DNA methylation-based measures of biological age: me

Aging
8, 1844-1865
DOI: 10.18632/aging.101020

Citation Report

#	Article	IF	Citations
1	Therapeutic Manipulation of Ageing: Repurposing Old Dogs and Discovering New Tricks. EBioMedicine, 2016, 14, 24-31.	2.7	15
2	Environmental Deflection: The Impact of Toxicant Exposures on the Aging Epigenome. Toxicological Sciences, 2017, 156, kfx005.	1.4	28
3	The methylation of nuclear and mitochondrial DNA in ageing phenotypes and longevity. Mechanisms of Ageing and Development, 2017, 165, 156-161.	2.2	36
4	DNA methylome analysis identifies accelerated epigenetic ageing associated with postmenopausal breast cancer susceptibility. European Journal of Cancer, 2017, 75, 299-307.	1.3	154
5	Maintained memory in aging is associated with young epigenetic age. Neurobiology of Aging, 2017, 55, 167-171.	1.5	70
6	Biological Age Predictors. EBioMedicine, 2017, 21, 29-36.	2.7	713
7	Multi-tissue DNA methylation age predictor in mouse. Genome Biology, 2017, 18, 68.	3.8	341
8	The epigenetic landscape of age-related diseases: the geroscience perspective. Biogerontology, 2017, 18, 549-559.	2.0	62
9	Editorâ€™s Highlight: Modifying Role of Endothelial Function Gene Variants on the Association of Long-Term PM2.5 Exposure With Blood DNA Methylation Age: The VA Normative Aging Study. Toxicological Sciences, 2017, 158, 116-126.	1.4	10
10	Aging, exceptional longevity and comparisons of the Hannum and Horvath epigenetic clocks. Epigenomics, 2017, 9, 689-700.	1.0	73
11	Associations between maternal risk factors of adverse pregnancy and birth outcomes and the offspring epigenetic clock of gestational age at birth. Clinical Epigenetics, 2017, 9, 49.	1.8	68
12	Genetic architecture of epigenetic and neuronal ageing rates in human brain regions. Nature Communications, 2017, 8, 15353.	5.8	92
13	What have we learned on aging from omics studies?. Seminars in Cell and Developmental Biology, 2017, 70, 177-189.	2.3	54
14	Impacts of the Mitochondrial Genome on the Relationship of Long-Term Ambient Fine Particle Exposure with Blood DNA Methylation Age. Environmental Science & Technology, 2017, 51, 8185-8195.	4.6	16
15	Interindividual epigenetic variability: Sound or noise?. BioEssays, 2017, 39, 1700055.	1.2	17
16	DNA methylation age is elevated in breast tissue of healthy women. Breast Cancer Research and Treatment, 2017, 164, 209-219.	1.1	52
17	Using DNA Methylation Profiling to Evaluate Biological Age and Longevity Interventions. Cell Metabolism, 2017, 25, 954-960.e6.	7.2	314
18	Associations between long-term exposure to PM2.5 component species and blood DNA methylation age in the elderly: The VA normative aging study. Environment International, 2017, 102, 57-65.	4.8	58

#	Article	IF	Citations
19	Epigenetic Age Acceleration Assessed with Human White-Matter Images. Journal of Neuroscience, 2017, 37, 4735-4743.	1.7	24
20	The frailty index outperforms DNA methylation age and its derivatives as an indicator of biological age. GeroScience, 2017, 39, 83-92.	2.1	100
21	The Rotterdam Study: 2018 update on objectives, design and main results. European Journal of Epidemiology, 2017, 32, 807-850.	2.5	379
22	Epigenetic Drift Is a Determinant of Mammalian Lifespan. Rejuvenation Research, 2017, 20, 430-436.	0.9	38
23	DNA Methylation and Human Heart Failure. Circulation, 2017, 136, 1545-1547.	1.6	12
24	Traumatic Stress and Accelerated Cellular Aging: From Epigenetics to Cardiometabolic Disease. Current Psychiatry Reports, 2017, 19, 75.	2.1	51
25	Epigenetic clock analysis in long-term meditators. Psychoneuroendocrinology, 2017, 85, 210-214.	1.3	48
26	Accelerated DNA methylation age in adolescent girls: associations with elevated diurnal cortisol and reduced hippocampal volume. Translational Psychiatry, 2017, 7, e1223-e1223.	2.4	63
27	Biological age is better than chronological as predictor of 3-month outcome in ischemic stroke. Neurology, 2017, 89, 830-836.	1.5	57
28	DNA methylation predicts stroke outcome better. Neurology, 2017, 89, 758-759.	1.5	4
29	Bayesian association scan reveals loci associated with human lifespan and linked biomarkers. Nature Communications, 2017, 8, 15842.	5.8	64
30	Social adversity and epigenetic aging: a multi-cohort study on socioeconomic differences in peripheral blood DNA methylation. Scientific Reports, 2017, 7, 16266.	1.6	181
31	Challenges and recommendations for epigenomics in precision health. Nature Biotechnology, 2017, 35, 1128-1132.	9.4	19
32	Epigenetic correlates of neonatal contact in humans. Development and Psychopathology, 2017, 29, 1517-1538.	1.4	81
33	A longitudinal study of DNA methylation as a potential mediator of age-related diabetes risk. GeroScience, 2017, 39, 475-489.	2.1	62
34	miRNA processing gene polymorphisms, blood DNA methylation age and long-term ambient PM_{2.5} exposure in elderly men. Epigenomics, 2017, 9, 1529-1542.	1.0	15
35	Are objective measures of physical capability related to accelerated epigenetic age? Findings from a British birth cohort. BMJ Open, 2017, 7, e016708.	0.8	36
36	'Omics' and endocrine-disrupting chemicals â€" new paths forward. Nature Reviews Endocrinology, 2017, 13, 740-748.	4.3	48

#	Article	IF	Citations
37	Differential DNA methylation and lymphocyte proportions in a Costa Rican high longevity region. Epigenetics and Chromatin, 2017, 10, 21.	1.8	24
38	â€œDNA Methylation signatures in panic disorderâ€• Translational Psychiatry, 2017, 7, 1287.	2.4	42
39	An epigenome-wide association study meta-analysis of educational attainment. Molecular Psychiatry, 2017, 22, 1680-1690.	4.1	70
40	Eleven Telomere, Epigenetic Clock, and Biomarker-Composite Quantifications of Biological Aging: Do They Measure the Same Thing?. American Journal of Epidemiology, 2018, 187, 1220-1230.	1.6	216
41	The Biology of Aging and Cancer: A Brief Overview of Shared and Divergent Molecular Hallmarks. , 2017, 8, 628.		238
42	DNA Methylation Profiling of Human Prefrontal Cortex Neurons in Heroin Users Shows Significant Difference between Genomic Contexts of Hyper- and Hypomethylation and a Younger Epigenetic Age. Genes, 2017, 8, 152.	1.0	66
43	Metabolic and Genetic Markers of Biological Age. Frontiers in Genetics, 2017, 8, 64.	1.1	27
44	Translating Measures of Biological Aging to Test Effectiveness of Geroprotective Interventions: What Can We Learn from Research on Telomeres?. Frontiers in Genetics, 2017, 8, 164.	1.1	27
45	Epigenetics and Oxidative Stress in Aging. Oxidative Medicine and Cellular Longevity, 2017, 2017, 1-8.	1.9	129
46	Epigenetic clocks for gestational age: statistical and study design considerations. Clinical Epigenetics, 2017, 9, 100.	1.8	24
47	Epigenetic clock analysis of diet, exercise, education, and lifestyle factors. Aging, 2017, 9, 419-446.	1.4	521
48	Accelerated epigenetic aging in Werner syndrome. Aging, 2017, 9, 1143-1152.	1.4	152
49	Biological Age is a predictor of mortality in Ischemic Stroke. Scientific Reports, 2018, 8, 4148.	1.6	53
50	Integrative analysis of omics summary data reveals putative mechanisms underlying complex traits. Nature Communications, 2018, 9, 918.	5.8	250
51	Concurrent systems and time synchronization. International Journal of General Systems, 2018, 47, 313-328.	1.2	1
52	Telomerase May Paradoxically Accelerate Aging of the DNA Methylome. Rejuvenation Research, 2018, 21, 168-172.	0.9	3
53	Prospective Study of Epigenetic Age Acceleration and Incidence of Cardiovascular Disease Outcomes in the ARIC Study (Atherosclerosis Risk in Communities). Circulation Genomic and Precision Medicine, 2018, 11, e001937.	1.6	97
54	Accelerated DNA methylation aging and increased resilience in veterans: The biological cost for soldiering on. Neurobiology of Stress, 2018, 8, 112-119.	1.9	31

#	Article	IF	Citations
55	Epigenetic Aging in Major Depressive Disorder. American Journal of Psychiatry, 2018, 175, 774-782.	4.0	172
56	DNA methylation-based biomarkers and the epigenetic clock theory of ageing. Nature Reviews Genetics, 2018, 19, 371-384.	7.7	1,741
57	Responders and non-responders to influenza vaccination: A DNA methylation approach on blood cells. Experimental Gerontology, 2018, 105, 94-100.	1.2	39
58	Gene Promoter Hypermethylation Detected in Sputum Predicts FEV₁ Decline and All-Cause Mortality in Smokers. American Journal of Respiratory and Critical Care Medicine, 2018, 198, 187-196.	2.5	10
59	Cytosine modifications exhibit circadian oscillations that are involved in epigenetic diversity and aging. Nature Communications, 2018, 9, 644.	5.8	59
60	GWAS of epigenetic aging rates in blood reveals a critical role for TERT. Nature Communications, 2018, 9, 387.	5.8	151
61	Epigenetic Biomarkers for Biological Age. , 2018, , 153-170.		5
62	DNA methylation dynamics in aging: how far are we from understanding the mechanisms?. Mechanisms of Ageing and Development, 2018, 174, 3-17.	2.2	135
63	Effect of adding B-vitamins to vitamin D and calcium supplementation on CpG methylation of epigenetic aging markers. Nutrition, Metabolism and Cardiovascular Diseases, 2018, 28, 411-417.	1.1	16
64	Traumatic stress and accelerated DNA methylation age: A meta-analysis. Psychoneuroendocrinology, 2018, 92, 123-134.	1.3	190
65	Why is parental lifespan linked to children's chances of reaching a high age? A transgenerational hypothesis. SSM - Population Health, 2018, 4, 45-54.	1.3	16
66	Analysis of DNA modifications in aging research. GeroScience, 2018, 40, 11-29.	2.1	39
67	Back to the future: Epigenetic clock plasticity towards healthy aging. Mechanisms of Ageing and Development, 2018, 174, 18-29.	2.2	71
68	Multi-tissue DNA methylation age: Molecular relationships and perspectives for advancing biomarker utility. Ageing Research Reviews, 2018, 45, 15-23.	5.0	33
69	Peripheral DNA methylation, cognitive decline and brain aging: pilot findings from the Whitehall II imaging study. Epigenomics, 2018, 10, 585-595.	1.0	50
70	The Epigenetic Clock at Birth: Associations With Maternal Antenatal Depression and Child Psychiatric Problems. Journal of the American Academy of Child and Adolescent Psychiatry, 2018, 57, 321-328.e2.	0.3	78
71	More than a feeling: A unified view of stress measurement for population science. Frontiers in Neuroendocrinology, 2018, 49, 146-169.	2.5	490
72	Molecular Aging of Human Liver: An Epigenetic/Transcriptomic Signature. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2019, 74, 1-8.	1.7	23

