Steven M Reppert

List of Publications by Year
in descending order

125 papers	31,042 citations	6254 80 h-index	17592 121 g-index
126 all docs	126 docs citations	126 times ranked	15332 citing authors

#	Article	IF	Citations
1	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
2	Demystifying Monarch Butterfly Migration. Current Biology, 2018, 28, R1009-R1022.	3.9	92
3	Dimorphic cocoons of the cecropia moth (Hyalophora cecropia): Morphological, behavioral, and biophysical differences. PLoS ONE, 2017, 12, e0174023.	2.5	8
4	Genomic Access to Monarch Migration Using TALEN and CRISPR/Cas9-Mediated Targeted Mutagenesis. G3: Genes, Genomes, Genetics, 2016, 6, 905-915.	1.8	92
5	Neural Integration Underlying a Time-Compensated Sun Compass in the Migratory Monarch Butterfly. Cell Reports, 2016, 15, 683-691.	6.4	16
6	Neurobiology of Monarch Butterfly Migration. Annual Review of Entomology, 2016, 61, 25-42.	11.8	111
7	Sensory basis of lepidopteran migration: focus on the monarch butterfly. Current Opinion in Neurobiology, 2015, 34, 20-28.	4.2	24
8	A magnetic compass aids monarch butterfly migration. Nature Communications, 2014, 5, 4164.	12.8	122
9	The genetics of monarch butterfly migration and warning colouration. Nature, 2014, 514, 317-321.	27.8	264
10	Efficient targeted mutagenesis in the monarch butterfly using zinc-finger nucleases. Genome Research, 2013, 23, 159-168.	5.5	94
11	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
12	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
13	Coldness Triggers Northward Flight in Remigrant Monarch Butterflies. Current Biology, 2013, 23, 419-423.	3.9	55
14	Discordant timing between antennae disrupts sun compass orientation in migratory monarch butterflies. Nature Communications, 2012, 3, 958.	12.8	52
15	MonarchBase: the monarch butterfly genome database. Nucleic Acids Research, 2012, 41, D758-D763.	14.5	91
16	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
17	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
18	Unraveling navigational strategies in migratory insects. Current Opinion in Neurobiology, 2012, 22, 353-361.	4.2	58

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19	Human cryptochrome exhibits light-dependent magnetosensitivity. Nature Communications, 2011, 2, 356.	12.8	176
20	The Monarch Butterfly Genome Yields Insights into Long-Distance Migration. Cell, 2011, 147, 1171-1185.	28.9	509
21	Sun Compass Integration of Skylight Cues in Migratory Monarch Butterflies. Neuron, 2011, 69, 345-358.	8.1	227
22	Animal cryptochromes mediate magnetoreception by an unconventional photochemical mechanism. Nature, 2010, 463, 804-807.	27.8	233
23	Navigational mechanisms of migrating monarch butterflies. Trends in Neurosciences, 2010, 33, 399-406.	8.6	167
24	Casein Kinase 1 Delta Regulates the Pace of the Mammalian Circadian Clock. Molecular and Cellular Biology, 2009, 29, 3853-3866.	2.3	201
25	Defining behavioral and molecular differences between summer and migratory monarch butterflies. BMC Biology, 2009, 7, 14.	3.8	102
26	Episodes in insect evolution. Integrative and Comparative Biology, 2009, 49, 590-606.	2.0	57
27	Antennal Circadian Clocks Coordinate Sun Compass Orientation in Migratory Monarch Butterflies. Science, 2009, 325, 1700-1704.	12.6	154
28	Cryptochrome mediates light-dependent magnetosensitivity in Drosophila. Nature, 2008, 454, 1014-1018.	27.8	366
29	Cryptochromes Define a Novel Circadian Clock Mechanism in Monarch Butterflies That May Underlie Sun Compass Navigation. PLoS Biology, 2008, 6, e4.	5.6	226
30	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
31	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
32	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
33	CLOCK and NPAS2 have overlapping roles in the suprachiasmatic circadian clock. Nature Neuroscience, 2007, 10, 543-545.	14.8	428
34	Peripheral circadian oscillators require CLOCK. Current Biology, 2007, 17, R538-R539.	3.9	138
35	A Colorful Model of the Circadian Clock. Cell, 2006, 124, 233-236.	28.9	94
36	A Clock Shock: Mouse CLOCK Is Not Required for Circadian Oscillator Function. Neuron, 2006, 50, 465-477.	8.1	386

