Hiroki R Ueda

List of Publications by Year
in descending order

148 papers	16,664 citations	28274 55 h-index	16650 123 g-index
167 all docs	167 docs citations	167 times ranked	20084 citing authors

#	Article	IF	Citations
1	The Transcriptional Landscape of the Mammalian Genome. Science, 2005, 309, 1559-1563.	12.6	3,227
2	Whole-Brain Imaging with Single-Cell Resolution Using Chemical Cocktails and Computational Analysis. Cell, 2014, 157, 726-739.	28.9	1,097
3	A transcription factor response element for gene expression during circadian night. Nature, 2002, 418, 534-539.	27.8	794
4	System-level identification of transcriptional circuits underlying mammalian circadian clocks. Nature Genetics, 2005, 37, 187-192.	21.4	732
5	Advanced CUBIC protocols for whole-brain and whole-body clearing and imaging. Nature Protocols, 2015, 10, 1709-1727.	12.0	615
6	Maintenance of self-renewal ability of mouse embryonic stem cells in the absence of DNA methyltransferases Dnmt1, Dnmt3a and Dnmt3b. Genes To Cells, 2006, 11, 805-814.	1.2	482
7	Thyrotrophin in the pars tuberalis triggers photoperiodic response. Nature, 2008, 452, 317-322.	27.8	444
8	Whole-Body Imaging with Single-Cell Resolution by Tissue Decolorization. Cell, 2014, 159, 911-924.	28.9	404
9	Quartz-Seq: a highly reproducible and sensitive single-cell RNA sequencing method, reveals non-genetic gene-expression heterogeneity. Genome Biology, 2013, 14, R31.	8.8	378
10	Tissue clearing and its applications inÂneuroscience. Nature Reviews Neuroscience, 2020, 21, 61-79.	10.2	350
11	Feedback repression is required for mammalian circadian clock function. Nature Genetics, 2006, 38, 312-319.	21.4	344
12	An improved single-cell cDNA amplification method for efficient high-density oligonucleotide microarray analysis. Nucleic Acids Research, 2006, 34, e42-e42.	14.5	341
13	Delay in Feedback Repression by Cryptochrome 1 Is Required for Circadian Clock Function. Cell, 2011, 144, 268-281.	28.9	288
14	Whole-body and Whole-Organ Clearing and Imaging Techniques with Single-Cell Resolution: Toward Organism-Level Systems Biology in Mammals. Cell Chemical Biology, 2016, 23, 137-157.	5.2	263
15	Measurement of internal body time by blood metabolomics. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 9890-9895.	7.1	246
16	CKIÎµ/Î´-dependent phosphorylation is a temperature-insensitive, period-determining process in the mammalian circadian clock. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 15744-15749.	7.1	239
17	Chemical Principles in Tissue Clearing and Staining Protocols for Whole-Body Cell Profiling. Annual Review of Cell and Developmental Biology, 2016, 32, 713-741.	9.4	238
18	Guidelines for Genome-Scale Analysis of Biological Rhythms. Journal of Biological Rhythms, 2017, 32, 380-393.	2.6	237

