3	4
156	COVID-19 mortality rate in children is U-shaped. <i>Aging</i> , <b>2021</b> , 13, 19954-19962	5.6	4
155	Selenium and the 15kDa Selenoprotein Impact Colorectal Tumorigenesis by Modulating Intestinal Barrier Integrity. <i>International Journal of Molecular Sciences</i> , <b>2021</b> , 22,	6.3	4
154	Ectopic cervical thymi and no thymic involution until midlife in naked mole rats. <i>Aging Cell</i> , <b>2021</b> , 20, e13437	13.7	5
153	Biosensor-Linked Immunosorbent Assay for the Quantification of Methionine Oxidation in Target Proteins.. <i>ACS Sensors</i> , <b>2021</b> ,	9.2	1
152	Chronic Exposure to Youthful Circulation Leads to Epigenetic Reprogramming and Lifespan Extension. <i>Innovation in Aging</i> , <b>2021</b> , 5, 677-678	0.1	
151	Aging Predisposes B cells to Malignancy by Activating c-Myc and Perturbing the Genome and Epigenome. <i>Innovation in Aging</i> , <b>2021</b> , 5, 560-561	0.1	
150	Genetic and Phenotypic Evidence for the Causal Relationship Between Aging and COVID-19. <i>Innovation in Aging</i> , <b>2021</b> , 5, 330-330	0.1	
149	Profiling Epigenetic Age in Single Cells. <i>Innovation in Aging</i> , <b>2021</b> , 5, 673-673	0.1	
148	Molecular damage in aging. <i>Nature Aging</i> , <b>2021</b> , 1, 1096-1106		3
147	How can aging be reversed? Exploring rejuvenation from a damage-based perspective. <i>Genetics &amp; Genomics Next</i> , <b>2020</b> , 1, e10025	1.2	2
146	Human Gut Microbiome Aging Clock Based on Taxonomic Profiling and Deep Learning. <i>IScience</i> , <b>2020</b> , 23, 101199	6.1	44
145	CTELS: A Cell-Free System for the Analysis of Translation Termination Rate. <i>Biomolecules</i> , <b>2020</b> , 10,	5.9	9
144	Multifaceted deregulation of gene expression and protein synthesis with age. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2020</b> , 117, 15581-15590	11.5	22
143	An NMR-Based Biosensor to Measure Stereospecific Methionine Sulfoxide Reductase Activities in Vitro and in Vivo*. <i>Chemistry - A European Journal</i> , <b>2020</b> , 26, 14838-14843	4.8	3
142	Bioinformatics of Selenoproteins. <i>Antioxidants and Redox Signaling</i> , <b>2020</b> , 33, 525-536	8.4	15

141	Systematic age-, organ-, and diet-associated ionome remodeling and the development of ionomic aging clocks. <i>Aging Cell</i> , <b>2020</b> , 19, e13119	9.9	9
140	Biohorology and biomarkers of aging: Current state-of-the-art, challenges and opportunities. <i>Ageing Research Reviews</i> , <b>2020</b> , 60, 101050	12	33
139	N6-adenosine methylation of ribosomal RNA affects lipid oxidation and stress resistance. <i>Science Advances</i> , <b>2020</b> , 6, eaaz4370	14.3	20
138	COVID-19 is an emergent disease of aging. <i>Aging Cell</i> , <b>2020</b> , 19, e13230	9.9	53
137	MICAL1 constrains cardiac stress responses and protects against disease by oxidizing CaMKII. <i>Journal of Clinical Investigation</i> , <b>2020</b> , 130, 4663-4678	15.9	8
136	ARDD 2020: from aging mechanisms to interventions. <i>Aging</i> , <b>2020</b> , 12, 24484-24503	5.6	11
135	Germline burden of rare damaging variants negatively affects human healthspan and lifespan. <i>ELife</i> , <b>2020</b> , 9,	8.9	9
134	Reprogramming to recover youthful epigenetic information and restore vision. <i>Nature</i> , <b>2020</b> , 588, 124-130.	30.4	128