#	Article	IF	Citations
73	Epigenetic Age Acceleration. Circulation Genomic and Precision Medicine, 2018, 11, e002089.	1.6	16
74	Change in the Rate of Biological Aging in Response to Caloric Restriction: CALERIE Biobank Analysis. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2018, 73, 4-10.	1.7	119
75	Accelerated aging in schizophrenia and related disorders: Future research. Schizophrenia Research, 2018, 196, 4-8.	1.1	61
76	Accelerated DNA Methylation Age: Associations With Posttraumatic Stress Disorder and Mortality. Psychosomatic Medicine, 2018, 80, 42-48.	1.3	57
77	DNA methylation patterns are related to co-morbidity status and circulating C-reactive protein levels in the nursing home elderly. Experimental Gerontology, 2018, 105, 47-52.	1.2	10
78	DNA methylation age and perceived age in elderly Danish twins. Mechanisms of Ageing and Development, 2018, 169, 40-44.	2.2	13
79	DNA methylation age is not accelerated in brain or blood of subjects with schizophrenia. Schizophrenia Research, 2018, 196, 39-44.	1.1	41
80	Emerging Omics Approaches in Aging Research. Antioxidants and Redox Signaling, 2018, 29, 985-1002.	2.5	22
81	Association of DNA Methylation-Based Biological Age With Health Risk Factors and Overall and Cause-Specific Mortality. American Journal of Epidemiology, 2018, 187, 529-538.	1.6	106
82	Biological age of the endometrium using DNA methylation. Reproduction, 2018, 155, 165-170.	1.1	13
83	DNA methylationâ€based biological aging and cancer risk and survival: Pooled analysis of seven prospective studies. International Journal of Cancer, 2018, 142, 1611-1619.	2.3	153
84	Adaptation to metabolic dysfunction during aging: Making the best of a bad situation. Experimental Gerontology, 2018, 107, 87-90.	1.2	11
85	An Incipient Revolution in the Testing of Anti-aging Strategies. Biochemistry (Moscow), 2018, 83, 1517-1523.	0.7	4
86	Vaccination in the elderly: The challenge of immune changes with aging. Seminars in Immunology, 2018, 40, 83-94.	2.7	286
87	An epigenetic biomarker of aging for lifespan and healthspan. Aging, 2018, 10, 573-591.	1.4	1,552
88	New insights into the role of DNA methylation in cardiovascular disease. European Journal of Clinical Investigation, 2018, 49, e13051.	1.7	0
89	The epigenetics of inflammaging: The contribution of age-related heterochromatin loss and locus-specific remodelling and the modulation by environmental stimuli. Seminars in Immunology, 2018, 40, 49-60.	2.7	29
90	Age and Periodontal Healthâ€"Immunological View. Current Oral Health Reports, 2018, 5, 229-241.	0.5	48

#	Article	IF	Citations
91	Trajectories of inflammatory biomarkers over the eighth decade and their associations with immune cell profiles and epigenetic ageing. Clinical Epigenetics, 2018, 10, 159.	1.8	30
92	A new aging measure captures morbidity and mortality risk across diverse subpopulations from NHANES IV: A cohort study. PLoS Medicine, 2018, 15, e1002718.	3.9	210
93	Personal Genome Project UK (PGP-UK): a research and citizen science hybrid project in support of personalized medicine. BMC Medical Genomics, 2018, 11, 108.	0.7	34
94	Age prediction of children and adolescents aged 6-17 years: an epigenome-wide analysis of DNA methylation. Aging, 2018, 10, 1015-1026.	1.4	22
95	Association of blood leukocyte DNA methylation at LINE-1 and growth-related candidate genes with pubertal onset and progression. Epigenetics, 2018, 13, 1222-1233.	1.3	16
96	Exposure to Polycyclic Aromatic Hydrocarbons and Accelerated DNA Methylation Aging. Environmental Health Perspectives, 2018, 126, 067005.	2.8	62
97	Biomedical Research in Aging. , 2018, , 25-54.		0
98	Epigenetic Clocks. Evolutionary Anthropology, 2018, 27, 256-260.	1.7	12
99	Polyamine Metabolism and Gene Methylation in Conjunction with One-Carbon Metabolism. International Journal of Molecular Sciences, 2018, 19, 3106.	1.8	70
100	Major trauma and acceleration of the ageing process. Ageing Research Reviews, 2018, 48, 32-39.	5.0	12
101	Dietary Intervention Modifies DNA Methylation Age Assessed by the Epigenetic Clock. Molecular Nutrition and Food Research, 2018, 62, e1800092.	1.5	76
102	Developing a toolkit for the assessment and monitoring of musculoskeletal ageing. Age and Ageing, 2018, 47, iv1-iv19.	0.7	25
103	DNA Methylation Clocks in Aging: Categories, Causes, and Consequences. Molecular Cell, 2018, 71, 882-895.	4.5	403
104	Epigenetic Age in Male Combat-Exposed War Veterans: Associations with Posttraumatic Stress Disorder Status. Molecular Neuropsychiatry, 2018, 4, 90-99.	3.0	35
105	DNA Methylation as a Biomarker of Aging in Epidemiologic Studies. Methods in Molecular Biology, 2018, 1856, 219-231.	0.4	21
106	A framework for selection of blood-based biomarkers for geroscience-guided clinical trials: report from the TAME Biomarkers Workgroup. GeroScience, 2018, 40, 419-436.	2.1	221
107	Healthy ageing: the natural consequences of good nutritionâ€"a conference report. European Journal of Nutrition, 2018, 57, 15-34.	1.8	58
108	Functional versus chronological age: geriatric assessments to guide decision making in older patients with cancer. Lancet Oncology, The, 2018, 19, e305-e316.	5.1	256

#	Article	IF	Citations
109	The Epigenetic Clock and Aging. , 2018, , 95-118.		12
110	Epigenomes in Cardiovascular Disease. Circulation Research, 2018, 122, 1586-1607.	2.0	60
111	DNA Methylationâ€“Based Measures of Biological Aging. , 2018, , 39-64.		16
112	Integrating Biomarkers in Social Stratification and Health Research. Annual Review of Sociology, 2018, 44, 361-386.	3.1	61
114	DNA methylation and the epigenetic clock in relation to physical frailty in older people: the Lothian Birth Cohort 1936. Clinical Epigenetics, 2018, 10, 101.	1.8	62
115	Reproduction predicts shorter telomeres and epigenetic age acceleration among young adult women. Scientific Reports, 2018, 8, 11100.	1.6	60
116	DNA methylation age is associated with an altered hemostatic profile in a multiethnic meta-analysis. Blood, 2018, 132, 1842-1850.	0.6	16
117	DNA Methylation Ageâ€”Environmental Influences, Health Impacts, and Its Role in Environmental Epidemiology. Current Environmental Health Reports, 2018, 5, 317-327.	3.2	80
118	Abnormal Epigenetic Regulation of Immune System during Aging. Frontiers in Immunology, 2018, 9, 197.	2.2	65
119	Plasma proteomic signature of age in healthy humans. Aging Cell, 2018, 17, e12799.	3.0	325
120	The epigenetic clock and pubertal, neuroendocrine, psychiatric, and cognitive outcomes in adolescents. Clinical Epigenetics, 2018, 10, 96.	1.8	43
121	Biological clocks and physical functioning in monozygotic female twins. BMC Geriatrics, 2018, 18, 83.	1.1	22
122	Metabolic and inflammatory biomarkers are associated with epigenetic aging acceleration estimates in the GOLDN study. Clinical Epigenetics, 2018, 10, 56.	1.8	68
123	The epigenetic clock and objectively measured sedentary and walking behavior in older adults: the Lothian Birth Cohort 1936. Clinical Epigenetics, 2018, 10, 4.	1.8	30
124	Perinatally acquired HIV infection accelerates epigenetic aging in South African adolescents. Aids, 2018, 32, 1465-1474.	1.0	81
125	Principles of DNA methylation and their implications for biology and medicine. Lancet, The, 2018, 392, 777-786.	6.3	436
126	Characterizing genetic and environmental influences on variable DNA methylation using monozygotic and dizygotic twins. PLoS Genetics, 2018, 14, e1007544.	1.5	153
127	Epigenetics and aging research: Between adult malleability and early life programming. BioSocieties, 2018, 13, 715-736.	0.8	15

#	Article	IF	Citations
128	Defective DNA Methylation/Demethylation Processes Define Aging-Dependent Methylation Patterns. , 2018, , 33-58.		0
129	Identifying gene targets for brain-related traits using transcriptomic and methylomic data from blood. Nature Communications, 2018, 9, 2282.	5.8	294
130	Epigenetics and Early Life Adversity: Current Evidence and Considerations for Epigenetic Studies in the Context of Child Maltreatment. Child Maltreatment Solutions Network, 2018, , 89-119.	0.4	3
131	Brain age and other bodily â€˜agesâ€™: implications for neuropsychiatry. Molecular Psychiatry, 2019, 24, 266-281.	4.1	291
132	Relationships of Long-Term Smoking and Moist Snuff Consumption With a DNA Methylation Age Relevant Smoking Index: An Analysis in Buccal Cells. Nicotine and Tobacco Research, 2019, 21, 1267-1273.	1.4	6
133	Posttraumatic psychopathology and the pace of the epigenetic clock: a longitudinal investigation. Psychological Medicine, 2019, 49, 791-800.	2.7	57
134	Epigenetic Clock and Relative Telomere Length Represent Largely Different Aspects of Aging in the Berlin Aging Study II (BASE-II). Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2019, 74, 27-32.	1.7	59
135	Nutrigenomics. , 2019, , 256-266.		0
136	Association of Epigenetic Clock with Consensus Molecular Subtypes and Overall Survival of Colorectal Cancer. Cancer Epidemiology Biomarkers and Prevention, 2019, 28, 1720-1724.	1.1	37
137	DNA Methylation and Hydroxymethylation and Behavior. Current Topics in Behavioral Neurosciences, 2019, 42, 51-82.	0.8	12
138	Screening for genes that accelerate the epigenetic aging clock in humans reveals a role for the H3K36 methyltransferase NSD1. Genome Biology, 2019, 20, 146.	3.8	66
139	Race in the social-epigenomic regulation of pre- and perinatal development. , 2019, , 135-152.		0
140	Why Is Parental Lifespan Linked to Childrenâ€™s Chances of Reaching a High Age? A Transgenerational Hypothesis. Healthy Ageing and Longevity, 2019, , 245-267.	0.2	0
141	Novel age-associated DNA methylation changes and epigenetic age acceleration in middle-aged African Americans and whites. Clinical Epigenetics, 2019, 11, 119.	1.8	67
142	The nasal methylome as a biomarker of asthma and airway inflammation in children. Nature Communications, 2019, 10, 3095.	5.8	129
143	Association between epigenetic age acceleration and depressive symptoms in a prospective cohort study of urban-dwelling adults. Journal of Affective Disorders, 2019, 257, 64-73.	2.0	19
144	Sleep and inflammation: partners in sickness and in health. Nature Reviews Immunology, 2019, 19, 702-715.	10.6	385
145	Age-Related DNA Methylation Changes: Potential Impact on Skeletal Muscle Aging in Humans. Frontiers in Physiology, 2019, 10, 996.	1.3	35

#	Article	IF	Citations
146	Exploring the Relationship of Relative Telomere Length and the Epigenetic Clock in the LipidCardio Cohort. International Journal of Molecular Sciences, 2019, 20, 3032.	1.8	31
147	The roles of DNA, RNA and histone methylation in ageing and cancer. Nature Reviews Molecular Cell Biology, 2019, 20, 573-589.	16.1	359
148	Different epigenetic clocks reflect distinct pathophysiological features of multiple sclerosis. Epigenomics, 2019, 11, 1429-1439.	1.0	22
149	Epigenetic Clocks and Allostatic Load Reveal Potential Sex-Specific Drivers of Biological Aging. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2020, 75, 495-503.	1.7	26
150	Reproduction, DNA methylation and biological age. Human Reproduction, 2019, 34, 1965-1973.	0.4	27
151	Development of Tissue-Specific Age Predictors Using DNA Methylation Data. Genes, 2019, 10, 888.	1.0	21
152	Mini Nutritional Assessment Scores Indicate Higher Risk for Prospective Mortality and Contrasting Correlation With Age-Related Epigenetic Biomarkers. Frontiers in Endocrinology, 2019, 10, 672.	1.5	1
153	DNA methylation age and physical and cognitive ageing. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2020, 75, 504-511.	1.7	35
154	Intrinsic and extrinsic epigenetic age acceleration are associated with hypertensive target organ damage in older African Americans. BMC Medical Genomics, 2019, 12, 141.	0.7	28
155	Exploring Epigenetic Age in Response to Intensive Relaxing Training: A Pilot Study to Slow Down Biological Age. International Journal of Environmental Research and Public Health, 2019, 16, 3074.	1.2	30
156	Improved precision of epigenetic clock estimates across tissues and its implication for biological ageing. Genome Medicine, 2019, 11, 54.	3.6	191
157	Education and Lifestyle Factors Are Associated with DNA Methylation Clocks in Older African Americans. International Journal of Environmental Research and Public Health, 2019, 16, 3141.	1.2	88
158	Enhancing Resilience in Youth. , 2019, , .		5
159	Age-related clonal haemopoiesis is associated with increased epigenetic age. Current Biology, 2019, 29, R786-R787.	1.8	37
160	Optimism is not associated with two indicators of DNA methylation aging. Aging, 2019, 11, 4970-4989.	1.4	6
161	A pilot prospective study of sleep patterns and DNA methylation-characterized epigenetic aging in young adults. BMC Research Notes, 2019, 12, 583.	0.6	22
162	Identifying blood-specific age-related DNA methylation markers on the Illumina MethylationEPICÂ® BeadChip. Forensic Science International, 2019, 303, 109944.	1.3	22
163	Environmental Factors in Successful Aging: The Potential Impact of Air Pollution. Environmental Health Perspectives, 2019, 127, 102001.	2.8	17