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19	Genome-wide Transcriptional Orchestration of Circadian Rhythms inDrosophila. Journal of Biological Chemistry, 2002, 277, 14048-14052.	3.4	236
20	A three-dimensional single-cell-resolution whole-brain atlas using CUBIC-X expansion microscopy and tissue clearing. Nature Neuroscience, 2018, 21, 625-637.	14.8	234
21	Chemical Landscape for Tissue Clearing Based on Hydrophilic Reagents. Cell Reports, 2018, 24, 2196-2210.e9.	6.4	221
22	Whole-Body Profiling of Cancer Metastasis with Single-Cell Resolution. Cell Reports, 2017, 20, 236-250.	6.4	194
23	Human blood metabolite timetable indicates internal body time. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 15036-15041.	7.1	188
24	Systems Biology of Mammalian Circadian Clocks. Annual Review of Physiology, 2010, 72, 579-603.	13.1	187
25	Single-cell gene profiling defines differential progenitor subclasses in mammalian neurogenesis. Development (Cambridge), 2008, 135, 3113-3124.	2.5	178
26	A functional genomics strategy reveals clockwork orange as a transcriptional regulator in the Drosophila circadian clock. Genes and Development, 2007, 21, 1687-1700.	5.9	150
27	Involvement of Ca2+-Dependent Hyperpolarization in Sleep Duration in Mammals. Neuron, 2016, 90, 70-85.	8.1	149
28	Whole-Brain Profiling of Cells and Circuits in Mammals by Tissue Clearing and Light-Sheet Microscopy. Neuron, 2020, 106, 369-387.	8.1	145
29	Universality and flexibility in gene expression from bacteria to human. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 3765-3769.	7.1	139
30	Robust Oscillations within the Interlocked Feedback Model of Drosophila Circadian Rhythm. Journal of Theoretical Biology, 2001, 210, 401-406.	1.7	136
31	Atypical Cadherins Dachsous and Fat Control Dynamics of Noncentrosomal Microtubules in Planar Cell Polarity. Developmental Cell, 2010, 19, 389-401.	7.0	134
32	Versatile whole-organ/body staining and imaging based on electrolyte-gel properties of biological tissues. Nature Communications, 2020, 11, 1982.	12.8	134
33	Advanced CUBIC tissue clearing for whole-organ cell profiling. Nature Protocols, 2019, 14, 3506-3537.	12.0	127
34	Understanding systems-level properties: timely stories from the study of clocks. Nature Reviews Genetics, 2011, 12, 407-416.	16.3	124
35	Context-Dependent Wiring of Sox2 Regulatory Networks for Self-Renewal of Embryonic and Trophoblast Stem Cells. Molecular Cell, 2013, 52, 380-392.	9.7	122
36	Molecular-timetable methods for detection of body time and rhythm disorders from single-time-point genome-wide expression profiles. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 11227-11232.	7.1	120

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37	Melanopsin-dependent photo-perturbation reveals desynchronization underlying the singularity of mammalian circadian clocks. Nature Cell Biology, 2007, 9, 1327-1334.	10.3	112
38	CUBIC pathology: three-dimensional imaging for pathological diagnosis. Scientific Reports, 2017, 7, 9269.	3.3	110
39	The BMAL1 C terminus regulates the circadian transcription feedback loop. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 10074-10079.	7.1	106
40	Mammalian Reverse Genetics without Crossing Reveals Nr3a as a Short-Sleeper Gene. Cell Reports, 2016, 14, 662-677.	6.4	106
41	Acute Induction of Eya3 by Late-Night Light Stimulation Triggers TSHÎ² Expression in Photoperiodism. Current Biology, 2010, 20, 2199-2206.	3.9	101
42	Proof-by-synthesis of the transcriptional logic of mammalian circadian clocks. Nature Cell Biology, 2008, 10, 1154-1163.	10.3	99
43	Generation of a p16 Reporter Mouse and Its Use to Characterize and Target p16high Cells InÂVivo. Cell Metabolism, 2020, 32, 814-828.e6.	16.2	93
44	Temperature-Sensitive Substrate and Product Binding Underlie Temperature-Compensated Phosphorylation in the Clock. Molecular Cell, 2017, 67, 783-798.e20.	9.7	79
45	Cell-cycle-independent transitions in temporal identity of mammalian neural progenitor cells. Nature Communications, 2016, 7, 11349.	12.8	78
46	Muscarinic Acetylcholine Receptors Chrm1 and Chrm3 Are Essential for REM Sleep. Cell Reports, 2018, 24, 2231-2247.e7.	6.4	75
47	The oral hypoxia-inducible factor prolyl hydroxylase inhibitor enarodustat counteracts alterations in renal energy metabolism inÂtheÂearlyÂstages of diabetic kidney disease. Kidney International, 2020, 97, 934-950.	5.2	73
48	Knockout-Rescue Embryonic Stem Cell-Derived Mouse Reveals Circadian-Period Control by Quality and Quantity of CRY1. Molecular Cell, 2017, 65, 176-190.	9.7	72
49	Theperiodgene and allochronic reproductive isolation inBactrocera cucurbitae. Proceedings of the Royal Society B: Biological Sciences, 2002, 269, 2467-2472.	2.6	70
50	Analysis and synthesis of high-amplitude Cis-elements in the mammalian circadian clock. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 14946-14951.	7.1	69
51	Mass spectrometry-based absolute quantification reveals rhythmic variation of mouse circadian clock proteins. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E3461-7.	7.1	69
52	Neuronal signals regulate obesity induced Î²-cell proliferation by FoxM1 dependent mechanism. Nature Communications, 2017, 8, 1930.	12.8	69
53	Identification of a Novel Cryptochrome Differentiating Domain Required for Feedback Repression in Circadian Clock Function. Journal of Biological Chemistry, 2012, 287, 25917-25926.	3.4	67
54	An automated system for high-throughput single cell-based breeding. Scientific Reports, 2013, 3, 1191.	3.3	66