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37	The Polycomb Group Protein EZH2 Is Required for Mammalian Circadian Clock Function. Journal of Biological Chemistry, 2006, 281, 21209-21215.	3.4	152
38	The two CRYs of the butterfly. Current Biology, 2005, 15, R953-R954.	3.9	217
39	Connecting the Navigational Clock to Sun Compass Input in Monarch Butterfly Brain. Neuron, 2005, 46, 457-467.	8.1	183
40	Direct Association between Mouse PERIOD and CKIÎµ Is Critical for a Functioning Circadian Clock. Molecular and Cellular Biology, 2004, 24, 584-594.	2.3	143
41	Polarized Light Helps Monarch Butterflies Navigate. Current Biology, 2004, 14, 155-158.	3.9	153
42	A Rhythmic Ror. Neuron, 2004, 43, 443-446.	8.1	114
43	A Novel C-Terminal Domain of Drosophila PERIOD Inhibits dCLOCK:CYCLE-Mediated Transcription. Current Biology, 2003, 13, 758-762.	3.9	106
44	Rhythmic histone acetylation underlies transcription in the mammalian circadian clock. Nature, 2003, 421, 177-182.	27.8	600
45	Illuminating the Circadian Clock in Monarch Butterfly Migration. Science, 2003, 300, 1303-1305.	12.6	187
46	Constructing a Feedback Loop with Circadian Clock Molecules from the Silkmoth, Antheraea pernyi. Journal of Biological Chemistry, 2003, 278, 38149-38158.	3.4	63
47	Targeted Disruption of the Mouse Mel_{1b} Melatonin Receptor. Molecular and Cellular Biology, 2003, 23, 1054-1060.	2.3	232
48	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
49	Redox Potential. Current Biology, 2002, 12, 147-152.	3.9	110
50	Coordination of circadian timing in mammals. Nature, 2002, 418, 935-941.	27.8	3,763
51	Molecular Analysis of Mammalian Circadian Rhythms. Annual Review of Physiology, 2001, 63, 647-676.	13.1	1,306
52	Analysis of human Per4. Molecular Brain Research, 2001, 92, 19-26.	2.3	12
53	The Circadian Clocks of Mice and Men. Neuron, 2001, 29, 555-558.	8.1	55
54	Differential Functions of mPer1, mPer2, and mPer3 in the SCN Circadian Clock. Neuron, 2001, 30, 525-536.	8.1	802

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55	Posttranslational Mechanisms Regulate the Mammalian Circadian Clock. Cell, 2001, 107, 855-867.	28.9	1,071
56	Keeping time with the human genome. Nature, 2001, 409, 829-831.	27.8	124
57	A time-less function for mouse Timeless. Nature Neuroscience, 2000, 3, 755-756.	14.8	159
58	Cellular and molecular basis of circadian timing in mammals. Seminars in Perinatology, 2000, 24, 243-246.	2.5	25
59	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
60	Comparing Clockworks: Mouse versus Fly. Journal of Biological Rhythms, 2000, 15, 357-364.	2.6	82
61	Targeted Disruption of the <i>mPer3</i> Gene: Subtle Effects on Circadian Clock Function. Molecular and Cellular Biology, 2000, 20, 6269-6275.	2.3	289
62	GABA Synchronizes Clock Cells within the Suprachiasmatic Circadian Clock. Neuron, 2000, 25, 123-128.	8.1	308
63	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
64	Interacting Molecular Loops in the Mammalian Circadian Clock. Science, 2000, 288, 1013-1019.	12.6	1,223
65	CLOCK, an essential pacemaker component, controls expression of the circadian transcription factor DBP. Genes and Development, 2000, 14, 679-689.	5.9	354
66	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
67	Sex-Linked period Genes in the Silkmoth, Antheraea pernyi. Neuron, 1999, 24, 953-965.	8.1	54
68	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
69	A Molecular Mechanism Regulating Rhythmic Output from the Suprachiasmatic Circadian Clock. Cell, 1999, 96, 57-68.	28.9	834
70	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
71	Assignment of the Melatonin-Related Receptor to Human Chromosome X (GPR50) and Mouse Chromosome X (Gpr50). Genomics, 1999, 55, 248-251.	2.9	23
72	A Clockwork Explosion!. Neuron, 1998, 21, 1-4.	8.1	181

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73	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
74	Molecular Analysis of Mammalian Timeless. Neuron, 1998, 21, 1115-1122.	8.1	169
75	Brain Control of Embryonic Circadian Rhythms in the Silkmoth Antheraea pernyi. Neuron, 1998, 20, 741-748.	8.1	31
76	Melatonin Receptors: Molecular Biology of a New Family of G Protein-Coupled Receptors. Journal of Biological Rhythms, 1997, 12, 528-531.	2.6	270
77	The Mel_{1a}Melatonin Receptor Is Coupled to Parallel Signal Transduction Pathways¹. Endocrinology, 1997, 138, 397-404.	2.8	174
78	Molecular Dissection of Two Distinct Actions of Melatonin on the Suprachiasmatic Circadian Clock. Neuron, 1997, 19, 91-102.	8.1	660
79	Two period Homologs: Circadian Expression and Photic Regulation in the Suprachiasmatic Nuclei. Neuron, 1997, 19, 1261-1269.	8.1	715
80	Forward Genetic Approach Strikes Gold: Cloning of a Mammalian Clock Gene. Cell, 1997, 89, 487-490.	28.9	50
81	Cellular Construction of a Circadian Clock: Period Determination in the Suprachiasmatic Nuclei. Cell, 1997, 91, 855-860.	28.9	456
82	The Mel1a Melatonin Receptor Is Coupled to Parallel Signal Transduction Pathways. Endocrinology, 1997, 138, 397-404.	2.8	77
83	Cloning of a melatonin-related receptor from human pituitary. FEBS Letters, 1996, 386, 219-224.	2.8	140
84	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
85	Circadian Clock Neurons in the Silkmoth Antheraea pernyi: Novel Mechanisms of Period Protein Regulation. Neuron, 1996, 17, 889-900.	8.1	223
86	Period Protein Is Necessary for Circadian Control of Egg Hatching Behavior in the Silkmoth Antheraea pernyi. Neuron, 1996, 17, 901-909.	8.1	55
87	The Mel1a melatonin receptor gene is expressed in human suprachiasmatic nuclei. NeuroReport, 1996, 8, 109-112.	1.2	119
88	Gap junctions couple astrocytes but not neurons in dissociated cultures of rat suprachiasmatic nucleus. Brain Research, 1996, 706, 30-36.	2.2	59
89	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
90	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