#	Article	IF	Citations
164	Epigenetics and Aging. , 2019, , 1413-1433.		8
165	Leisure-time physical activity and DNA methylation ageâ€"a twin study. Clinical Epigenetics, 2019, 11, 12.	1.8	34
166	Can markers of biological age predict dependency in old age?. Biogerontology, 2019, 20, 321-329.	2.0	19
167	DNA methylation patterns of adult survivors of adolescent/young adult Hodgkin lymphoma compared to their unaffected monozygotic twin. Leukemia and Lymphoma, 2019, 60, 1429-1437.	0.6	11
168	Intratumor DNA methylation heterogeneity in glioblastoma: implications for DNA methylation-based classification. Neuro-Oncology, 2019, 21, 616-627.	0.6	83
169	RE: â€œSOCIOECONOMIC POSITION AND DNA METHYLATION AGE ACCELERATION ACROSS THE LIFE COURSEâ€. American Journal of Epidemiology, 2019, 188, 487-488.	1.6	5
170	DNA Methylation Signatures as Biomarkers of Prior Environmental Exposures. Current Epidemiology Reports, 2019, 6, 1-13.	1.1	24
171	Role of Epigenomics in Bone and Cartilage Disease. Journal of Bone and Mineral Research, 2019, 34, 215-230.	3.1	61
172	Cross-disorder analysis of schizophrenia and 19 immune-mediated diseases identifies shared genetic risk. Human Molecular Genetics, 2019, 28, 3498-3513.	1.4	65
173	Developments in molecular epidemiology of aging. Emerging Topics in Life Sciences, 2019, 3, 411-421.	1.1	19
174	Investigation of accelerated epigenetic aging in individuals suffering from schizophrenia in the context of lifetime suicide attempt. Schizophrenia Research, 2022, 243, 222-224.	1.1	3
175	Human epigenetic ageing is logarithmic with time across the entire lifespan. Epigenetics, 2019, 14, 912-926.	1.3	47
176	Patterns of DNA methylation as an indicator of biological aging: State of the science and future directions in precision health promotion. Nursing Outlook, 2019, 67, 337-344.	1.5	5
177	Genomic and Epigenomic Potential With Age: Genome, Epigenome, and the Epigenetic Clock. , 2019, , 445-459.		0
178	Human aging DNA methylation signatures are conserved but accelerated in cultured fibroblasts. Epigenetics, 2019, 14, 961-976.	1.3	36
179	Growth disrupting mutations in epigenetic regulatory molecules are associated with abnormalities of epigenetic aging. Genome Research, 2019, 29, 1057-1066.	2.4	38
180	Methylation age acceleration does not predict mortality in schizophrenia. Translational Psychiatry, 2019, 9, 157.	2.4	17
181	Epigenetic Age Acceleration in Adolescence Associates With BMI, Inflammation, and Risk Score for Middle Age Cardiovascular Disease. Journal of Clinical Endocrinology and Metabolism, 2019, 104, 3012-3024.	1.8	53

#	Article	IF	Citations
182	DNA methylation GrimAge strongly predicts lifespan and healthspan. Aging, 2019, 11, 303-327.	1.4	1,128
183	Prenatal adverse environment is associated with epigenetic age deceleration at birth and hypomethylation at the hypoxia-responsive EP300 gene. Clinical Epigenetics, 2019, 11, 73.	1.8	39
184	Comparative validation of an epigenetic mortality risk score with three aging biomarkers for predicting mortality risks among older adult males. International Journal of Epidemiology, 2019, 48, 1958-1971.	0.9	25
185	The Impact of Caloric Restriction on the Epigenetic Signatures of Aging. International Journal of Molecular Sciences, 2019, 20, 2022.	1.8	71
186	Pilot study of DNA methylation, molecular aging markers and measures of health and well-being in aging. Translational Psychiatry, 2019, 9, 118.	2.4	22
187	Shift work, DNA methylation and epigenetic age. International Journal of Epidemiology, 2019, 48, 1536-1544.	0.9	38
188	Dynamic DNA Methylation During Aging: A â€œProphetâ€•of Age-Related Outcomes. Frontiers in Genetics, 2019, 10, 107.	1.1	91
189	The goddess who spins the thread of life: Klotho, psychiatric stress, and accelerated aging. Brain, Behavior, and Immunity, 2019, 80, 193-203.	2.0	29
190	Epigenetic age acceleration is associated with allergy and asthma in children in Project Viva. Journal of Allergy and Clinical Immunology, 2019, 143, 2263-2270.e14.	1.5	43
191	Extracellular Spermine Activates DNA Methyltransferase 3A and 3B. International Journal of Molecular Sciences, 2019, 20, 1254.	1.8	11
192	Accelerating research on biological aging and mental health: Current challenges and future directions. Psychoneuroendocrinology, 2019, 106, 293-311.	1.3	61
193	Variable DNA methylation in neonates mediates the association between prenatal smoking and birth weight. Philosophical Transactions of the Royal Society B: Biological Sciences, 2019, 374, 20180120.	1.8	46
194	The epigenetic clock as a predictor of disease and mortality risk: a systematic review and meta-analysis. Clinical Epigenetics, 2019, 11, 62.	1.8	198
195	Examination of the Dimensions of Biological Age. Frontiers in Genetics, 2019, 10, 263.	1.1	68
196	Zoster Vaccination in Older Adults: Efficacy and Public Health Implications. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2019, 74, 1239-1243.	1.7	10
197	Methylation-Based Biological Age and Breast Cancer Risk. Journal of the National Cancer Institute, 2019, 111, 1051-1058.	3.0	124
198	Peripheral Blood DNA Methylation as Potential Biomarker of Malignant Pleural Mesothelioma in Asbestos-Exposed Subjects. Journal of Thoracic Oncology, 2019, 14, 527-539.	0.5	28
199	Longitudinal changes in the genetic and environmental influences on the epigenetic clocks across old age: Evidence from two twin cohorts. EBioMedicine, 2019, 40, 710-716.	2.7	27

#	Article	IF	Citations
200	How does socio-economic position (SEP) get biologically embedded? A comparison of allostatic load and the epigenetic clock(s). Psychoneuroendocrinology, 2019, 104, 64-73.	1.3	65
201	Epigenetic clock analysis of blood samples from Japanese schizophrenia patients. NPJ Schizophrenia, 2019, 5, 4.	2.0	37
202	Systematic underestimation of the epigenetic clock and age acceleration in older subjects. Genome Biology, 2019, 20, 283.	3.8	97
203	A meta-analysis of genome-wide association studies of epigenetic age acceleration. PLoS Genetics, 2019, 15, e1008104.	1.5	83
204	Emerging Insights into the Metabolic Alterations in Aging Using Metabolomics. Metabolites, 2019, 9, 301.	1.3	72
205	DNA methylation aging clocks: challenges and recommendations. Genome Biology, 2019, 20, 249.	3.8	552
206	An epigenetic predictor of death captures multi-modal measures of brain health. Molecular Psychiatry, 2021, 26, 3806-3816.	4.1	77
207	çŽ˜å¢ƒåœ¨å¥åº·è€ƒ¾„åŒ–æ‰®æ¼”çš„è§’è‰²ï¼šçŽ°çŠ¶ä¸Žæ–°è¿›å±•ã€ Environmental Health Perspectives (Chine	2.3	65
208	Accelerated aging in serious mental disorders. Current Opinion in Psychiatry, 2019, 32, 381-387.	3.1	30
209	Characterization of Blood Surrogate Immune-Methylation Biomarkers for Immune Cell Infiltration in Chronic Inflammaging Disorders. Frontiers in Genetics, 2019, 10, 1229.	1.1	8
210	Brain-age in midlife is associated with accelerated biological aging and cognitive decline in a longitudinal birth cohort. Molecular Psychiatry, 2021, 26, 3829-3838.	4.1	151
211	DNA methylation processes in atherosclerotic plaque. Atherosclerosis, 2019, 281, 168-179.	0.4	49
212	Cellâ€free DNA as a biomarker of aging. Aging Cell, 2019, 18, e12890.	3.0	80
213	To the freezers! Stored biospecimens from human randomized trials are an important new direction for studies of biological aging. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2019, 74, 89-90.	1.7	2
214	Why are people with HIV considered â€œolder adultsâ€• in their fifties?. European Geriatric Medicine, 2019, 10, 183-188.	1.2	13
215	The role of DNA methylation in epigenetics of aging. , 2019, 195, 172-185.		216
216	Epigenetics and meditation. Current Opinion in Psychology, 2019, 28, 76-80.	2.5	47
217	The Biological Basis of Aging. , 2019, , 415-444.		1

#	Article	IF	Citations
218	Implications of sleep disturbance and inflammation for Alzheimer's disease dementia. Lancet Neurology, The, 2019, 18, 296-306.	4.9	273
219	A Clinical Trial Using Methylation Age to Evaluate Current Antiaging Practices. Rejuvenation Research, 2019, 22, 201-209.	0.9	7
220	DNA methylation correlates of PTSD: Recent findings and technical challenges. Progress in Neuro-Psychopharmacology and Biological Psychiatry, 2019, 90, 223-234.	2.5	28
221	Early Experiences of Threat, but Not Deprivation, Are Associated With Accelerated Biological Aging in Children and Adolescents. Biological Psychiatry, 2019, 85, 268-278.	0.7	211
222	Tracking the Epigenetic Clock Across the Human Life Course: A Meta-analysis of Longitudinal Cohort Data. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2019, 74, 57-61.	1.7	81
223	An Epigenetics-Based, Lifestyle Medicineâ€"Driven Approach to Stress Management for Primary Patient Care: Implications for Medical Education. American Journal of Lifestyle Medicine, 2020, 14, 294-303.	0.8	5
224	A Systematic Review and Meta-analysis of Environmental, Lifestyle, and Health Factors Associated With DNA Methylation Age. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2020, 75, 481-494.	1.7	92
225	Spermine and gene methylation: a mechanism of lifespan extension induced by polyamine-rich diet. Amino Acids, 2020, 52, 213-224.	1.2	23
226	A systems approach to clinical oncology uses deep phenotyping to deliver personalized care. Nature Reviews Clinical Oncology, 2020, 17, 183-194.	12.5	41
227	Cancer in the Elderly. , 2020, , 874-881.e3.		1
228	Epigenetics in age-related macular degeneration: new discoveries and future perspectives. Cellular and Molecular Life Sciences, 2020, 77, 807-818.	2.4	23
229	Excess brain age in the sleep electroencephalogram predicts reduced life expectancy. Neurobiology of Aging, 2020, 88, 150-155.	1.5	28
230	Epigenetic aging in children from a smallâ€scale farming society in The Congo Basin: Associations with child growth and family conflict. Developmental Psychobiology, 2020, 62, 138-153.	0.9	13
231	Accelerated extrinsic epigenetic aging and increased natural killer cells in blood of suicide completers. Progress in Neuro-Psychopharmacology and Biological Psychiatry, 2020, 98, 109805.	2.5	15
232	Accelerated hippocampal biological aging in bipolar disorder. Bipolar Disorders, 2020, 22, 498-507.	1.1	49
233	Methylation signatures in peripheral blood are associated with marked age acceleration and disease progression in patients with primary sclerosing cholangitis. JHEP Reports, 2020, 2, 100060.	2.6	9
234	DNA Methylation Analysis Validates Organoids as a Viable Model for Studying Human Intestinal Aging. Cellular and Molecular Gastroenterology and Hepatology, 2020, 9, 527-541.	2.3	53
235	Measuring biological aging in humans: A quest. Aging Cell, 2020, 19, e13080.	3.0	364