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55	Cochlear Cell Modeling Using Disease-Specific iPSCs Unveils a Degenerative Phenotype and Suggests Treatments for Congenital Progressive Hearing Loss. Cell Reports, 2017, 18, 68-81.	6.4	63
56	Quantitative Expression Profile of Distinct Functional Regions in the Adult Mouse Brain. PLoS ONE, 2011, 6, e23228.	2.5	60
57	A Design Principle for a Posttranslational Biochemical Oscillator. Cell Reports, 2012, 2, 938-950.	6.4	58
58	Visualization and molecular characterization of whole-brain vascular networks with capillary resolution. Nature Communications, 2020, 11, 1104.	12.8	57
59	Tissue clearing. Nature Reviews Methods Primers, 2021, 1, .	21.2	56
60	Predicting Perfect Adaptation Motifs in Reaction Kinetic Networks. Journal of Physical Chemistry B, 2008, 112, 16752-16758.	2.6	54
61	A hybrid open-top light-sheet microscope for versatile multi-scale imaging of cleared tissues. Nature Methods, 2022, 19, 613-619.	19.0	54
62	Intercellular Coupling Mechanism for Synchronized and Noise-Resistant Circadian Oscillators. Journal of Theoretical Biology, 2002, 216, 501-512.	1.7	53
63	Transcriptomic landscape of the primitive streak. Development (Cambridge), 2010, 137, 2863-2874.	2.5	47
64	Whole-Brain Analysis of Cells and Circuits by Tissue Clearing and Light-Sheet Microscopy. Journal of Neuroscience, 2018, 38, 9330-9337.	3.6	45
65	<scp>FASTER</scp>: an unsupervised fully automated sleep staging method for mice. Genes To Cells, 2013, 18, 502-518.	1.2	40
66	Leak potassium channels regulate sleep duration. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E9459-E9468.	7.1	39
67	Systems Biology of Mammalian Circadian Clocks. Cold Spring Harbor Symposia on Quantitative Biology, 2007, 72, 365-380.	1.1	38
68	Novel 3D analysis using optical tissue clearing documents the evolution of murine rapidly progressive glomerulonephritis. Kidney International, 2019, 96, 505-516.	5.2	35
69	Reflections on the past two decades of neuroscience. Nature Reviews Neuroscience, 2020, 21, 524-534.	10.2	35
70	Comprehensive three-dimensional analysis (CUBIC-kidney) visualizes abnormal renal sympathetic nerves after ischemia/reperfusion injury. Kidney International, 2019, 96, 129-138.	5.2	34
71	Systems Biology-Derived Discoveries of Intrinsic Clocks. Frontiers in Neurology, 2017, 8, 25.	2.4	31
72	NEK9 regulates primary cilia formation by acting as a selective autophagy adaptor for MYH9/myosin IIA. Nature Communications, 2021, 12, 3292.	12.8	30