133	Beaver and Naked Mole Rat Genomes Reveal Common Paths to Longevity. <i>Cell Reports</i> , <b>2020</b> , 32, 107949.	10.6	10
132	Translation elongation factor 2 depletion by siRNA in mouse liver leads to mTOR-independent translational upregulation of ribosomal protein genes. <i>Scientific Reports</i> , <b>2020</b> , 10, 15473	4.9	5
131	Tolerance to Selenoprotein Loss Differs between Human and Mouse. <i>Molecular Biology and Evolution</i> , <b>2020</b> , 37, 341-354	8.3	15
130	Selenium Deficiency Is Associated with Pro-longevity Mechanisms. <i>Cell Reports</i> , <b>2019</b> , 27, 2785-2797.e3	10.6	35
129	SIRT6 Is Responsible for More Efficient DNA Double-Strand Break Repair in Long-Lived Species. <i>Cell</i> , <b>2019</b> , 177, 622-638.e22	56.2	120
128	LINE1 Derepression in Aged Wild-Type and SIRT6-Deficient Mice Drives Inflammation. <i>Cell Metabolism</i> , <b>2019</b> , 29, 871-885.e5	24.6	138
127	svist4get: a simple visualization tool for genomic tracks from sequencing experiments. <i>BMC Bioinformatics</i> , <b>2019</b> , 20, 113	3.6	16
126	Utilization of selenocysteine in early-branching fungal phyla. <i>Nature Microbiology</i> , <b>2019</b> , 4, 759-765	26.6	28
125	Identification and Application of Gene Expression Signatures Associated with Lifespan Extension. <i>Cell Metabolism</i> , <b>2019</b> , 30, 573-593.e8	24.6	55
124	Mammalian Hbs1L deficiency causes congenital anomalies and developmental delay associated with Pelota depletion and 80S monosome accumulation. <i>PLoS Genetics</i> , <b>2019</b> , 15, e1007917	6	4

123	Latest advances in aging research and drug discovery. <i>Aging</i> , <b>2019</b> , 11, 9971-9981	5.6	6
122	Patterns of Aging Biomarkers, Mortality, and Damaging Mutations Illuminate the Beginning of Aging and Causes of Early-Life Mortality. <i>Cell Reports</i> , <b>2019</b> , 29, 4276-4284.e3	10.6	22
121	DNA methylation aging clocks: challenges and recommendations. <i>Genome Biology</i> , <b>2019</b> , 20, 249	18.3	248
120	Integrating cellular senescence with the concept of damage accumulation in aging: Relevance for clearance of senescent cells. <i>Aging Cell</i> , <b>2019</b> , 18, e12841	9.9	64
119	Reversibility of irreversible aging. <i>Ageing Research Reviews</i> , <b>2019</b> , 49, 104-114	12	13
118	Comparative transcriptomics across 14 <i>Drosophila</i> species reveals signatures of longevity. <i>Aging Cell</i> , <b>2018</b> , 17, e12740	9.9	19
117	Mechanisms of cancer resistance in long-lived mammals. <i>Nature Reviews Cancer</i> , <b>2018</b> , 18, 433-441	31.3	104
116	Global remodeling of the mouse DNA methylome during aging and in response to calorie restriction. <i>Aging Cell</i> , <b>2018</b> , 17, e12738	9.9	34
115	Population genomics of finless porpoises reveal an incipient cetacean species adapted to freshwater. <i>Nature Communications</i> , <b>2018</b> , 9, 1276	17.4	37
114	Naked mole rats can undergo developmental, oncogene-induced and DNA damage-induced cellular senescence. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2018</b> , 115, 1801-1806	11.5	44
113	Role of Selenof as a Gatekeeper of Secreted Disulfide-Rich Glycoproteins. <i>Cell Reports</i> , <b>2018</b> , 23, 1387-1396	12.8	36
112	Molecular Footprints of Aquatic Adaptation Including Bone Mass Changes in Cetaceans. <i>Genome Biology and Evolution</i> , <b>2018</b> , 10, 967-975	3.9	17