#	Article	IF	Citations
236	Midlife Study of the Louisville Twins: Connecting Cognitive Development to Biological and Cognitive Aging. Behavior Genetics, 2020, 50, 73-83.	1.4	7
237	Psychosocial stress and epigenetic aging. International Review of Neurobiology, 2020, 150, 107-128.	0.9	53
238	Aging: therapeutics for a healthy future. Neuroscience and Biobehavioral Reviews, 2020, 108, 453-458.	2.9	15
239	Promising biomarkers of human aging: In search of a multi-omics panel to understand the aging process from a multidimensional perspective. Ageing Research Reviews, 2020, 64, 101164.	5.0	54
240	Epigenetic age acceleration and clinical outcomes in gliomas. PLoS ONE, 2020, 15, e0236045.	1.1	14
241	Accelerated epigenetic aging in adolescents from low-income households is associated with altered development of brain structures. Metabolic Brain Disease, 2020, 35, 1287-1298.	1.4	17
242	Socio-Environmental, Lifestyle, Behavioural, and Psychological Determinants of Biological Ageing: The Singapore Longitudinal Ageing Study. Gerontology, 2020, 66, 603-613.	1.4	10
243	Mitochondrial metabolism and DNA methylation: a review of the interaction between two genomes. Clinical Epigenetics, 2020, 12, 182.	1.8	60
244	Personalized nutrition and healthy aging. Nutrition Reviews, 2020, 78, 58-65.	2.6	17
245	Whole blood DNA methylation aging markers predict colorectal cancer survival: a prospective cohort study. Clinical Epigenetics, 2020, 12, 184.	1.8	10
246	In vivo biomarkers of structural and functional brain development and aging in humans. Neuroscience and Biobehavioral Reviews, 2020, 117, 142-164.	2.9	19
247	Prediction of Lung Function in Adolescence Using Epigenetic Aging: A Machine Learning Approach. Methods and Protocols, 2020, 3, 77.	0.9	3
248	Stochastic Epigenetic Mutations Are Associated with Risk of Breast Cancer, Lung Cancer, and Mature B-cell Neoplasms. Cancer Epidemiology Biomarkers and Prevention, 2020, 29, 2026-2037.	1.1	18
249	DNA Methylation Clocks and Their Predictive Capacity for Aging Phenotypes and Healthspan. Neuroscience Insights, 2020, 15, 263310552094222.	0.9	86
250	Epigenetic measures of ageing predict the prevalence and incidence of leading causes of death and disease burden. Clinical Epigenetics, 2020, 12, 115.	1.8	109
251	The Illumina Infinium methylation assay for genome-wide methylation analyses. , 2020, , 117-140.		2
252	Molecules of Silence: Effects of Meditation on Gene Expression and Epigenetics. Frontiers in Psychology, 2020, 11, 1767.	1.1	32
253	Body weight and highâ€fat diet are associated with epigenetic aging in female members of the BXD murine family. Aging Cell, 2020, 19, e13207.	3.0	31

#	Article	IF	Citations
254	Age-associated changes in the circulating human antibody repertoire are upregulated in autoimmunity. Immunity and Ageing, 2020, 17, 28.	1.8	16
255	Anti-aging technoscience & the biologization of cumulative inequality: Affinities in the biopolitics of successful aging. Journal of Aging Studies, 2020, 55, 100899.	0.7	4
256	Identifying Risk Genes and Interpreting Pathogenesis for Parkinsonâ€™s Disease by a Multiomics Analysis. Genes, 2020, 11, 1100.	1.0	13
257	Underlying features of epigenetic aging clocks in vivo and in vitro. Aging Cell, 2020, 19, e13229.	3.0	120
258	DNA methylation study of Huntingtonâ€™s disease and motor progression in patients and in animal models. Nature Communications, 2020, 11, 4529.	5.8	45
259	Age-associated epigenetic change in chimpanzees and humans. Philosophical Transactions of the Royal Society B: Biological Sciences, 2020, 375, 20190616.	1.8	22
260	Biological and Functional Biomarkers of Aging: Definition, Characteristics, and How They Can Impact Everyday Cancer Treatment. Current Oncology Reports, 2020, 22, 115.	1.8	32
261	High-resolution analyses of human sperm dynamic methylome reveal thousands of novel age-related epigenetic alterations. Clinical Epigenetics, 2020, 12, 192.	1.8	29
262	Association of Epigenetic Metrics of Biological Age With Cortical Thickness. JAMA Network Open, 2020, 3, e2015428.	2.8	18
263	Determinants of accelerated metabolomic and epigenetic aging in a UK cohort. Aging Cell, 2020, 19, e13149.	3.0	95
264	Decelerated epigenetic aging associated with mood stabilizers in the blood of patients with bipolar disorder. Translational Psychiatry, 2020, 10, 129.	2.4	41
265	Epigenetics and imprinting in assisted reproduction. , 2020, , 69-87.		0
266	Epigenetic regulation in the pathophysiology of Lewy body dementia. Progress in Neurobiology, 2020, 192, 101822.	2.8	10
267	The acute effects of adjuvant radiation and chemotherapy on peripheral blood epigenetic age in early stage breast cancer patients. Npj Breast Cancer, 2020, 6, 23.	2.3	37
268	New methodologies in ageing research. Ageing Research Reviews, 2020, 62, 101094.	5.0	7
269	Bloodâ€derived DNA methylation predictors of mortality discriminate tumor and healthy tissue in multiple organs. Molecular Oncology, 2020, 14, 2111-2123.	2.1	7
270	Epigenetics of allergies: From birth to childhood. , 2020, , 269-283.		0
271	Blood DNA Methylation and Aging: A Cross-Sectional Analysis and Longitudinal Validation in the InCHIANTI Study. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2020, 75, 2051-2055.	1.7	14

#	Article	IF	Citations
272	DNA Methylation Biomarkers in Aging and Age-Related Diseases. Frontiers in Genetics, 2020, 11, 171.	1.1	149
273	Epigenetic predictors of all-cause mortality are associated with objective measures of neighborhood disadvantage in an urban population. Clinical Epigenetics, 2020, 12, 44.	1.8	28
274	Molecular Aging Markers in Patients with Klinefelter Syndrome. , 2020, 11, 470.		4
275	Transient non-integrative expression of nuclear reprogramming factors promotes multifaceted amelioration of aging in human cells. Nature Communications, 2020, 11, 1545.	5.8	183
276	DNA methylation-based measures of accelerated biological ageing and the risk of dementia in the oldest-old: a study of the Lothian Birth Cohort 1921. BMC Psychiatry, 2020, 20, 91.	1.1	24
277	The biological age of the heart is consistently younger than chronological age. Scientific Reports, 2020, 10, 10752.	1.6	23
278	Stress During Pregnancy and Epigenetic Modifications to Offspring DNA. Journal of Perinatal and Neonatal Nursing, 2020, 34, 134-145.	0.5	19
279	DNA Methylationâ€“Based Biomarkers of Environmental Exposures for Human Population Studies. Current Environmental Health Reports, 2020, 7, 121-128.	3.2	19
280	Aging Biomarkers: From Functional Tests to Multiâ€Omics Approaches. Proteomics, 2020, 20, e1900408.	1.3	40
281	Effects of Maternal Vitamin D3 Supplementation on Offspring Epigenetic Clock of Gestational Age at Birth: A Post-hoc Analysis of a Randomized Controlled Trial. Epigenetics, 2020, 15, 830-840.	1.3	16
282	Accelerated epigenetic age and cognitive decline among urban-dwelling adults. Neurology, 2020, 94, e613-e625.	1.5	45
283	Epigenetic aging in newborns: role of maternal diet. American Journal of Clinical Nutrition, 2020, 111, 555-561.	2.2	20
284	One-year Mediterranean diet promotes epigenetic rejuvenation with country- and sex-specific effects: a pilot study from the NU-AGE project. GeroScience, 2020, 42, 687-701.	2.1	76
285	Exceptionally Long-Lived Individuals (ELLI) Demonstrate Slower Aging Rate Calculated by DNA Methylation Clocks as Possible Modulators for Healthy Longevity. International Journal of Molecular Sciences, 2020, 21, 615.	1.8	18
286	Promoter-anchored chromatin interactions predicted from genetic analysis of epigenomic data. Nature Communications, 2020, 11, 2061.	5.8	8
287	Epigenetic Mechanisms in the Neurodevelopmental Theory of Depression. Depression Research and Treatment, 2020, 2020, 1-9.	0.7	12
288	Telomere Length as a Biomarker of Biological Aging in Shift Workers. Applied Sciences (Switzerland), 2020, 10, 2764.	1.3	11
289	The environment as a determinant of successful aging or frailty. Mechanisms of Ageing and Development, 2020, 188, 111244.	2.2	27

#	Article	IF	Citations
290	Epigenetic clock measuring age acceleration via DNA methylation levels in blood is associated with decreased oocyte yield. Journal of Assisted Reproduction and Genetics, 2020, 37, 1097-1103.	1.2	16
291	Resources for functional genomic studies of health and development in nonhuman primates. American Journal of Physical Anthropology, 2020, 171, 174-194.	2.1	7
292	Determination of saliva epigenetic age in infancy, and its association with parental socio-economic characteristics and pregnancy outcomes. Journal of Developmental Origins of Health and Disease, 2021, 12, 319-327.	0.7	1
293	Prenatal gestational diabetes mellitus exposure and accelerated offspring DNA methylation age in early childhood. Epigenetics, 2021, 16, 186-195.	1.3	25
294	Biological age is a novel biomarker to predict stroke recurrence. Journal of Neurology, 2021, 268, 285-292.	1.8	16
295	N-terminal pro B-type natriuretic peptide (NT-proBNP): a possible surrogate of biological age in the elderly people. GeroScience, 2021, 43, 845-857.	2.1	15
296	Maternal prenatal depression and epigenetic age deceleration: testing potentially confounding effects of prenatal stress and SSRI use. Epigenetics, 2021, 16, 327-337.	1.3	16
297	The associations of multiple metals mixture with accelerated DNA methylation aging. Environmental Pollution, 2021, 269, 116230.	3.7	29
298	Coordination in the unfolded protein response during aging in outbred deer mice. Experimental Gerontology, 2021, 144, 111191.	1.2	9
299	DNA methylation-based biomarkers of age acceleration and all-cause death, myocardial infarction, stroke, and cancer in two cohorts: The NAS, and KORA F4. EBioMedicine, 2021, 63, 103151.	2.7	42
300	GrimAge Outperforms Other Epigenetic Clocks in the Prediction of Age-Related Clinical Phenotypes and All-Cause Mortality. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2021, 76, 741-749.	1.7	200
301	The use of DNA methylation clock in aging research. Experimental Biology and Medicine, 2021, 246, 436-446.	1.1	12
302	Biological aging in schizophrenia and psychosis severity: DNA methylation analysis. Psychiatry Research, 2021, 296, 113646.	1.7	16
303	DNA methylation ageing clocks and pancreatic cancer risk: pooled analysis of three prospective nested case-control studies. Epigenetics, 2021, 16, 1306-1316.	1.3	14
304	Characteristics of Epigenetic Clocks Across Blood and Brain Tissue in Older Women and Men. Frontiers in Neuroscience, 2020, 14, 555307.	1.4	32
305	Occurrence of Accelerated Epigenetic Aging and Methylation Disruptions in Human Immunodeficiency Virus Infection Before Antiretroviral Therapy. Journal of Infectious Diseases, 2021, 223, 1681-1689.	1.9	19
306	â€œEpigenetic clocksâ€: Theory and applications in human biology. American Journal of Human Biology, 2021, 33, e23488.	0.8	56
308	DNA methylation perturbations may link altered development and aging in the lung. Aging, 2021, 13, 1742-1764.	1.4	6