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73	Mechanical load regulates bone growth via periosteal Osteocrin. Cell Reports, 2021, 36, 109380.	6.4	29
74	Mammalian Circadian Clock: The Roles of Transcriptional Repression and Delay. Handbook of Experimental Pharmacology, 2013, , 359-377.	1.8	27
75	Amnionless-mediated glycosylation is crucial for cell surface targeting of cubilin in renal and intestinal cells. Scientific Reports, 2018, 8, 2351.	3.3	27
76	Design Principles of Phosphorylation-Dependent Timekeeping in Eukaryotic Circadian Clocks. Cold Spring Harbor Perspectives in Biology, 2018, 10, a028357.	5.5	27
77	Molecular Mechanisms of REM Sleep. Frontiers in Neuroscience, 2019, 13, 1402.	2.8	27
78	Malignant subclone drives metastasis of genetically and phenotypically heterogenous cell clusters through fibrotic niche generation. Nature Communications, 2021, 12, 863.	12.8	27
79	Different circadian expression of major matrix-related genes in various types of cartilage: modulation by lightâ€“dark conditions. Journal of Biochemistry, 2013, 154, 373-381.	1.7	24
80	A Mammalian Circadian Clock Model Incorporating Daytime Expression Elements. Biophysical Journal, 2014, 107, 1462-1473.	0.5	24
81	Production of knock-in mice in a single generation from embryonic stem cells. Nature Protocols, 2017, 12, 2513-2530.	12.0	21
82	Systems biology flowering in the plant clock field. Molecular Systems Biology, 2006, 2, 60.	7.2	20
83	Detection of a circadian enhancer in the mDbp promoter using prokaryotic transposon vector-based strategy. Nucleic Acids Research, 2008, 36, e23-e23.	14.5	20
84	Phosphorylation by casein kinase 2 enhances the interaction between ERâ€phagy receptor TEX264 and ATG8 proteins. EMBO Reports, 2022, 23, e54801.	4.5	20
85	Ca²⁺â€Dependent Hyperpolarization Pathways in Sleep Homeostasis and Mental Disorders. BioEssays, 2018, 40, 1700105.	2.5	19
86	Establishment of <scp><i>TSHÂ</i></scp>Î² realâ€time monitoring system in mammalian photoperiodism. Genes To Cells, 2013, 18, 575-588.	1.2	18
87	Phosphorylation Hypothesis of Sleep. Frontiers in Psychology, 2020, 11, 575328.	2.1	18
88	Transcriptome Tomography for Brain Analysis in the Web-Accessible Anatomical Space. PLoS ONE, 2012, 7, e45373.	2.5	17
89	Cell-free synthesis of stable isotope-labeled internal standards for targeted quantitative proteomics. Synthetic and Systems Biotechnology, 2018, 3, 97-104.	3.7	17
90	Activation of Sympathetic Signaling in Macrophages Blocks Systemic Inflammation and Protects against Renal Ischemia-Reperfusion Injury. Journal of the American Society of Nephrology: JASN, 2021, 32, 1599-1615.	6.1	17

