Steven M Reppert

List of Publications by Year
in descending order

125	31,042	6254 80	17592 121
papers	citations	h-index	g-index

126	126	126	15332
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Coordination of circadian timing in mammals. Nature, 2002, 418, 935-941.	27.8	3,763
2	mCRY1 and mCRY2 Are Essential Components of the Negative Limb of the Circadian Clock Feedback Loop. Cell, 1999, 98, 193-205.	28.9	1,445
3	Individual neurons dissociated from rat suprachiasmatic nucleus express independently phased circadian firing rhythms. Neuron, 1995, 14, 697-706.	8.1	1,325
4	Molecular Analysis of Mammalian Circadian Rhythms. Annual Review of Physiology, 2001, 63, 647-676.	13.1	1,306
5	Interacting Molecular Loops in the Mammalian Circadian Clock. Science, 2000, 288, 1013-1019.	12.6	1,223
6	Posttranslational Mechanisms Regulate the Mammalian Circadian Clock. Cell, 2001, 107, 855-867.	28.9	1,071
7	Cloning and characterization of a mammalian melatonin receptor that mediates reproductive and circadian responses. Neuron, 1994, 13, 1177-1185.	8.1	1,013
8	A Molecular Mechanism Regulating Rhythmic Output from the Suprachiasmatic Circadian Clock. Cell, 1999, 96, 57-68.	28.9	834
9	Three period Homologs in Mammals: Differential Light Responses in the Suprachiasmatic Circadian Clock and Oscillating Transcripts Outside of Brain. Neuron, 1998, 20, 1103-1110.	8.1	807
10	Differential Functions of mPer1, mPer2, and mPer3 in the SCN Circadian Clock. Neuron, 2001, 30, 525-536.	8.1	802
11	Two period Homologs: Circadian Expression and Photic Regulation in the Suprachiasmatic Nuclei. Neuron, 1997, 19, 1261-1269.	8.1	715
12	Molecular Dissection of Two Distinct Actions of Melatonin on the Suprachiasmatic Circadian Clock. Neuron, 1997, 19, 91-102.	8.1	660
13	Molecular cloning of the rat A2 adenosine receptor: selective co-expression with D2 dopamine receptors in rat striatum. Molecular Brain Research, 1992, 14, 186-195.	2.3	614
14	Rhythmic histone acetylation underlies transcription in the mammalian circadian clock. Nature, 2003, 421, 177-182.	27.8	600
15	The Monarch Butterfly Genome Yields Insights into Long-Distance Migration. Cell, 2011, 147, 1171-1185.	28.9	509
16	Bimodal regulation of mPeriod promoters by CREB-dependent signaling and CLOCK/BMAL1 activity. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 7728-7733.	7.1	490
17	Cellular Construction of a Circadian Clock: Period Determination in the Suprachiasmatic Nuclei. Cell, 1997, 91, 855-860.	28.9	456
18	CLOCK and NPAS2 have overlapping roles in the suprachiasmatic circadian clock. Nature Neuroscience, 2007, 10, 543-545.	14.8	428