111	Monitoring of Methionine Sulfoxide Content and Methionine Sulfoxide Reductase Activity. <i>Methods in Molecular Biology</i> , <b>2018</b> , 1661, 285-299	1.4	4
110	Selenocysteine tRNA, the Central Component of Selenoprotein Biosynthesis: Isolation, Identification, Modification, and Sequencing. <i>Methods in Molecular Biology</i> , <b>2018</b> , 1661, 43-60	1.4	13
109	A Tale of Two Concepts: Harmonizing the Free Radical and Antagonistic Pleiotropy Theories of Aging. <i>Antioxidants and Redox Signaling</i> , <b>2018</b> , 29, 1003-1017	8.4	19
108	Mitochondrial redox sensing by the kinase ATM maintains cellular antioxidant capacity. <i>Science Signaling</i> , <b>2018</b> , 11,	8.8	45
107	NEDD9 targets to promote endothelial fibrosis and pulmonary arterial hypertension. <i>Science Translational Medicine</i> , <b>2018</b> , 10,	17.5	52
106	Protein synthesis and quality control in aging. <i>Aging</i> , <b>2018</b> , 10, 4269-4288	5.6	60

105	A whole lifespan mouse multi-tissue DNA methylation clock. <i>ELife</i> , <b>2018</b> , 7,	8.9	75
104	Aging and drug discovery. <i>Aging</i> , <b>2018</b> , 10, 3079-3088	5.6	16
103	Selenoproteins in colon cancer. <i>Free Radical Biology and Medicine</i> , <b>2018</b> , 127, 14-25	7.8	30
102	A naked mole rat iPSC line expressing drug-inducible mouse pluripotency factors developed from embryonic fibroblasts. <i>Stem Cell Research</i> , <b>2018</b> , 31, 197-200	1.6	3
101	Comparison of the redox chemistry of sulfur- and selenium-containing analogs of uracil. <i>Free Radical Biology and Medicine</i> , <b>2017</b> , 104, 249-261	7.8	16
100	Regulated methionine oxidation by monooxygenases. <i>Free Radical Biology and Medicine</i> , <b>2017</b> , 109, 141-155	7.5	45
99	Non-enzymatic molecular damage as a prototypic driver of aging. <i>Journal of Biological Chemistry</i> , <b>2017</b> , 292, 6029-6038	5.4	39
98	Age-associated molecular changes are deleterious and may modulate life span through diet. <i>Science Advances</i> , <b>2017</b> , 3, e1601833	14.3	9
97	The Enzymatic and Structural Basis for Inhibition of <i>Echinococcus granulosus</i> Thioredoxin Glutathione Reductase by Gold(I). <i>Antioxidants and Redox Signaling</i> , <b>2017</b> , 27, 1491-1504	8.4	10
96	Using DNA Methylation Profiling to Evaluate Biological Age and Longevity Interventions. <i>Cell Metabolism</i> , <b>2017</b> , 25, 954-960.e6	24.6	196
95	Selenoprotein MsrB1 deficiency exacerbates acetaminophen-induced hepatotoxicity via increased oxidative damage. <i>Archives of Biochemistry and Biophysics</i> , <b>2017</b> , 634, 69-75	4.1	6
94	Translation fidelity coevolves with longevity. <i>Aging Cell</i> , <b>2017</b> , 16, 988-993	9.9	42
93	Molecular signatures of longevity: Insights from cross-species comparative studies. <i>Seminars in Cell and Developmental Biology</i> , <b>2017</b> , 70, 190-203	7.5	54
92	Naked Mole Rat Induced Pluripotent Stem Cells and Their Contribution to Interspecific Chimera. <i>Stem Cell Reports</i> , <b>2017</b> , 9, 1706-1720	8	17
91	Aminoglycoside-driven biosynthesis of selenium-deficient Selenoprotein P. <i>Scientific Reports</i> , <b>2017</b> , 7, 4391	4.9	13
90	Methionine sulfoxide reductase B1 deficiency does not increase high-fat diet-induced insulin resistance in mice. <i>Free Radical Research</i> , <b>2017</b> , 51, 24-37	4	7