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91	The 103,200-arm acceleration dataset in the UK Biobank revealed a landscape of human sleep phenotypes. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2116729119.	7.1	17
92	Fast and slow Ca2+-dependent hyperpolarization mechanisms connect membrane potential and sleep homeostasis. Current Opinion in Neurobiology, 2017, 44, 212-221.	4.2	16
93	Next-generation mammalian genetics toward organism-level systems biology. Npj Systems Biology and Applications, 2017, 3, 15.	3.0	16
94	Whole-organ analysis of TGF-Î²-mediated remodelling of the tumour microenvironment by tissue clearing. Communications Biology, 2021, 4, 294.	4.4	14
95	CUBIC-Cloud provides an integrative computational framework toward community-driven whole-mouse-brain mapping. Cell Reports Methods, 2021, 1, 100038.	2.9	12
96	Picrotoxin dramatically speeds the mammalian circadian clock independent of Cys-loop receptors. Journal of Neurophysiology, 2013, 110, 103-108.	1.8	11
97	Ca2+-dependent hyperpolarization hypothesis for mammalian sleep. Neuroscience Research, 2017, 118, 48-55.	1.9	11
98	Comparison of the 3-D patterns of the parasympathetic nervous system in the lung at late developmental stages between mouse and chicken. Developmental Biology, 2018, 444, S325-S336.	2.0	10
99	A design principle for posttranslational chaotic oscillators. IScience, 2021, 24, 101946.	4.1	10
100	A period without PER: understanding 24-hour rhythms without classic transcription and translation feedback loops. F1000Research, 2019, 8, 499.	1.6	10
101	A jerk-based algorithm ACCEL for the accurate classification of sleepâ€“wake states from arm acceleration. IScience, 2022, 25, 103727.	4.1	10
102	Perturbational formulation of principal component analysis in molecular dynamics simulation. Physical Review E, 2008, 78, 046702.	2.1	9
103	A Design Principle for an Autonomous Post-translational Pattern Formation. Cell Reports, 2017, 19, 863-874.	6.4	9
104	Easy and efficient production of completely embryonic-stem-cell-derived mice using a micro-aggregation device. PLoS ONE, 2018, 13, e0203056.	2.5	9
105	Challenges in synthetically designing mammalian circadian clocks. Current Opinion in Biotechnology, 2010, 21, 556-565.	6.6	8
106	Seeing the forest and trees: wholeâ€body and wholeâ€brain imaging for circadian biology. Diabetes, Obesity and Metabolism, 2015, 17, 47-54.	4.4	8
107	Mass spectrometry-based absolute quantification of amyloid proteins in pathology tissue specimens: Merits and limitations. PLoS ONE, 2020, 15, e0235143.	2.5	8
108	Microarrays. Methods in Molecular Biology, 2007, 362, 245-264.	0.9	8

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109	Visualization of the cancer cell cycle by tissueâ€clearing technology using the Fucci reporter system. Cancer Science, 2021, 112, 3796-3809.	3.9	7
110	Protocol for Imaging and Analysis of Mouse Tumor Models with CUBIC Tissue Clearing. STAR Protocols, 2020, 1, 100191.	1.2	6
111	A Microfluidic Platform Based on Robust Gas and Liquid Exchange for Long-term Culturing of Explanted Tissues. Analytical Sciences, 2019, 35, 1141-1147.	1.6	5
112	Next-generation human genetics for organism-level systems biology. Current Opinion in Biotechnology, 2019, 58, 137-145.	6.6	5
113	The cellular model of albumin endocytosis uncovers link between membrane and nuclear proteins. Journal of Cell Science, 2020, 133, .	2.0	5
114	Microarrays. Methods in Molecular Biology, 2007, , 225-243.	0.9	5
115	Perturbation analyses of intermolecular interactions. Physical Review E, 2011, 84, 026704.	2.1	3
116	Non-Enzymatic DNA Cleavage Reaction Induced by 5-Ethynyluracil in Methylamine Aqueous Solution and Application to DNA Concatenation. PLoS ONE, 2014, 9, e92369.	2.5	3
117	Generation of gene-corrected iPSCs line (KEIUi001-A) from a PARK8 patient iPSCs with familial Parkinsonâ€™s disease carrying the I2020T mutation in LRRK2. Stem Cell Research, 2020, 49, 102073.	0.7	3
118	Genetic and Molecular Analysis of Wild-Derived Arrhythmic Mice. PLoS ONE, 2009, 4, e4301.	2.5	3
119	JBIR-26, a Novel Natural Compound from Streptomyces sp. AK-AH76, Regulates Mammalian Circadian Clock. Journal of Antibiotics, 2008, 61, 756-758.	2.0	2
120	Rhythms: The dark side meets the light. Science, 2018, 359, 1210-1211.	12.6	2
121	Lost in clocks: nonâ€canonical circadian oscillation discovered in Drosophila cells. Molecular Systems Biology, 2018, 14, e8567.	7.2	2
122	Genes and Ion Channels in the Circadian and Homeostatic Regulation of Sleep. Handbook of Behavioral Neuroscience, 2019, 30, 181-193.	0.7	2
123	The circadian clock ticks in organoids. EMBO Journal, 2021, , e110157.	7.8	2
124	Acute induction of Eya3 by late-night light stimulation triggers TSHÎ² expression in photoperiodism. Neuroscience Research, 2011, 71, e172.	1.9	1
125	Compass in the data ocean: Toward chronotherapy. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 5069-5071.	7.1	1
126	Towards organism-level systems biology by next-generation genetics and whole-organ cell profiling. Biophysical Reviews, 2021, 13, 1113-1126.	3.2	1