#	Article	IF	Citations
309	<scp>DNA</scp> methylation age as a biomarker for cancer. International Journal of Cancer, 2021, 148, 2652-2663.	2.3	21
310	Systems Glycobiology: Immunoglobulin G Glycans as Biomarkers and Functional Effectors in Aging and Diseases. , 2021, , 439-478.		10
311	Epigenetic Age Acceleration and Risk for Posttraumatic Stress Disorder following Exposure to Substantiated Child Maltreatment. Journal of Clinical Child and Adolescent Psychology, 2021, , 1-11.	2.2	8
312	Deep learning encodes robust discriminative neuroimaging representations to outperform standard machine learning. Nature Communications, 2021, 12, 353.	5.8	114
313	Associations of Age, Sex, Race/Ethnicity, and Education With 13 Epigenetic Clocks in a Nationally Representative U.S. Sample: The Health and Retirement Study. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2021, 76, 1117-1123.	1.7	93
314	Healthy eating patterns and epigenetic measures of biological age. American Journal of Clinical Nutrition, 2022, 115, 171-179.	2.2	24
315	Age-Net: An MRI-Based Iterative Framework for Brain Biological Age Estimation. IEEE Transactions on Medical Imaging, 2021, 40, 1778-1791.	5.4	22
316	Exercise and/or Stress Effects on the Epigenetic Clock. , 2021, , 275-278.		0
317	An integrative study of five biological clocks in somatic and mental health. ELife, 2021, 10, .	2.8	52
318	Epigenetic Age Acceleration and Cognitive Decline: A Twin Study. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2021, 76, 1854-1863.	1.7	27
320	Implementing Precision Medicine in Human Frailty through Epigenetic Biomarkers. International Journal of Environmental Research and Public Health, 2021, 18, 1883.	1.2	5
321	Internalizing symptoms associate with the pace of epigenetic aging in childhood. Biological Psychology, 2021, 159, 108021.	1.1	13
322	Accelerated epigenetic aging in adolescents living with HIV is associated with altered development of brain structures. Journal of NeuroVirology, 2022, 28, 208-216.	1.0	11
323	DNA methylation predicts age and provides insight into exceptional longevity of bats. Nature Communications, 2021, 12, 1615.	5.8	80
324	Disparities in the pace of biological aging among midlife adults of the same chronological age have implications for future frailty risk and policy. Nature Aging, 2021, 1, 295-308.	5.3	118
326	Youthfulness begins in youth. Nature Aging, 2021, 1, 239-240.	5.3	2
327	How are social determinants of health integrated into epigenetic research? A systematic review. Social Science and Medicine, 2021, 273, 113738.	1.8	35
328	Epigenetic age acceleration is associated with cardiometabolic risk factors and clinical cardiovascular disease risk scores in African Americans. Clinical Epigenetics, 2021, 13, 55.	1.8	37

#	Article	IF	Citations
329	Polyamine-Rich Diet Elevates Blood Spermine Levels and Inhibits Pro-Inflammatory Status: An Interventional Study. Medical Sciences (Basel, Switzerland), 2021, 9, 22.	1.3	19
330	Aging imparts cell-autonomous dysfunction to regulatory T cells during recovery from influenza pneumonia. JCI Insight, 2021, 6, .	2.3	25
331	IÃn virallinen muuttaminen tulisi sallia. Gerontologia, 2021, 35, 72-75.	0.1	0
332	Weight management intervention identifies association of decreased DNA methylation age with improved functional age measures in older adults with obesity. Clinical Epigenetics, 2021, 13, 46.	1.8	6
333	The Effects of Lifetime Estrogen Exposure on Breast Epigenetic Age. Cancer Epidemiology Biomarkers and Prevention, 2021, 30, 1241-1249.	1.1	7
336	Lifestyle weight-loss intervention may attenuate methylation aging: the CENTRAL MRI randomized controlled trial. Clinical Epigenetics, 2021, 13, 48.	1.8	22
337	Epigenetic age acceleration changes 2 years after antiretroviral therapy initiation in adults with HIV: a substudy of the NEAT001/ANRS143 randomised trial. Lancet HIV,the, 2021, 8, e197-e205.	2.1	46
338	Characteristics of epigenetic aging across gestational and perinatal tissues. Clinical Epigenetics, 2021, 13, 97.	1.8	25
339	Associations of circulating folate, vitamin B12 and homocysteine concentrations in early pregnancy and cord blood with epigenetic gestational age: the Generation R Study. Clinical Epigenetics, 2021, 13, 95.	1.8	9
340	Telomere length and epigenetic age acceleration in adolescents with anxiety disorders. Scientific Reports, 2021, 11, 7716.	1.6	11
341	Clonal haematopoiesis of indeterminate potential: intersections between inflammation, vascular disease and heart failure. Clinical Science, 2021, 135, 991-1007.	1.8	18
342	DNA Methylation GrimAge and Incident Diabetes: The Coronary Artery Risk Development in Young Adults (CARDIA) Study. Diabetes, 2021, 70, 1404-1413.	0.3	19
344	Accelerated aging in the brain, epigenetic aging in blood, and polygenic risk for schizophrenia. Schizophrenia Research, 2021, 231, 189-197.	1.1	30
345	Alcohol Consumption and Methylation-Based Measures of Biological Age. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2021, 76, 2107-2111.	1.7	27
346	Epigenetic age acceleration, fatigue, and inflammation in patients undergoing radiation therapy for head and neck cancer: A longitudinal study. Cancer, 2021, 127, 3361-3371.	2.0	28
347	Epigenetic enzymes: A role in aging and prospects for pharmacological targeting. Ageing Research Reviews, 2021, 67, 101312.	5.0	16
348	Combined healthy lifestyle score and risk of epigenetic aging: a discordant monozygotic twin study. Aging, 2021, 13, 14039-14052.	1.4	11
349	Blood and skeletal muscle ageing determined by epigenetic clocks and their associations with physical activity and functioning. Clinical Epigenetics, 2021, 13, 110.	1.8	15

#	Article	IF	Citations
351	An update in toxicology of ageing. Environmental Toxicology and Pharmacology, 2021, 84, 103611.	2.0	7
352	Clonal hematopoiesis associated with epigenetic aging and clinical outcomes. Aging Cell, 2021, 20, e13366.	3.0	72
353	PTSD is associated with accelerated transcriptional aging in World Trade Center responders. Translational Psychiatry, 2021, 11, 311.	2.4	15
355	Extremely Low Birth Weight and Accelerated Biological Aging. Pediatrics, 2021, 147, .	1.0	19
356	Sex differences in biological aging with a focus on human studies. ELife, 2021, 10, .	2.8	146
357	Epigenetic clock and methylation studies in elephants. Aging Cell, 2021, 20, e13414.	3.0	43
358	The Cerebral Effect of Ammonia in Brain Aging: Bloodâ€“Brain Barrier Breakdown, Mitochondrial Dysfunction, and Neuroinflammation. Journal of Clinical Medicine, 2021, 10, 2773.	1.0	12
359	Aging in Adult Survivors of Childhood Cancer: Implications for Future Care. Journal of Clinical Oncology, 2021, 39, 1741-1751.	0.8	6
360	Epigenetic Aging Biomarkers Associated With Cognitive Impairment in Older African American Adults With Human Immunodeficiency Virus (HIV). Clinical Infectious Diseases, 2021, 73, 1982-1991.	2.9	14
361	Postpartum sleep loss and accelerated epigenetic aging. Sleep Health, 2021, 7, 362-367.	1.3	20
362	DNAm-based signatures of accelerated aging and mortality in blood are associated with low renal function. Clinical Epigenetics, 2021, 13, 121.	1.8	13
363	Inflammation, epigenetics, and metabolism converge to cell senescence and ageing: the regulation and intervention. Signal Transduction and Targeted Therapy, 2021, 6, 245.	7.1	119
364	Does the epigenetic clock GrimAge predict mortality independent of genetic influences: an 18Âyear follow-up study in older female twin pairs. Clinical Epigenetics, 2021, 13, 128.	1.8	17
365	Maternal psychosocial risk factors and child gestational epigenetic age in a South African birth cohort study. Translational Psychiatry, 2021, 11, 358.	2.4	11
366	Association of Markers of Inflammation, the Kynurenine Pathway and B Vitamins with Age and Mortality, and a Signature of Inflammaging. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2022, 77, 826-836.	1.7	28
367	Uncertainty-Based Biological Age Estimation of Brain MRI Scans. , 2021, , .		0
368	DNA methylation-based age clocks: From age prediction to age reversion. Ageing Research Reviews, 2021, 68, 101314.	5.0	60
369	DNA Methylation and Intra-Clonal Heterogeneity: The Chronic Myeloid Leukemia Model. Cancers, 2021, 13, 3587.	1.7	7

#	Article	IF	Citations
371	Maternal biological age assessed in early pregnancy is associated with gestational age at birth. Scientific Reports, 2021, 11, 15440.	1.6	6
372	Manipulating the exposome to enable better ageing. Biochemical Journal, 2021, 478, 2889-2898.	1.7	26
373	Acceleration of Biological Aging and Underestimation of Subjective Age Are Risk Factors for Severe COVID-19. Biomedicines, 2021, 9, 913.	1.4	13
374	Disentangling tumorigenesis-associated DNA methylation changes in colorectal tissues from those associated with ageing. Epigenetics, 2022, 17, 677-694.	1.3	1
376	Epigenetic Age in Young African American Adults With Perinatally Acquired HIV. Journal of Acquired Immune Deficiency Syndromes (1999), 2021, 87, 1102-1109.	0.9	9
377	Association of Epigenetic Age Acceleration With Incident Mild Cognitive Impairment and Dementia Among Older Women. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2022, 77, 1239-1244.	1.7	13
378	Epigenetic clock and methylation studies in cats. GeroScience, 2021, 43, 2363-2378.	2.1	26
379	A Metabolomic Aging Clock Using Human Cerebrospinal Fluid. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2022, 77, 744-754.	1.7	19
380	Childhood growth and development and DNA methylation age in mid-life. Clinical Epigenetics, 2021, 13, 155.	1.8	5
382	Epigenetic age prediction. Aging Cell, 2021, 20, e13452.	3.0	81
383	Prediction of biological age and all-cause mortality by 12-lead electrocardiogram in patients without structural heart disease. BMC Geriatrics, 2021, 21, 460.	1.1	15
384	Blood DNA methylation profiles improve breast cancer prediction. Molecular Oncology, 2022, 16, 42-53.	2.1	19
386	Epigenetic clock and DNA methylation analysis of porcine models of aging and obesity. GeroScience, 2021, 43, 2467-2483.	2.1	27
387	Epigenetic clock and methylation studies in vervet monkeys. GeroScience, 2022, 44, 699-717.	2.1	18
388	Association of Epigenetic Age Acceleration With Risk Factors, Survival, and Quality of Life in Patients With Head and Neck Cancer. International Journal of Radiation Oncology Biology Physics, 2021, 111, 157-167.	0.4	18
389	Epigenetic clock and methylation studies in the rhesus macaque. GeroScience, 2021, 43, 2441-2453.	2.1	28
390	DNA methylationâ€based biomarkers of aging were slowed down in a twoâ€year diet and physical activity intervention trial: the DAMA study. Aging Cell, 2021, 20, e13439.	3.0	64
391	Multi-Tissue Methylation Clocks for Age and Sex Estimation in the Common Bottlenose Dolphin. Frontiers in Marine Science, 2021, 8, .	1.2	8