89	Ribonuclease selection for ribosome profiling. <i>Nucleic Acids Research</i> , <b>2017</b> , 45, e6	20.1	91
88	Comprehensive variation discovery and recovery of missing sequence in the pig genome using multiple de novo assemblies. <i>Genome Research</i> , <b>2017</b> , 27, 865-874	9.7	54

87	Comparative transcriptomics of 5 high-altitude vertebrates and their low-altitude relatives. <i>GigaScience</i> , <b>2017</b> , 6, 1-9	7.6	32
86	Selenoprotein H is an essential regulator of redox homeostasis that cooperates with p53 in development and tumorigenesis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2016</b> , 113, E5562-71	11.5	33
85	Intrinsic Versus Extrinsic Cancer Risk Factors and Aging. <i>Trends in Molecular Medicine</i> , <b>2016</b> , 22, 833-834	11.5	14
84	Population Genomics Reveals Low Genetic Diversity and Adaptation to Hypoxia in Snub-Nosed Monkeys. <i>Molecular Biology and Evolution</i> , <b>2016</b> , 33, 2670-81	8.3	33
83	Lokiarchaeota Marks the Transition between the Archaeal and Eukaryotic Selenocysteine Encoding Systems. <i>Molecular Biology and Evolution</i> , <b>2016</b> , 33, 2441-53	8.3	31
82	Aging: progressive decline in fitness due to the rising deleteriome adjusted by genetic, environmental, and stochastic processes. <i>Aging Cell</i> , <b>2016</b> , 15, 594-602	9.9	115
81	Selenophosphate synthetase 1 is an essential protein with roles in regulation of redox homeostasis in mammals. <i>Biochemical Journal</i> , <b>2016</b> , 473, 2141-54	3.8	25
80	Selenoprotein Gene Nomenclature. <i>Journal of Biological Chemistry</i> , <b>2016</b> , 291, 24036-24040	5.4	147
79	Glutathione peroxidase 4 and vitamin E cooperatively prevent hepatocellular degeneration. <i>Redox Biology</i> , <b>2016</b> , 9, 22-31	11.3	116
78	Sensitivity of primary fibroblasts in culture to atmospheric oxygen does not correlate with species lifespan. <i>Aging</i> , <b>2016</b> , 8, 841-7	5.6	8
77	Cell culture-based profiling across mammals reveals DNA repair and metabolism as determinants of species longevity. <i>ELife</i> , <b>2016</b> , 5,	8.9	42
76	Analysis of cancer genomes reveals basic features of human aging and its role in cancer development. <i>Nature Communications</i> , <b>2016</b> , 7, 12157	17.4	58
75	Gene expression signatures of human cell and tissue longevity. <i>Npj Aging and Mechanisms of Disease</i> , <b>2016</b> , 2, 16014	5.5	28
74	Organization of the Mammalian Metabolome according to Organ Function, Lineage Specialization, and Longevity. <i>Cell Metabolism</i> , <b>2015</b> , 22, 332-43	24.6	68
73	Regulation of protein function by reversible methionine oxidation and the role of selenoprotein MsrB1. <i>Antioxidants and Redox Signaling</i> , <b>2015</b> , 23, 814-22	8.4	52
72	Monitoring methionine sulfoxide with stereospecific mechanism-based fluorescent sensors. <i>Nature Chemical Biology</i> , <b>2015</b> , 11, 332-8	11.7	43
71	Selenium utilization in thioredoxin and catalytic advantage provided by selenocysteine. <i>Biochemical and Biophysical Research Communications</i> , <b>2015</b> , 461, 648-52	3.4	14
70	Evidence that mutation accumulation does not cause aging in <i>Saccharomyces cerevisiae</i> . <i>Aging Cell</i> , <b>2015</b> , 14, 366-71	9.9	41