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127	High-throughput Genetically Modified Animal Experiments Achieved by Next-generation Mammalian Genetics. Journal of Biological Rhythms, 2022, , 074873042210750.	2.6	1
128	Desynchronization of Noisy Multi-cellular Clocks Underlies the Population-level Singularity Behavior of Mammalian Circadian Clock. AIP Conference Proceedings, 2007, , .	0.4	0
129	1S3-6 MOLECULAR AND CELLULAR NETWORKS OF MAMMALIAN CIRCADIAN CLOCK REVEALED BY BIOLUMINESCENCE(1S3 The fundamental and developmental study of bioluminescence-the biological) Tj ETQq1 1 0.784314 rgBT /Ove Butsuri, 2008, 48, S3.	0.1	0
130	Temperature-insensitive reaction in the mammalian circadian clock. Sleep and Biological Rhythms, 2009, 7, 243-251.	1.0	0
131	Systems biology of mammalian circadian clocks. Neuroscience Research, 2009, 65, S22.	1.9	0
132	1P283 From cell-autonomous circadian clocks to tissue-level timekeeping(25. Equality Nonequilibrium) Tj ETQq0 0 0 rgBT /Overlock 10 T	0.1	0
133	A Simple Protocol to Clear and Transparentize the Brain. Seibutsu Butsuri, 2015, 55, 145-147.	0.1	0
134	Title is missing!. Kagaku To Seibutsu, 2015, 53, 737-740.	0.0	0
135	Organism-level systems biology by next-generation genetics and whole-organ cell profiling. IBRO Reports, 2019, 6, S38-S39.	0.3	0
136	Rapid and easy-to-use ES cell manipulation device with a small groove near culturing wells. BMC Research Notes, 2020, 13, 453.	1.4	0
137	Systems Biology of Mammalian Circadian Clocks. , 2009, , 57-69.		0
138	Whole-body and whole-organ clearing and imaging with single-cell resolution. , 2017, , .		0
139	The Impairments of Ca2+-dependent Hyperpolarization Pathway Altered NREM Sleep Duration in Mice. Proceedings for Annual Meeting of the Japanese Pharmacological Society, 2018, WCP2018, PO1-6-3.	0.0	0
140	A Design Principle for an Autonomous Post-translational Pattern Formation. Proceedings for Annual Meeting of the Japanese Pharmacological Society, 2018, WCP2018, PO2-14-19.	0.0	0
141	Towards Organism-level Systems Biology. Proceedings for Annual Meeting of the Japanese Pharmacological Society, 2018, WCP2018, JPS-FS-1.	0.0	0
142	A design principle of spindle oscillations in mammalian sleep. IScience, 2022, 25, 103873.	4.1	0
143	Title is missing!. , 2020, 15, e0235143.		0
144	Title is missing!. , 2020, 15, e0235143.		0

#	Article	IF	Citations
145	Title is missing!. , 2020, 15, e0235143.		0
146	Title is missing!. , 2020, 15, e0235143.		0
147	Title is missing!. , 2020, 15, e0235143.		0
148	Title is missing!. , 2020, 15, e0235143.		0