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19	A Clock Shock: Mouse CLOCK Is Not Required for Circadian Oscillator Function. Neuron, 2006, 50, 465-477.	8.1	386
20	Cryptochrome mediates light-dependent magnetosensitivity in Drosophila. Nature, 2008, 454, 1014-1018.	27.8	366
21	CLOCK, an essential pacemaker component, controls expression of the circadian transcription factor DBP. Genes and Development, 2000, 14, 679-689.	5.9	354
22	Insect Cryptochromes: Gene Duplication and Loss Define Diverse Ways to Construct Insect Circadian Clocks. Molecular Biology and Evolution, 2007, 24, 948-955.	8.9	345
23	Melatonin receptors are for the birds: Molecular analysis of two receptor subtypes differentially expressed in chick brain. Neuron, 1995, 15, 1003-1015.	8.1	332
24	Molecular Cloning and Characterization of a Rat A₁-Adenosine Receptor that is Widely Expressed in Brain and Spinal Cord. Molecular Endocrinology, 1991, 5, 1037-1048.	3.7	325
25	Analysis of Clock Proteins in Mouse SCN Demonstrates Phylogenetic Divergence of the Circadian Clockwork and Resetting Mechanisms. Neuron, 2000, 25, 437-447.	8.1	318
26	GABA Synchronizes Clock Cells within the Suprachiasmatic Circadian Clock. Neuron, 2000, 25, 123-128.	8.1	308
27	Targeted Disruption of the mPer3 Gene: Subtle Effects on Circadian Clock Function. Molecular and Cellular Biology, 2000, 20, 6269-6275.	2.3	289
28	Melatonin Receptors: Molecular Biology of a New Family of G Protein-Coupled Receptors. Journal of Biological Rhythms, 1997, 12, 528-531.	2.6	270
29	The genetics of monarch butterfly migration and warning colouration. Nature, 2014, 514, 317-321.	27.8	264
30	Animal cryptochromes mediate magnetoreception by an unconventional photochemical mechanism. Nature, 2010, 463, 804-807.	27.8	233
31	Targeted Disruption of the Mouse Mel_{1b} Melatonin Receptor. Molecular and Cellular Biology, 2003, 23, 1054-1060.	2.3	232
32	Sun Compass Integration of Skylight Cues in Migratory Monarch Butterflies. Neuron, 2011, 69, 345-358.	8.1	227
33	Cryptochromes Define a Novel Circadian Clock Mechanism in Monarch Butterflies That May Underlie Sun Compass Navigation. PLoS Biology, 2008, 6, e4.	5.6	226
34	Circadian Clock Neurons in the Silkmoth Antheraea pernyi: Novel Mechanisms of Period Protein Regulation. Neuron, 1996, 17, 889-900.	8.1	223
35	The two CRYs of the butterfly. Current Biology, 2005, 15, R953-R954.	3.9	217
36	The A Adenosine Receptor Mediates cAMP Responses to Adenosine Receptor Agonists in Human Intestinal Epithelia. Journal of Biological Chemistry, 1995, 270, 2387-2394.	3.4	212

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37	Melatonin Signal Transduction in Hamster Brain: Inhibition of Adenylyl Cyclase by a Pertussis Toxin-Sensitive G Protein*. Endocrinology, 1989, 125, 2670-2676.	2.8	201
38	Casein Kinase 1 Delta Regulates the Pace of the Mammalian Circadian Clock. Molecular and Cellular Biology, 2009, 29, 3853-3866.	2.3	201
39	The hypothalamic suprachiasmatic nuclei: Circadian patterns of vasopressin secretion and neuronal activity in vitro. Brain Research Bulletin, 1987, 19, 135-139.	3.0	192
40	Illuminating the Circadian Clock in Monarch Butterfly Migration. Science, 2003, 300, 1303-1305.	12.6	187
41	Melatonin madness. Cell, 1995, 83, 1059-1062.	28.9	186
42	Connecting the Navigational Clock to Sun Compass Input in Monarch Butterfly Brain. Neuron, 2005, 46, 457-467.	8.1	183
43	A Clockwork Explosion!. Neuron, 1998, 21, 1-4.	8.1	181
44	Human cryptochrome exhibits light-dependent magnetosensitivity. Nature Communications, 2011, 2, 356.	12.8	176
45	The Mel_{1a}Melatonin Receptor Is Coupled to Parallel Signal Transduction Pathways¹. Endocrinology, 1997, 138, 397-404.	2.8	174
46	Molecular Analysis of Mammalian Timeless. Neuron, 1998, 21, 1115-1122.	8.1	169
47	Navigational mechanisms of migrating monarch butterflies. Trends in Neurosciences, 2010, 33, 399-406.	8.6	167
48	A time-less function for mouse Timeless. Nature Neuroscience, 2000, 3, 755-756.	14.8	159
49	Anatomical basis of sun compass navigation II: The neuronal composition of the central complex of the monarch butterfly. Journal of Comparative Neurology, 2013, 521, 267-298.	1.6	159
50	Antennal Circadian Clocks Coordinate Sun Compass Orientation in Migratory Monarch Butterflies. Science, 2009, 325, 1700-1704.	12.6	154
51	Polarized Light Helps Monarch Butterflies Navigate. Current Biology, 2004, 14, 155-158.	3.9	153
52	The Polycomb Group Protein EZH2 Is Required for Mammalian Circadian Clock Function. Journal of Biological Chemistry, 2006, 281, 21209-21215.	3.4	152
53	Differential Regulation of mPER1 and mTIM Proteins in the Mouse Suprachiasmatic Nuclei: New Insights into a Core Clock Mechanism. Journal of Neuroscience, 1999, 19, RC11-RC11.	3.6	145
54	In vivo metabolic activity of the suprachiasmatic nuclei: a comparative study. Brain Research, 1983, 274, 184-187.	2.2	143