69	Evolution of selenophosphate synthetases: emergence and relocation of function through independent duplications and recurrent subfunctionalization. <i>Genome Research</i> , <b>2015</b> , 25, 1256-67	9.7	39
68	Convergent evolution of marine mammals is associated with distinct substitutions in common genes. <i>Scientific Reports</i> , <b>2015</b> , 5, 16550	4.9	20
67	Defining Molecular Basis for Longevity Traits in Natural Yeast Isolates. <i>Npj Aging and Mechanisms of Disease</i> , <b>2015</b> , 1,	5.5	11
66	DNA repair in species with extreme lifespan differences. <i>Aging</i> , <b>2015</b> , 7, 1171-84	5.6	102
65	Comparative analysis of genome maintenance genes in naked mole rat, mouse, and human. <i>Aging Cell</i> , <b>2015</b> , 14, 288-91	9.9	42
64	Organization of the Mammalian Ionome According to Organ Origin, Lineage Specialization, and Longevity. <i>Cell Reports</i> , <b>2015</b> , 13, 1319-1326	10.6	43
63	INK4 locus of the tumor-resistant rodent, the naked mole rat, expresses a functional p15/p16 hybrid isoform. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2015</b> , 112, 1053-8	11.5	66
62	Gene expression defines natural changes in mammalian lifespan. <i>Aging Cell</i> , <b>2015</b> , 14, 352-65	9.9	92
61	Deficiency of the 15-kDa selenoprotein led to cytoskeleton remodeling and non-apoptotic membrane blebbing through a RhoA/ROCK pathway. <i>Biochemical and Biophysical Research Communications</i> , <b>2015</b> , 456, 884-90	3.4	24
60	The 15kDa selenoprotein and thioredoxin reductase 1 promote colon cancer by different pathways. <i>PLoS ONE</i> , <b>2015</b> , 10, e0124487	3.7	31
59	Cell Proliferation and Motility Are Inhibited by G1 Phase Arrest in 15-kDa Selenoprotein-Deficient Chang Liver Cells. <i>Molecules and Cells</i> , <b>2015</b> , 38, 457-65	3.5	18
58	Differences in Redox Regulatory Systems in Human Lung and Liver Tumors Suggest Different Avenues for Therapy. <i>Cancers</i> , <b>2015</b> , 7, 2262-76	6.6	17
57	Selenium and selenocysteine: roles in cancer, health, and development. <i>Trends in Biochemical Sciences</i> , <b>2014</b> , 39, 112-20	10.3	431
56	Adjustments, extinction, and remains of selenocysteine incorporation machinery in the nematode lineage. <i>Rna</i> , <b>2014</b> , 20, 1023-34	5.8	19
55	The free radical theory of aging is dead. Long live the damage theory!. <i>Antioxidants and Redox Signaling</i> , <b>2014</b> , 20, 727-31	8.4	142
54	Comparative genetics of longevity and cancer: insights from long-lived rodents. <i>Nature Reviews Genetics</i> , <b>2014</b> , 15, 531-40	30.1	129
53	Selenoproteins: molecular pathways and physiological roles. <i>Physiological Reviews</i> , <b>2014</b> , 94, 739-77	47.9	661
52	The transcriptome of the bowhead whale <i>Balaena mysticetus</i> reveals adaptations of the longest-lived mammal. <i>Aging</i> , <b>2014</b> , 6, 879-99	5.6	46



51	The insertion Green Monster (iGM) method for expression of multiple exogenous genes in yeast. <i>G3: Genes, Genomes, Genetics</i> , <b>2014</b> , 4, 1183-91	3.2	7
50	The first international mini-symposium on methionine restriction and lifespan. <i>Frontiers in Genetics</i> , <b>2014</b> , 5, 122	4.5	15
49	Selenium and Methionine Sulfoxide Reduction. <i>Free Radical Biology and Medicine</i> , <b>2014</b> , 75 Suppl 1, S8-9	7.8	5