#	Article	IF	Citations
392	Epigenetic clocks in the pediatric population: when and why they tick?. Chinese Medical Journal, 2021, 134, 2901-2910.	0.9	19
393	Estrogen and COVID-19 symptoms: Associations in women from the COVID Symptom Study. PLoS ONE, 2021, 16, e0257051.	1.1	68
394	Effects of Histone Modification in Major Depressive Disorder. Current Neuropharmacology, 2022, 20, 1261-1277.	1.4	13
395	Investigating the DNA methylation profile of e-cigarette use. Clinical Epigenetics, 2021, 13, 183.	1.8	5
396	DNA methylation age analysis of rapamycin in common marmosets. GeroScience, 2021, 43, 2413-2425.	2.1	26
398	Unstable Childhood, Adult Adversity, and Smoking Accelerate Biological Aging Among Middle-Age African Americans: Similar Findings for GrimAge and PoAm. Journal of Aging and Health, 2022, 34, 487-498.	0.9	6
399	Epigenetic Forensics for Suspect Identification and Age Prediction. Forensic Genomics, 2021, 1, 83-86.	0.3	1
400	Cellular reprogramming and epigenetic rejuvenation. Clinical Epigenetics, 2021, 13, 170.	1.8	54
401	The Association Between Epigenetic Clocks and Physical Functioning in Older Women: A 3-Year Follow-up. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2022, 77, 1569-1576.	1.7	11
402	(Re)Setting Epigenetic Clocks: An Important Avenue Whereby Social Conditions Become Biologically Embedded across the Life Course. Journal of Health and Social Behavior, 2021, 62, 436-453.	2.7	10
403	The early-life exposome and epigenetic age acceleration in children. Environment International, 2021, 155, 106683.	4.8	47
405	Epigenetic aging biomarkers and occupational exposure to benzene, trichloroethylene and formaldehyde. Environment International, 2022, 158, 106871.	4.8	18
407	Accelerated Epigenetic Age in Normal Cognitive Aging of Korean Community-Dwelling Older Adults. Biological Research for Nursing, 2021, 23, 464-470.	1.0	4
408	Alternative stromal cell-based therapies for aging and regeneration. , 2021, , 251-270.		1
409	Predictors of Biological Age: The Implications for Wellness and Aging Research. Gerontology and Geriatric Medicine, 2021, 7, 233372142110464.	0.8	17
412	Association of Neighborhood Deprivation With Epigenetic Aging Using 4 Clock Metrics. JAMA Network Open, 2020, 3, e2024329.	2.8	50
413	An epigenetic clock for human skeletal muscle. Journal of Cachexia, Sarcopenia and Muscle, 2020, 11, 887-898.	2.9	70
414	Epigenetic Biomarkers of Aging. Healthy Ageing and Longevity, 2019, , 155-171.	0.2	5

#	Article	IF	Citations
415	Lifestyle and Well-Being: Potential Epigenetic Benefits of Mindfulness Training, Healthy Eating and Physical Activity. , 2019, , 39-55.		2
416	Epigenetic Clock: Just a Convenient Marker or an Active Driver of Aging?. Advances in Experimental Medicine and Biology, 2019, 1178, 175-206.	0.8	26
417	Biological aging in childhood and adolescence following experiences of threat and deprivation: A systematic review and meta-analysis.. Psychological Bulletin, 2020, 146, 721-764.	5.5	216
418	Midlife reversibility of early-established biobehavioral risk factors: A research agenda.. Developmental Psychology, 2019, 55, 2203-2218.	1.2	8
419	Associations of Body Composition and Physical Activity Level With Multiple Measures of Epigenetic Age Acceleration. American Journal of Epidemiology, 2021, 190, 984-993.	1.6	53
420	Measures of Biologic Age in a Community Sample Predict Mortality and Age-Related Disease: The Framingham Offspring Study. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2018, 73, 757-762.	1.7	59
421	Biological Aging Measures Based on Blood DNA Methylation and Risk of Cancer: A Prospective Study. JNCI Cancer Spectrum, 2021, 5, pkaa109.	1.4	40
422	DNA Methylation Age Is More Closely Associated With Infection Risk Than Chronological Age in Kidney Transplant Recipients. Transplantation Direct, 2020, 6, e576.	0.8	9
453	Epigenetic age is a cellâ€intrinsic property in transplanted human hematopoietic cells. Aging Cell, 2019, 18, e12897.	3.0	39
454	DNA methylation signatures reflect aging in patients with nonalcoholic steatohepatitis. JCI Insight, 2018, 3, .	2.3	47
455	Altered microRNA expression links IL6 and TNF-induced inflammaging with myeloid malignancy in humans and mice. Blood, 2020, 135, 2235-2251.	0.6	35
456	Longitudinal trajectories of brain age in young individuals at familial risk of mood disorder. Wellcome Open Research, 2019, 4, 206.	0.9	3
457	Longitudinal trajectories of brain age in young individuals at familial risk of mood disorder from the Scottish Bipolar Family Study. Wellcome Open Research, 0, 4, 206.	0.9	6
458	A Droplet Digital PCR Assay for Smoking Predicts All-Cause Mortality. Journal of Insurance Medicine (New York, N Y), 2018, 47, 220-229.	0.1	5
459	An epigenetic aging clock for dogs and wolves. Aging, 2017, 9, 1055-1068.	1.4	125
460	Leukocyte telomere length, T cell composition and DNA methylation age. Aging, 2017, 9, 1983-1995.	1.4	42
461	Methylomic survival predictors, frailty, and mortality. Aging, 2018, 10, 339-357.	1.4	29
462	Epigenetic clock for skin and blood cells applied to Hutchinson Gilford Progeria Syndrome and ex vivo studies. Aging, 2018, 10, 1758-1775.	1.4	406

#	Article	IF	Citations
463	Epigenetic ageing is distinct from senescence-mediated ageing and is not prevented by telomerase expression. Aging, 2018, 10, 2800-2815.	1.4	70
464	A multi-tissue full lifespan epigenetic clock for mice. Aging, 2018, 10, 2832-2854.	1.4	166
465	DNA methylation-based age prediction and telomere length in white blood cells and cumulus cells of infertile women with normal or poor response to ovarian stimulation. Aging, 2018, 10, 3761-3773.	1.4	36
466	Socioeconomic position, lifestyle habits and biomarkers of epigenetic aging: a multi-cohort analysis. Aging, 2019, 11, 2045-2070.	1.4	137
467	Epigenetic clock analysis of human fibroblasts in vitro: effects of hypoxia, donor age, and expression of hTERT and SV40 largeT. Aging, 2019, 11, 3012-3022.	1.4	20
468	Investigation of bidirectional longitudinal associations between advanced epigenetic age and peripheral biomarkers of inflammation and metabolic syndrome. Aging, 2019, 11, 3487-3504.	1.4	15
469	Epigenetic mortality predictors and incidence of breast cancer. Aging, 2019, 11, 11975-11987.	1.4	30
470	Association of adult lung function with accelerated biological aging. Aging, 2020, 12, 518-542.	1.4	23
471	Mitochondria and aging in older individuals: an analysis of DNA methylation age metrics, leukocyte telomere length, and mitochondrial DNA copy number in the VA normative aging study. Aging, 2020, 12, 2070-2083.	1.4	26
472	Blood DNA methylation sites predict death risk in a longitudinal study of 12, 300 individuals. Aging, 2020, 12, 14092-14124.	1.4	15
473	Multi-omics network analysis reveals distinct stages in the human aging progression in epidermal tissue. Aging, 2020, 12, 12393-12409.	1.4	21
474	Epigenetic mutation load is weakly correlated with epigenetic age acceleration. Aging, 2020, 12, 17863-17894.	1.4	12
475	Hippocampal and cortical tissue-specific epigenetic clocks indicate an increased epigenetic age in a mouse model for Alzheimer’s disease. Aging, 2020, 12, 20817-20834.	1.4	22
476	Accelerated epigenetic age as a biomarker of cardiovascular sensitivity to traffic-related air pollution. Aging, 2020, 12, 24141-24155.	1.4	18
477	Acceleration of leukocytesâ€™ epigenetic age as an early tumor and sex-specific marker of breast and colorectal cancer. Oncotarget, 2017, 8, 23237-23245.	0.8	90
478	The Effects of Anti-retroviral Therapy on Epigenetic Age Acceleration Observed in HIV-1-infected Adults. Pathogens and Immunity, 2020, 5, 291.	1.4	22
479	p16 a biomarker of aging and tolerance for cancer therapy. Translational Cancer Research, 2020, 9, 5732-5742.	0.4	21
480	Epigenetics as a key link between psychosocial stress and aging: concepts, evidence, mechanisms. Dialogues in Clinical Neuroscience, 2019, 21, 389-396.	1.8	34

#	Article	IF	Citations
481	Plasma proteomic biomarker signature of age predicts health and life span. ELife, 2020, 9, .	2.8	78
482	Are sex differences in cognitive impairment reflected in epigenetic age acceleration metrics?. Neurobiology of Aging, 2022, 109, 192-194.	1.5	6
483	Association Between Posttraumatic Stress Disorder and Epigenetic Age Acceleration in a Sample of Twins. Psychosomatic Medicine, 2022, 84, 151-158.	1.3	9
484	Biomarkers of geroprotection and cardiovascular health: An overview of omics studies and established clinical biomarkers in the context of diet. Critical Reviews in Food Science and Nutrition, 2023, 63, 2426-2446.	5.4	5
485	Epidemiological and genetic overlap among biological aging clocks: New challenges in biogerontology. Ageing Research Reviews, 2021, 72, 101502.	5.0	13
486	Per-Âand polyfluoroalkyl substances, epigenetic ageÂand DNA methylation: aÂcross-sectional study of firefighters. Epigenomics, 2021, 13, 1619-1636.	1.0	23
493	Epigenetics and Aging. , 2018, , 1-21.		0
496	Lessons from Knowledge on theÂCorrelates of theÂAge of Onset of Physical Illness. , 2019, , 15-28.		0
498	Molecular and Epigenetic Clocks of Aging. , 2019, , 1-6.		0
499	Molecular and Epigenetic Clocks of Aging. , 2019, , 1-6.		0
513	Challenges and Opportunities of Genomic Approaches in Therapeutics Development. Methods in Molecular Biology, 2021, 2194, 107-126.	0.4	2
514	Predicting physiological aging rates from a range of quantitative traits using machine learning. Aging, 2021, 13, 23471-23516.	1.4	6
516	Impact of large granular lymphocyte leukemia on blood DNA methylation and epigenetic clock modeling in Fischer 344 rats. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2021, , .	1.7	3
517	DNA methylation as a tool to explore ageing in wild roe deer populations. Molecular Ecology Resources, 2022, 22, 1002-1015.	2.2	19
519	Schizophrenia in Older Adults. , 2020, , .		0
520	The Development of Epigenetics in the Study of Disease Pathogenesis. Advances in Experimental Medicine and Biology, 2020, 1253, 57-94.	0.8	13
521	Cellular Senescence in Aging Mucosal Tissues Is Accentuated byÂPeriodontitis. , 2020, , 97-111.		0
522	Epidemiological concepts in environmental epigenetics. , 2020, , 89-105.		3