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55	Melatonin Receptors in Chick Brain: Characterization and Localization*. Endocrinology, 1989, 125, 363-368.	2.8	143
56	Direct Association between Mouse PERIOD and CKÎµ Is Critical for a Functioning Circadian Clock. Molecular and Cellular Biology, 2004, 24, 584-594.	2.3	143
57	A daily vasopressin rhythm in rat cerebrospinal fluid. Brain Research, 1983, 263, 105-112.	2.2	142
58	Cloning of a structural and functional homolog of the circadian clock gene period from the giant silkmoth antheraea pernyi. Neuron, 1994, 13, 1167-1176.	8.1	142
59	Cloning of a melatonin-related receptor from human pituitary. FEBS Letters, 1996, 386, 219-224.	2.8	140
60	Peripheral circadian oscillators require CLOCK. Current Biology, 2007, 17, R538-R539.	3.9	138
61	Anatomical basis of sun compass navigation I: The general layout of the monarch butterfly brain. Journal of Comparative Neurology, 2012, 520, 1599-1628.	1.6	132
62	Iodinated melatonin mimics melatonin action and reveals discrete binding sites in fetal brain. FEBS Letters, 1988, 228, 123-127.	2.8	130
63	Keeping time with the human genome. Nature, 2001, 409, 829-831.	27.8	124
64	A magnetic compass aids monarch butterfly migration. Nature Communications, 2014, 5, 4164.	12.8	122
65	The Mel1a melatonin receptor gene is expressed in human suprachiasmatic nuclei. NeuroReport, 1996, 8, 109-112.	1.2	119
66	Molecular Characterization of Prothoracicotropic Hormone (PTTH) from the Giant SilkmothAntheraea pernyi:Developmental Appearance of PTTH-Expressing Cells and Relationship to Circadian Clock Cells in Central Brain. Developmental Biology, 1996, 178, 418-429.	2.0	115
67	A Rhythmic Ror. Neuron, 2004, 43, 443-446.	8.1	114
68	Neurobiology of Monarch Butterfly Migration. Annual Review of Entomology, 2016, 61, 25-42.	11.8	111
69	MATERNAL-FETAL TRANSFER OF MELATONIN IN THE NON-HUMAN PRIMATE. Pediatric Research, 1979, 13, 788-791.	2.3	110
70	Redox Potential. Current Biology, 2002, 12, 147-152.	3.9	110
71	MATKRNAL MELATONIN COMMUNICATES DAYLENGTH TO THE FETUS IN DJUNGARIAN HAMSTERS. Endocrinology, 1986, 119, 2861-2863.	2.8	109
72	A Novel C-Terminal Domain of Drosophila PERIOD Inhibits dCLOCK:CYCLE-Mediated Transcription. Current Biology, 2003, 13, 758-762.	3.9	106