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91	period and timeless Tango: A dance of two clock genes. Neuron, 1995, 15, 983-986.	8.1	40
92	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
93	Individual neurons dissociated from rat suprachiasmatic nucleus express independently phased circadian firing rhythms. Neuron, 1995, 14, 697-706.	8.1	1,325
94	Melatonin madness. Cell, 1995, 83, 1059-1062.	28.9	186
95	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
96	Interaction between the Circadian Clocks of Mother and Fetus. Novartis Foundation Symposium, 1995, 183, 198-211.	1.1	20
97	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
98	Cloning and characterization of a mammalian melatonin receptor that mediates reproductive and circadian responses. Neuron, 1994, 13, 1177-1185.	8.1	1,013
99	Serotonin receptor gene expression in the rat suprachiasmatic nuclei. Brain Research, 1993, 608, 159-165.	2.2	77
100	Maternal Entrainment of a Fetal Biological Clock. , 1993, , 93-104.		0
101	Chapter 9 Pre-natal development of a hypothalamic biological clock. Progress in Brain Research, 1992, 93, 119-132.	1.4	37
102	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
103	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
104	Circadian and developmental regulation of Oct-2 gene expression in the suprachiasmatic nuclei. Brain Research, 1992, 598, 332-336.	2.2	11
105	Appearance of melatonin receptors during embryonic life in Siberian hamsters (Phodopus sungorous). Brain Research, 1991, 568, 345-349.	2.2	37
106	Melatonin receptors and signal transduction during development in Siberian hamsters (Phodopus) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	1.7	47
107	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
108	High-Affinity Melatonin Receptors in Mammals: Localization, G-Protein Coupling and Signal Transduction. , 1991, , 85-95.		2

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109	MELATONIN RECEPTORS ARE PRESENT IN THE FERRET PARS TUBERALIS AND PARS DISTALIS, BUT NOT IN BRAIN. Endocrinology, 1990, 127, 2607-2609.	2.8	101
110	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
111	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
112	Melatonin Receptors in Chick Brain: Characterization and Localization*. Endocrinology, 1989, 125, 363-368.	2.8	143
113	Melatonin Response to Exercise Training in Women. Journal of Pineal Research, 1989, 7, 185-194.	7.4	30
114	Iodinated melatonin mimics melatonin action and reveals discrete binding sites in fetal brain. FEBS Letters, 1988, 228, 123-127.	2.8	130
115	The Influence of Light on the Mammalian Fetus. Proceedings in Life Sciences, 1988, , 149-177.	0.5	3
116	Arginine vasopressin: a novel peptide rhythm in cerebrospinal fluid. Trends in Neurosciences, 1987, 10, 76-80.	8.6	88
117	The hypothalamic suprachiasmatic nuclei: Circadian patterns of vasopressin secretion and neuronal activity in vitro. Brain Research Bulletin, 1987, 19, 135-139.	3.0	192
118	MATKRNAL MELATONIN COMMUNICATES DAYLENGTH TO THE FETUS IN DJUNGARIAN HAMSTERS. Endocrinology, 1986, 119, 2861-2863.	2.8	109
119	Photic Influences on the Developing Mammal. Novartis Foundation Symposium, 1985, 117, 116-128.	1.1	11
120	Functional activity of the suprachiasmatic nuclei in the fetal primate. Neuroscience Letters, 1984, 46, 145-149.	2.1	82
121	In vivo metabolic activity of the suprachiasmatic nuclei: a comparative study. Brain Research, 1983, 274, 184-187.	2.2	143
122	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
123	A daily vasopressin rhythm in rat cerebrospinal fluid. Brain Research, 1983, 263, 105-112.	2.2	142
124	Cerebrospinal Fluid Melatonin. , 1980, , 579-589.		10
125	MATERNAL-FETAL TRANSFER OF MELATONIN IN THE NON-HUMAN PRIMATE. Pediatric Research, 1979, 13, 788-791.	2.3	110