48	Adaptations to a subterranean environment and longevity revealed by the analysis of mole rat genomes. <i>Cell Reports</i> , <b>2014</b> , 8, 1354-64	10.6	124
47	Translation inhibitors cause abnormalities in ribosome profiling experiments. <i>Nucleic Acids Research</i> , <b>2014</b> , 42, e134	20.1	192
46	Age- and diet-associated metabolome remodeling characterizes the aging process driven by damage accumulation. <i>ELife</i> , <b>2014</b> , 3, e02077	8.9	44
45	Genome analysis reveals insights into physiology and longevity of the Brandt's bat <i>Myotis brandtii</i> . <i>Nature Communications</i> , <b>2013</b> , 4, 2212	17.4	160
44	MsrB1 and MICALs regulate actin assembly and macrophage function via reversible stereoselective methionine oxidation. <i>Molecular Cell</i> , <b>2013</b> , 51, 397-404	17.6	154
43	Selenoproteome of Kinetoplastids <b>2013</b> , 237-242		
42	The origin of aging: imperfectness-driven non-random damage defines the aging process and control of lifespan. <i>Trends in Genetics</i> , <b>2013</b> , 29, 506-12	8.5	66
41	Role of reactive oxygen species-mediated signaling in aging. <i>Antioxidants and Redox Signaling</i> , <b>2013</b> , 19, 1362-72	8.4	83
40	SECISearch3 and Seblastian: new tools for prediction of SECIS elements and selenoproteins. <i>Nucleic Acids Research</i> , <b>2013</b> , 41, e149	20.1	66
39	Selenium and selenoprotein deficiencies induce widespread pyogranuloma formation in mice, while high levels of dietary selenium decrease liver tumor size driven by TGF $\beta$ . <i>PLoS ONE</i> , <b>2013</b> , 8, e57389	3.7	21
38	On the cause of aging and control of lifespan: heterogeneity leads to inevitable damage accumulation, causing aging; control of damage composition and rate of accumulation define lifespan. <i>BioEssays</i> , <b>2012</b> , 34, 925-9	4.1	26
37	Genome-wide ribosome profiling reveals complex translational regulation in response to oxidative stress. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2012</b> , 109, 17394-9	11.5	209
36	Composition and evolution of the vertebrate and mammalian selenoproteomes. <i>PLoS ONE</i> , <b>2012</b> , 7, e33066	9.6	172
35	Methionine sulfoxide reductases preferentially reduce unfolded oxidized proteins and protect cells from oxidative protein unfolding. <i>Journal of Biological Chemistry</i> , <b>2012</b> , 287, 24448-59	5.4	63
34	SECIS- and UGA position-dependent incorporation of selenocysteine into mammalian selenoproteins. <i>FASEB Journal</i> , <b>2012</b> , 26, 1013.31	0.9	

33	The biological significance of methionine sulfoxide stereochemistry. <i>Free Radical Biology and Medicine</i> , <b>2011</b> , 50, 221-7	7.8	87
32	Genome sequencing reveals insights into physiology and longevity of the naked mole rat. <i>Nature</i> , <b>2011</b> , 479, 223-7	50.4	410
31	Sep15 knockout in mice provides protection against chemically-induced aberrant crypt formation. <i>FASEB Journal</i> , <b>2011</b> , 25, 110.1	0.9	3
30	Increased sodium selenite cytotoxicity in thioredoxin reductase 1 knockdown cancer cells. <i>FASEB Journal</i> , <b>2011</b> , 25, 110.6	0.9	
29	Role of the 15kDa selenoprotein (Sep15) in colon cancer prevention. <i>FASEB Journal</i> , <b>2010</b> , 24, 218.5	0.9	