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73	Defining behavioral and molecular differences between summer and migratory monarch butterflies. BMC Biology, 2009, 7, 14.	3.8	102
74	MELATONIN RECEPTORS ARE PRESENT IN THE FERRET PARS TUBERALIS AND PARS DISTALIS, BUT NOT IN BRAIN. Endocrinology, 1990, 127, 2607-2609.	2.8	101
75	A Colorful Model of the Circadian Clock. Cell, 2006, 124, 233-236.	28.9	94
76	Efficient targeted mutagenesis in the monarch butterfly using zinc-finger nucleases. Genome Research, 2013, 23, 159-168.	5.5	94
77	Genomic Access to Monarch Migration Using TALEN and CRISPR/Cas9-Mediated Targeted Mutagenesis. G3: Genes, Genomes, Genetics, 2016, 6, 905-915.	1.8	92
78	Demystifying Monarch Butterfly Migration. Current Biology, 2018, 28, R1009-R1022.	3.9	92
79	MonarchBase: the monarch butterfly genome database. Nucleic Acids Research, 2012, 41, D758-D763.	14.5	91
80	Arginine vasopressin: a novel peptide rhythm in cerebrospinal fluid. Trends in Neurosciences, 1987, 10, 76-80.	8.6	88
81	Functional activity of the suprachiasmatic nuclei in the fetal primate. Neuroscience Letters, 1984, 46, 145-149.	2.1	82
82	Mapping of the Gene for the Mel1a-Melatonin Receptor to Human Chromosome 4 (MTNR1A) and Mouse Chromosome 8 (Mtnr1a). Genomics, 1995, 27, 355-357.	2.9	82
83	Comparing Clockworks: Mouse versus Fly. Journal of Biological Rhythms, 2000, 15, 357-364.	2.6	82
84	Formation and Function of Flavin Anion Radical in Cryptochrome 1 Blue-Light Photoreceptor of Monarch Butterfly. Journal of Biological Chemistry, 2007, 282, 17608-17612.	3.4	81
85	Serotonin receptor gene expression in the rat suprachiasmatic nuclei. Brain Research, 1993, 608, 159-165.	2.2	77
86	The Mel1a Melatonin Receptor Is Coupled to Parallel Signal Transduction Pathways. Endocrinology, 1997, 138, 397-404.	2.8	77
87	Period protein from the giant silkmoth antheraea pernyi functions as a circadian clock element in drosophila melanogaster. Neuron, 1995, 15, 147-157.	8.1	74
88	Melatonin receptors and signal transduction in melatonin-sensitive and melatonin-insensitive populations of white-footed mice (Peromyscus leucopus). Brain Research, 1990, 506, 353-357.	2.2	73
89	Constructing a Feedback Loop with Circadian Clock Molecules from the Silkmoth, Antheraea pernyi. Journal of Biological Chemistry, 2003, 278, 38149-38158.	3.4	63
90	Gap junctions couple astrocytes but not neurons in dissociated cultures of rat suprachiasmatic nucleus. Brain Research, 1996, 706, 30-36.	2.2	59

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91	Unraveling navigational strategies in migratory insects. Current Opinion in Neurobiology, 2012, 22, 353-361.	4.2	58
92	Episodes in insect evolution. Integrative and Comparative Biology, 2009, 49, 590-606.	2.0	57
93	Discovery of a putative heme-binding protein family (SOUL/HBP) by two-tissue suppression subtractive hybridization and database searches. Molecular Brain Research, 1999, 74, 175-181.	2.3	56
94	Period Protein Is Necessary for Circadian Control of Egg Hatching Behavior in the Silkmoth Antheraea pernyi. Neuron, 1996, 17, 901-909.	8.1	55
95	The Circadian Clocks of Mice and Men. Neuron, 2001, 29, 555-558.	8.1	55
96	Coldness Triggers Northward Flight in Remigrant Monarch Butterflies. Current Biology, 2013, 23, 419-423.	3.9	55
97	Sex-Linked period Genes in the Silkmoth, Antheraea pernyi. Neuron, 1999, 24, 953-965.	8.1	54
98	Comparison of the temporal profiles of vasopressin and oxytocin in the cerebrospinal fluid of the cat, monkey and rat. Brain Research, 1983, 261, 341-345.	2.2	52
99	Discordant timing between antennae disrupts sun compass orientation in migratory monarch butterflies. Nature Communications, 2012, 3, 958.	12.8	52
100	Forward Genetic Approach Strikes Gold: Cloning of a Mammalian Clock Gene. Cell, 1997, 89, 487-490.	28.9	50
101	Melatonin receptors and signal transduction during development in Siberian hamsters (Phodopus) Tj ETQq1 1 0.784314 rgBT /Overlo	1.7	47
102	Chasing Migration Genes: A Brain Expressed Sequence Tag Resource for Summer and Migratory Monarch Butterflies (Danaus plexippus). PLoS ONE, 2008, 3, e1345.	2.5	46
103	period and timeless Tango: A dance of two clock genes. Neuron, 1995, 15, 983-986.	8.1	40
104	Appearance of melatonin receptors during embryonic life in Siberian hamsters (Phodopus sungorous). Brain Research, 1991, 568, 345-349.	2.2	37
105	Chapter 9 Pre-natal development of a hypothalamic biological clock. Progress in Brain Research, 1992, 93, 119-132.	1.4	37
106	Brain Control of Embryonic Circadian Rhythms in the Silkmoth Antheraea pernyi. Neuron, 1998, 20, 741-748.	8.1	31
107	Melatonin Response to Exercise Training in Women. Journal of Pineal Research, 1989, 7, 185-194.	7.4	30
108	Chimeric and Point-Mutated Receptors Reveal That a Single Glycine Residue in Transmembrane Domain 6 Is Critical for High Affinity Melatonin Binding1. Endocrinology, 2000, 141, 1236-1244.	2.8	28