#	Article	IF	Citations
523	Many chronological aging clocks can be found throughout the epigenome: Implications for quantifying biological aging. Aging Cell, 2021, 20, e13492.	3.0	35
526	DNA methylation-based age estimation in pediatric healthy tissues and brain tumors. Aging, 2020, 12, 21037-21056.	1.4	22
527	Inferring Multidimensional Rates of Aging from Cross-Sectional Data. Proceedings of Machine Learning Research, 2019, 89, 97-107.	0.3	5
528	Molecular and Epigenetic Clocks of Aging. , 2021, , 3280-3286.		0
529	Recalibrating the epigenetic clock after exposure to trauma: The role of risk and protective psychosocial factors. Journal of Psychiatric Research, 2022, 149, 374-381.	1.5	14
530	Epigenetic age acceleration and cardiovascular outcomes in school-age children: The Generation R Study. Clinical Epigenetics, 2021, 13, 205.	1.8	8
531	Cortisol trajectories measured prospectively across thirty years of female development following exposure to childhood sexual abuse: Moderation by epigenetic age acceleration at midlife. Psychoneuroendocrinology, 2022, 136, 105606.	1.3	8
532	Stochastic Epigenetic Mutations Influence Parkinsonâ€™s Disease Risk, Progression, and Mortality. Journal of Parkinson's Disease, 2022, 12, 545-556.	1.5	5
534	The accelerated aging phenotype: The role of race and social determinants of health on aging. Ageing Research Reviews, 2022, 73, 101536.	5.0	55
535	The effects of epigenetic age and its acceleration on surface area, cortical thickness, and volume in young adults. Cerebral Cortex, 2022, 32, 5654-5663.	1.6	8
536	Seven-CpG DNA Methylation Age Determined by Single Nucleotide Primer Extension and Illuminaâ€™s Infinium MethylationEPIC Array Provide Highly Comparable Results. Frontiers in Genetics, 2021, 12, 759357.	1.1	7
537	The Relationship between Epigenetic Age and Myocardial Infarction/Acute Coronary Syndrome in a Population-Based Nested Case-Control Study. Journal of Personalized Medicine, 2022, 12, 110.	1.1	6
539	Epigenome-wide epidemiologic studies of human immunodeficiency virus infection, treatment, and disease progression. Clinical Epigenetics, 2022, 14, 8.	1.8	5
540	Age-specific oncogenic pathways in head and neck squamous cell carcinomaÂ-Âare elderly a different subcategory?. Cellular Oncology (Dordrecht), 2022, 45, 1-18.	2.1	5
542	Overview of Polyamines as Nutrients for Human Healthy Long Life and Effect of Increased Polyamine Intake on DNA Methylation. Cells, 2022, 11, 164.	1.8	26
543	The metabolome as a biomarker of aging in Drosophila melanogaster. Aging Cell, 2022, 21, e13548.	3.0	22
544	DNA Epigenetics in Addiction Susceptibility. Frontiers in Genetics, 2022, 13, 806685.	1.1	7
545	Epigenetics of single-site and multi-site atherosclerosis in African Americans from the Genetic Epidemiology Network of Arteriopathy (GENOA). Clinical Epigenetics, 2022, 14, 10.	1.8	6

#	Article	IF	Citations
546	DNA methylation aging and transcriptomic studies in horses. Nature Communications, 2022, 13, 40.	5.8	34
548	A catalogue of omics biological ageing clocks reveals substantial commonality and associations with disease risk. Aging, 2022, 14, 623-659.	1.4	22
549	Epigenetic biomarkers of ageing are predictive of mortality risk in a longitudinal clinical cohort of individuals diagnosed with oropharyngeal cancer. Clinical Epigenetics, 2022, 14, 1.	1.8	17
552	Epigenetic models developed for plains zebras predict age in domestic horses and endangered equids. Communications Biology, 2021, 4, 1412.	2.0	23
553	PTSD and physiology: The long-term effects of PTSD and relation to epigenetics, physical health, and chronic diseases. , 2022, , 137-162.		0
555	Integrating DNA Methylation Measures of Biological Aging into Social Determinants of Health Research. Current Environmental Health Reports, 2022, 9, 196-210.	3.2	35
556	Evidence of accelerated epigenetic aging of breast tissues in patients with breast cancer is driven by CpGs associated with polycomb-related genes. Clinical Epigenetics, 2022, 14, 30.	1.8	8
559	Biological Age Acceleration Is Lower in Women With Ischemic Stroke Compared to Men. Stroke, 2022, 53, 2320-2330.	1.0	11
560	Accelerated epigenetic aging and inflammatory/immunological profile (ipAGE) in patients with chronic kidney disease. GeroScience, 2022, 44, 817-834.	2.1	13
561	Hibernation slows epigenetic ageing in yellow-bellied marmots. Nature Ecology and Evolution, 2022, 6, 418-426.	3.4	23
562	SARS-CoV-2 Morbidity in the CNS and the Aged Brain Specific Vulnerability. International Journal of Molecular Sciences, 2022, 23, 3782.	1.8	2
564	DNA Methylation - and Telomere - Based Biological Age Estimation as Markers of Biological Aging in Donors Kidneys. Frontiers in Medicine, 2022, 9, 832411.	1.2	7
565	Epigenome-wide association study and epigenetic age acceleration associated with cigarette smoking among Costa Rican adults. Scientific Reports, 2022, 12, 4277.	1.6	22
566	Epigenetic Signatures Discriminate Patients With Primary Sclerosing Cholangitis and Ulcerative Colitis From Patients With Ulcerative Colitis. Frontiers in Immunology, 2022, 13, 840935.	2.2	4
567	Genome-wide association studies identify novel genetic loci for epigenetic age acceleration among survivors of childhood cancer. Genome Medicine, 2022, 14, 32.	3.6	12
568	Inflammation, Aging, and CardiovascularÂDisease. Journal of the American College of Cardiology, 2022, 79, 837-847.	1.2	113
569	Deconvolution of the epigenetic age discloses distinct inter-personal variability in epigenetic aging patterns. Epigenetics and Chromatin, 2022, 15, 9.	1.8	5
570	Association of Glyphosate Exposure with Blood DNA Methylation in a Cross-Sectional Study of Postmenopausal Women. Environmental Health Perspectives, 2022, 130, 47001.	2.8	9

#	Article	IF	Citations
571	Biomarkers of ageing in the study of occupational harm impacts (literature review). Gigiena I Sanitariia, 2021, 100, 1328-1332.	0.1	0
572	Cumulative risks predict epigenetic age in adult survivors of extremely low birth weight. Developmental Psychobiology, 2021, 63, e22222.	0.9	4
573	Prospects for assessing the biological and immunological age of a person by blood factors. Science and Innovations in Medicine, 2021, 6, 19-39.	0.2	0
574	Pathophysiology of Circulating Biomarkers and Relationship With Vascular Aging: A Review of the Literature From VascAgeNet Group on Circulating Biomarkers, European Cooperation in Science and Technology Action 18216. Frontiers in Physiology, 2021, 12, 789690.	1.3	11
575	FYB methylation in peripheral blood as a potential marker for the early-stage lung cancer: a case-control study in Chinese population. Biomarkers, 2022, 27, 79-85.	0.9	0
576	Reproductive history and blood cell DNA methylation later in life: the Young Finns Study. Clinical Epigenetics, 2021, 13, 227.	1.8	2
577	Epigenetic Clocks. , 2022, , 261-276.		2
578	Age-Related Variation in DNA Methylation. , 2022, , 235-259.		1
579	HIV, pathology and epigenetic age acceleration in different human tissues. GeroScience, 2022, 44, 1609-1620.	2.1	15
580	Validity and cardio-metabolic risk profiles of DNA methylation clocks among adults in south-central CÃ´te dâ€™Ivoire. , 2022, 2, .		1
581	Comprehensive analysis of epigenetic clocks reveals associations between disproportionate biological ageing and hippocampal volume. GeroScience, 2022, 44, 1807-1823.	2.1	19
583	HPA-axis dysregulation is not associated with accelerated epigenetic aging in patients with hypersexual disorder. Psychoneuroendocrinology, 2022, 141, 105765.	1.3	2
589	DNA Methylation Modulates Aging Process in Adipocytes. , 2022, 13, 433.		9
590	Utilization of Host and Microbiome Features in Determination of Biological Aging. Microorganisms, 2022, 10, 668.	1.6	8
591	Predictive Utility of Mortality by Aging Measures at Different Hierarchical Levels and the Response to Modifiable Life Style Factors: Implications for Geroprotective Programs. Frontiers in Medicine, 2022, 9, 831260.	1.2	1
592	Integrative analysis of clinical and epigenetic biomarkers of mortality. Aging Cell, 2022, 21, e13608.	3.0	8
593	Making sense of the ageing methylome. Nature Reviews Genetics, 2022, 23, 585-605.	7.7	86
594	Telomere length and epigenetic clocks as markers of cellular aging: a comparative study. GeroScience, 2022, 44, 1861-1869.	2.1	18

#	Article	IF	Citations
595	Epigenetic ageing of the prefrontal cortex and cerebellum in humans and chimpanzees. Epigenetics, 2022, 17, 1774-1785.	1.3	5
597	Large-scale integration of DNA methylation and gene expression array platforms identifies both cis and trans relationships. Epigenetics, 2022, 17, 1753-1773.	1.3	2
599	Metabolic reprogramming: a bridge between aging and tumorigenesis. Molecular Oncology, 2022, 16, 3295-3318.	2.1	8
600	DNA Methylation, Aging, and Cancer Risk: A Mini-Review. Frontiers in Bioinformatics, 2022, 2, .	1.0	7
601	Accelerated epigenetic aging in suicide attempters uninfluenced by high intent-to-die and choice of lethal methods. Translational Psychiatry, 2022, 12, .	2.4	3
602	Maternal epigenetic clocks measured during pregnancy do not predict gestational age at delivery or offspring birth outcomes: a replication study in metropolitan Cebu, Philippines. Clinical Epigenetics, 2022, 14, .	1.8	2
605	Counteracting aged DNA methylation states to combat ageing and age-related diseases. Mechanisms of Ageing and Development, 2022, 206, 111695.	2.2	13
606	Measuring biological age using omics data. Nature Reviews Genetics, 2022, 23, 715-727.	7.7	117
607	Epigenetic aging: Biological age prediction and informing a mechanistic theory of aging. Journal of Internal Medicine, 2022, 292, 733-744.	2.7	24
608	Biological Aging for Risk Prediction of First-Ever Intracerebral Hemorrhage and Cerebral Infarction in Advanced Age. Journal of Stroke and Cerebrovascular Diseases, 2022, 31, 106568.	0.7	2
609	Prenatal Exposure to Ambient Air Pollution and Epigenetic Aging at Birth in Newborns. Frontiers in Genetics, 0, 13, .	1.1	4
610	Maternal depression and adverse neighbourhood conditions during pregnancy are associated with gestational epigenetic age deceleration. Epigenetics, 2022, 17, 1905-1919.	1.3	2
611	Association between depression and epigenetic age acceleration: A coâ€twin control study. Depression and Anxiety, 2022, 39, 741-750.	2.0	5
612	Evaluation of different computational methods for DNA methylation-based biological age. Briefings in Bioinformatics, 2022, 23, .	3.2	4
613	Genetic Association Between Epigenetic Aging-Acceleration and the Progression of Mild Cognitive Impairment to Alzheimerâ€™s Disease. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2022, 77, 1734-1742.	1.7	6
614	Epigenetic clocks and their association with trajectories in perceived discrimination and depressive symptoms among US middle-aged and older adults. Aging, 2022, 14, 5311-5344.	1.4	2
615	Accelerated aging with HIV occurs at the time of initial HIV infection. IScience, 2022, 25, 104488.	1.9	22
616	Nutrient intakes and telomere length of cell-free circulating DNA from amniotic fluid: findings from the Mamma & Bambino cohort. Scientific Reports, 2022, 12, .	1.6	1

#	Article	IF	Citations
618	Shifts in lifestyle and socioeconomic circumstances predict changeâ€"for better or worseâ€"in speed of epigenetic aging: A study of middle-aged black women. Social Science and Medicine, 2022, 307, 115175.	1.8	5
619	Epigenetic GrimAge acceleration and cognitive impairment in bipolar disorder. European Neuropsychopharmacology, 2022, 62, 10-21.	0.3	13
620	Epigenetic clocks in relapse after a first episode of schizophrenia. , 2022, 8, .		5
622	Aging the brain: multi-region methylation principal component based clock in the context of Alzheimerâ€™s disease. Aging, 2022, 14, 5641-5668.	1.4	14
623	Clonal Hematopoiesis and Epigenetic Age Acceleration in Elderly Danish Twins. HemaSphere, 2022, 6, e768.	1.2	3
624	Sexual Minority Stress and Cellular Aging in Methamphetamine-Using Sexual Minority Men With Treated HIV. Psychosomatic Medicine, 2022, 84, 949-956.	1.3	4
625	Hormetic association between perceived stress and human epigenetic aging based on resilience capacity. Biogerontology, 2022, 23, 615-627.	2.0	3
626	Gestational diabetes mellitus, epigenetic age and offspring metabolism. Diabetic Medicine, 2022, 39, .	1.2	6
627	Effect of a 3-Week Multidisciplinary Body Weight Reduction Program on the Epigenetic Age Acceleration in Obese Adults. Journal of Clinical Medicine, 2022, 11, 4677.	1.0	3
628	Alu hypomethylation in naturally and surgically postmenopausal women; a cross-sectional study. PLoS ONE, 2022, 17, e0273403.	1.1	0
629	Interrelationships and determinants of aging biomarkers in cord blood. Journal of Translational Medicine, 2022, 20, .	1.8	4
630	Intrinsic capacity and 10-year mortality: Findings from a cohort of older people. Experimental Gerontology, 2022, 167, 111926.	1.2	11
631	Differences in DNA Methylation-Based Age Prediction Within Twin Pairs Discordant for Cancer. Twin Research and Human Genetics, 0, , 1-9.	0.3	0
632	Machine learning in the context of better healthcare in aging. , 2023, , 625-647.		0
633	Personalized medicine: will it work for decreasing age-related morbidities?. , 2023, , 683-700.		2
634	DNA Methylation Clocks in Age-related Disease. , 2023, , 479-495.		0
635	Age group <scp>DNA</scp> methylation differences in lemon sharks (Negaprion brevirostris): Implications for future age estimation tools. Ecology and Evolution, 2022, 12, .	0.8	3
636	Analysis of Systemic Epigenetic Alterations in Inflammatory Bowel Disease: Defining Geographical, Genetic and Immune-Inflammatory influences on the Circulating Methylome. Journal of Crohn's and Colitis, 2023, 17, 170-184.	0.6	14