28	Functional analysis of free methionine-R-sulfoxide reductase from <i>Saccharomyces cerevisiae</i> . <i>Journal of Biological Chemistry</i> , <b>2009</b> , 284, 4354-64	5.4	68
27	Functions and evolution of selenoprotein methionine sulfoxide reductases. <i>Biochimica Et Biophysica Acta - General Subjects</i> , <b>2009</b> , 1790, 1471-7	4	131
26	Eukaryotic selenoproteins and selenoproteomes. <i>Biochimica Et Biophysica Acta - General Subjects</i> , <b>2009</b> , 1790, 1424-8	4	228
25	Mammals reduce methionine-S-sulfoxide with MsrA and are unable to reduce methionine-R-sulfoxide, and this function can be restored with a yeast reductase. <i>Journal of Biological Chemistry</i> , <b>2008</b> , 283, 28361-9	5.4	40
24	Evolutionary dynamics of eukaryotic selenoproteomes: large selenoproteomes may associate with aquatic life and small with terrestrial life. <i>Genome Biology</i> , <b>2007</b> , 8, R198	18.3	154
23	Dynamic evolution of selenocysteine utilization in bacteria: a balance between selenoprotein loss and evolution of selenocysteine from redox active cysteine residues. <i>Genome Biology</i> , <b>2006</b> , 7, R94	18.3	114
22	Evolution of selenium utilization traits. <i>Genome Biology</i> , <b>2005</b> , 6, R66	18.3	80
21	An algorithm for identification of bacterial selenocysteine insertion sequence elements and selenoprotein genes. <i>Bioinformatics</i> , <b>2005</b> , 21, 2580-9	7.2	90
20	Selective rescue of selenoprotein expression in mice lacking a highly specialized methyl group in selenocysteine tRNA. <i>Journal of Biological Chemistry</i> , <b>2005</b> , 280, 5542-8	5.4	114
19	Methionine sulfoxide reduction in mammals: characterization of methionine-R-sulfoxide reductases. <i>Molecular Biology of the Cell</i> , <b>2004</b> , 15, 1055-64	3.5	251
18	The prokaryotic selenoproteome. <i>EMBO Reports</i> , <b>2004</b> , 5, 538-43	6.5	189
17	The Metallome <b>2004</b> , 1-22		
16	Characterization of mammalian selenoproteomes. <i>Science</i> , <b>2003</b> , 300, 1439-43	33.3	1741

15	How selenium has altered our understanding of the genetic code. <i>Molecular and Cellular Biology</i> , <b>2002</b> , 22, 3565-76	4.8	538
14	Reversal of ageing- and injury-induced vision loss by Tet-dependent epigenetic reprogramming		9
13	Ultra-cheap and scalable epigenetic age predictions with TIME-Seq		2
12	COVID-19 is an emergent disease of aging		14
11	Genetic and Phenotypic Evidence for the Causal Relationship Between Aging and COVID-19		3
10	Organ-specific translation elongation rates measured by in vivo ribosome profiling		4
9	Use of selenocysteine, the 21st amino acid, in the fungal kingdom		1
8	Human microbiome aging clocks based on deep learning and tandem of permutation feature importance and accumulated local effects		29
7	Erosion of the Epigenetic Landscape and Loss of Cellular Identity as a Cause of Aging in Mammals		6
6	Profiling epigenetic age in single cells		5
5	Epigenetic clocks reveal a rejuvenation event during embryogenesis followed by aging		1
4	Epigenetic predictors of maximum lifespan and other life history traits in mammals		5
3	Aging predisposes B cells to malignancy by activating c-Myc and perturbing the genome and epigenome		1
2	Universal DNA methylation age across mammalian tissues		31
1	Rapamycin treatment during development extends lifespan and healthspan		1