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109	Cellular and molecular basis of circadian timing in mammals. Seminars in Perinatology, 2000, 24, 243-246.	2.5	25
110	Sensory basis of lepidopteran migration: focus on the monarch butterfly. Current Opinion in Neurobiology, 2015, 34, 20-28.	4.2	24
111	Assignment of the Melatonin-Related Receptor to Human Chromosome X (GPR50) and Mouse Chromosome X (Gpr50). Genomics, 1999, 55, 248-251.	2.9	23
112	Interaction between the Circadian Clocks of Mother and Fetus. Novartis Foundation Symposium, 1995, 183, 198-211.	1.1	20
113	Neural Integration Underlying a Time-Compensated Sun Compass in the Migratory Monarch Butterfly. Cell Reports, 2016, 15, 683-691.	6.4	16
114	Analysis of human Per4. Molecular Brain Research, 2001, 92, 19-26.	2.3	12
115	Circadian and developmental regulation of Oct-2 gene expression in the suprachiasmatic nuclei. Brain Research, 1992, 598, 332-336.	2.2	11
116	Photic Influences on the Developing Mammal. Novartis Foundation Symposium, 1985, 117, 116-128.	1.1	11
117	Cerebrospinal Fluid Melatonin. , 1980, , 579-589.		10
118	Molecular cloning of a G protein-coupled receptor that is highly expressed in lymphocytes and proliferative areas of developing brain. Molecular and Cellular Neurosciences, 1992, 3, 206-214.	2.2	8
119	Dimorphic cocoons of the cecropia moth (Hyalophora cecropia): Morphological, behavioral, and biophysical differences. PLoS ONE, 2017, 12, e0174023.	2.5	8
120	A re-evaluation of silk measurement by the cecropia caterpillar (Hyalophora cecropia) during cocoon construction reveals use of a silk odometer that is temporally regulated. PLoS ONE, 2020, 15, e0228453.	2.5	4
121	The Influence of Light on the Mammalian Fetus. Proceedings in Life Sciences, 1988, , 149-177.	0.5	3
122	High-Affinity Melatonin Receptors in Mammals: Localization, G-Protein Coupling and Signal Transduction. , 1991, , 85-95.		2
123	Anatomical basis of sun compass navigation II: The neuronal composition of the central complex of the monarch butterfly. Journal of Comparative Neurology, 2013, 521, Spc1-Spc1.	1.6	1
124	Anatomical basis of sun compass navigation I: The general layout of the monarch butterfly brain. Journal of Comparative Neurology, 2012, 520, Spc1-Spc1.	1.6	0
125	Maternal Entrainment of a Fetal Biological Clock. , 1993, , 93-104.		0