#	Article	IF	Citations
638	Within subject crossâ€tissue analyzes of epigenetic clocks in substance use disorder postmortem brain and blood. American Journal of Medical Genetics Part B: Neuropsychiatric Genetics, 2023, 192, 13-27.	1.1	7
640	Epigenetic aging and perceived psychological stress in old age. Translational Psychiatry, 2022, 12, .	2.4	6
641	Effect of metformin on the epigenetic age of peripheral blood in patients with diabetes mellitus. Frontiers in Genetics, 0, 13, .	1.1	4
642	Epigenetic aging as a biomarker of dementia and related outcomes: a systematic review. Epigenomics, 2022, 14, 1125-1138.	1.0	21
643	Serum lead, mercury, manganese, and copper and DNA methylation age among adults in Detroit, Michigan. Environmental Epigenetics, 2022, 8, .	0.9	2
644	Associations between accelerated parental biologic age, autism spectrum disorder, social traits, and developmental and cognitive outcomes in their children. Autism Research, 0, , .	2.1	0
647	Centenarians consistently present a younger epigenetic age than their chronological age with four epigenetic clocks based on a small number of CpG sites. Aging, 2022, 14, 7718-7733.	1.4	11
648	Epigenetic clock: A promising biomarker and practical tool in aging. Ageing Research Reviews, 2022, 81, 101743.	5.0	47
649	Characterisation of ethnic differences in DNA methylation between UK-resident South Asians and Europeans. Clinical Epigenetics, 2022, 14, .	1.8	11
650	Significant variation in the performance of DNA methylation predictors across data preprocessing and normalization strategies. Genome Biology, 2022, 23, .	3.8	7
651	Increased epigenetic age acceleration in the hidradenitis suppurativa skin. Archives of Dermatological Research, 2023, 315, 1037-1039.	1.1	3
652	Do Loneliness and Per Capita Income Combine to Increase the Pace of Biological Aging for Black Adults across Late Middle Age?. International Journal of Environmental Research and Public Health, 2022, 19, 13421.	1.2	2
653	Epigenome-wide association study of biomarkers of liver function identifies albumin-associated DNA methylation sites among male veterans with HIV. Frontiers in Genetics, 0, 13, .	1.1	1
654	Cumulative risk exposure and child cellular aging in a Dutch lowâ€risk community sample. Psychophysiology, 2023, 60, .	1.2	2
655	Attachment insecurity and the biological embedding of reproductive strategies: Investigating the role of cellular aging. Biological Psychology, 2022, 175, 108446.	1.1	3
656	Potential Lifelong Neurobiological, Bio-behavioral, and Other Outcomes of Trauma. , 2022, , 55-92.		0
657	Physical Exercise, Sleep, and the Brain. , 2022, , 359-394.		0
658	Introduction, Epidemiology, Measurement, and the Cycle of Trauma. , 2022, , 3-23.		0

#	Article	IF	Citations
659	Life-course socioeconomic factors are associated with markers of epigenetic aging in a population-based study. Psychoneuroendocrinology, 2022, , 105976.	1.3	1
660	Mindfulness Meditation Interventions for Long COVID: Biobehavioral Gene Expression and Neuroimmune Functioning. Neuropsychiatric Disease and Treatment, 0, Volume 18, 2599-2626.	1.0	4
661	DNA methylation-based measures of biological aging and cognitive decline over 16-years: preliminary longitudinal findings in midlife. Aging, 0, , .	1.4	1
662	Molecular Mechanisms of Vascular Health: Insights From Vascular Aging and Calcification. Arteriosclerosis, Thrombosis, and Vascular Biology, 2023, 43, 15-29.	1.1	28
663	Positive social factors prospectively predict younger epigenetic age: Findings from the Health and Retirement Study. Psychoneuroendocrinology, 2023, 148, 105988.	1.3	2
664	Impact of social determinants of health on DNA methylation. , 2024, , 394-412.		0
665	Gestational age acceleration is associated with epigenetic biomarkers of prenatal physiologic stress exposure. Clinical Epigenetics, 2022, 14, .	1.8	3
666	An evaluation of aging measures: from biomarkers to clocks. Biogerontology, 0, , .	2.0	2
667	Helicobacter pyloriâ€positive chronic atrophic gastritis and cellular senescence. Helicobacter, 2023, 28, .	1.6	5
668	The association of accelerated epigenetic age with all-cause mortality in cardiac catheterization patients as mediated by vascular and cardiometabolic outcomes. Clinical Epigenetics, 2022, 14, .	1.8	2
669	Exploring the relationship between DNA methylation age measures and psychoneurological symptoms in women with early-stage breast cancer. Supportive Care in Cancer, 2023, 31, .	1.0	0
670	Biological Age Predictors: The Status Quo and Future Trends. International Journal of Molecular Sciences, 2022, 23, 15103.	1.8	13
672	A Blood-Based Molecular Clock for Biological Age Estimation. Cells, 2023, 12, 32.	1.8	1
673	No strong association among epigenetic modifications by DNA methylation, telomere length, and physical fitness in biological aging. Biogerontology, 0, , .	2.0	6
675	Systemic interindividual epigenetic variation in humans is associated with transposable elements and under strong genetic control. Genome Biology, 2023, 24, .	3.8	11
676	Cardiovascular events and artificial intelligence-predicted age using 12-lead electrocardiograms. IJC Heart and Vasculature, 2023, 44, 101172.	0.6	0
677	Evaluation of Epigenetic Age Acceleration Scores and Their Associations with CVD-Related Phenotypes in a Population Cohort. Biology, 2023, 12, 68.	1.3	2
679	On the road to resilience: Epigenetic effects of meditation. Vitamins and Hormones, 2023, , 339-376.	0.7	2

#	Article	IF	Citations
681	Psychological and biological mechanisms linking trauma with cardiovascular disease risk. Translational Psychiatry, 2023, 13, .	2.4	12
682	Maternal and Paternal Dietary Quality and Dietary Inflammation Associations with Offspring DNA Methylation and Epigenetic Biomarkers of Aging in the Lifeways Cross-Generation Study. Journal of Nutrition, 2023, , .	1.3	3
683	Machine Learning Approximations to Predict Epigenetic Age Acceleration in Stroke Patients. International Journal of Molecular Sciences, 2023, 24, 2759.	1.8	1
684	DNA methylation accelerated age as captured by epigenetic clocks influences breast cancer risk. Frontiers in Oncology, 0, 13, .	1.3	0
685	Potential reversal of biological age in women following an 8-week methylation-supportive diet and lifestyle program: a case series. Aging, 2023, 15, 1833-1839.	1.4	5
686	DNA methylation age at birth and childhood: performance of epigenetic clocks and characteristics associated with epigenetic age acceleration in the Project Viva cohort. Clinical Epigenetics, 2023, 15, .	1.8	12
687	Integration of Mendelian randomisation and systems biology models to identify novel blood-based biomarkers for stroke. Journal of Biomedical Informatics, 2023, 141, 104345.	2.5	3
688	Stressful life events and accelerated biological aging over time in youths. Psychoneuroendocrinology, 2023, 151, 106058.	1.3	7
689	Molecular mechanisms of environmental exposures and human disease. Nature Reviews Genetics, 2023, 24, 332-344.	7.7	29
690	A Deep Learning Approach to Predict Chronological Age. Healthcare (Switzerland), 2023, 11, 448.	1.0	0
691	Epigenetic age and lung cancer risk in the CLUE II prospective cohort study. Aging, 2023, 15, 617-629.	1.4	1
692	Cardiovascular correlates of epigenetic aging across the adult lifespan: a population-based study. GeroScience, 2023, 45, 1605-1618.	2.1	3
693	The Cutting Edge of Epigenetic Clocks: In Search of Mechanisms Linking Aging and Mental Health. Biological Psychiatry, 2023, 94, 694-705.	0.7	8
694	Effect of long-term caloric restriction on DNA methylation measures of biological aging in healthy adults from the CALERIE trial. Nature Aging, 2023, 3, 248-257.	5.3	39
695	Occupational Years of Service and Leukocyte Epigenetic Aging. Journal of Occupational and Environmental Medicine, 2023, 65, e312-e318.	0.9	5
696	Aging and obesity prime the methylome and transcriptome of adipose stem cells for disease and dysfunction. FASEB Journal, 2023, 37, .	0.2	4
697	Childhood sleep health and epigenetic age acceleration in late adolescence: Crossâ€sectional and longitudinal analyses. Acta Paediatrica, International Journal of Paediatrics, 2023, 112, 1001-1010.	0.7	1
698	DNAmFitAge: biological age indicator incorporating physical fitness. Aging, 2023, 15, 3904-3938.	1.4	15

#	Article	IF	Citations
699	Analysis of Pregnancy Complications and Epigenetic Gestational Age of Newborns. JAMA Network Open, 2023, 6, e230672.	2.8	13
700	Biological Age Acceleration and Motoric Cognitive Risk Syndrome. Annals of Neurology, 2023, 93, 1187-1197.	2.8	2
701	Genetic plasma biomarkers associated with ischemic stroke. , 0, , 27-47.		0
704	Epigenetic clocks in neurodegenerative diseases: a systematic review. Journal of Neurology, Neurosurgery and Psychiatry, 2023, 94, 1064-1070.	0.9	2
705	Centenarian clocks: epigenetic clocks for validating claims of exceptional longevity. GeroScience, 2023, 45, 1817-1835.	2.1	8
706	Ageing as a software design flaw. Genome Biology, 2023, 24, .	3.8	22
707	Effects of Human LAV-BPIFB4 Gene Therapy on the Epigenetic Clock and Health of Aged Mice. International Journal of Molecular Sciences, 2023, 24, 6464.	1.8	2
708	Effects of epigenetic age acceleration on kidney function: a Mendelian randomization study. Clinical Epigenetics, 2023, 15, .	1.8	3
709	Contextual modifiers of healthspan, lifespan, and epigenome in mice under chronic social stress. Proceedings of the National Academy of Sciences of the United States of America, 2023, 120, .	3.3	5
710	No evidence of accelerated epigenetic aging among black heroin users: A case vs control analysis. Addiction Neuroscience, 2023, 7, 100096.	0.4	1
711	The relationship of trait-like compassion with epigenetic aging: The population-based prospective Young Finns Study. Frontiers in Psychiatry, 0, 14, .	1.3	1
715	Ageing, Metabolic Dysfunction, and the Therapeutic Role of Antioxidants. Sub-Cellular Biochemistry, 2023, , 341-435.	1.0	2
716	Associations of stress and stress-related psychiatric disorders with GrimAge acceleration: review and suggestions for future work. Translational Psychiatry, 2023, 13, .	2.4	3
730	Epidemiology, Genetics and Epigenetics of Biological Aging: One or More Aging Systems?. Healthy Ageing and Longevity, 2023, , 115-142.	0.2	0