Donald W Pfaff

List of Publications by Citations

387 papers	25,674 citations	85 h-index	141 g-index
392 ext. papers	27,123 ext. citations	5.8 avg, IF	6.79 L-index

#	Paper	IF	Citations
387	Atlas of estradiol-concentrating cells in the central nervous system of the female rat. *Journal of Comparative Neurology*, **1973**, 151, 121-58	3.4	1373
386	Long-term gene expression and phenotypic correction using adeno-associated virus vectors in the mammalian brain. *Nature Genetics*, **1994**, 8, 148-54	36.3	945
385	Origin of luteinizing hormone-releasing hormone neurons. *Nature*, **1989**, 338, 161-4	50.4	934
384	Connections of the median and dorsal raphe nuclei in the rat: an autoradiographic and degeneration study. *Journal of Comparative Neurology*, **1974**, 156, 179-205	3.4	619
383	Luteinizing hormone-releasing hormone (LHRH)-expressing cells do not migrate normally in an inherited hypogonadal (Kallmann) syndrome. *Molecular Brain Research*, **1989**, 6, 311-26		511
382	Efferents from medial basal forebrain and hypothalamus in the rat. II. An autoradiographic study of the anterior hypothalamus. *Journal of Comparative Neurology*, **1976**, 169, 221-61	3.4	458
381	Efferents from medial basal forebrain and hypothalamus in the rat. I. An autoradiographic study of the medial preoptic area. *Journal of Comparative Neurology*, **1976**, 169, 185-219	3.4	419
380	Silencing of estrogen receptor alpha in the ventromedial nucleus of hypothalamus leads to metabolic syndrome. *Proceedings of the National Academy of Sciences of the United States of America*, **2007**, 104, 2501-6	11.5	380
379	Hormone concentrating cells in vocal control and other areas of the brain of the zebra finch (Poephila guttata). *Journal of Comparative Neurology*, **1976**, 165, 487-511	3.4	353
378	An estrogen-dependent four-gene micronet regulating social recognition: a study with oxytocin and estrogen receptor-alpha and -beta knockout mice. *Proceedings of the National Academy of Sciences of the United States of America*, **2003**, 100, 6192-7	11.5	306
377	Possible role for endogenous oxytocin in estrogen-facilitated maternal behavior in rats. *Neuroendocrinology*, **1985**, 40, 526-32	5.6	277
376	Deconstructing and reconstructing theory of mind. *Trends in Cognitive Sciences*, **2015**, 19, 65-72	14	276
375	Non-genomic actions of estrogens and their interaction with genomic actions in the brain. *Frontiers in Neuroendocrinology*, **2008**, 29, 238-57	8.9	272
374	An autoradiographic study of the efferent connections of the ventromedial nucleus of the hypothalamus. *Journal of Comparative Neurology*, **1979**, 183, 785-815	3.4	268
373	Stomach ghrelin-secreting cells as food-entrainable circadian clocks. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 13582-7	11.5	244
372	Regulation of hippocampal H3 histone methylation by acute and chronic stress. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 20912-7	11.5	231
371	LH-RH in the mesencephalic central grey can potentiate lordosis reflex of female rats. *Nature*, **1980**, 283, 566-7	50.4	231

370	Chemical characterization of neuroendocrine targets for progesterone in the female rat brain and pituitary. *Neuroendocrinology*, **1990**, 51, 276-83	5.6	196
369	Factors influencing sex hormone uptake by rat brain regions. I. Effects of neonatal treatment, hypophysectomy, and competing steroid on estradiol uptake. *Brain Research*, **1970**, 21, 1-16	3.7	193
368	Expression and estrogen regulation of progesterone receptor mRNA in neurons of the mediobasal hypothalamus: an in situ hybridization study. *Molecular Endocrinology*, **1989**, 3, 1295-300		190
367	RNAi-mediated silencing of estrogen receptor {alpha} in the ventromedial nucleus of hypothalamus abolishes female sexual behaviors. *Proceedings of the National Academy of Sciences of the United States of America*, **2006**, 103, 10456-10460	11.5	179
366	Immunocytochemical localization of luteinizing hormone-releasing hormone in male and female rat brains. Quantitative studies on the effect of gonadal steroids. *Neuroendocrinology*, **1983**, 36, 1-12	5.6	174
365	Estrogen increases proenkephalin messenger ribonucleic acid levels in the ventromedial hypothalamus of the rat. *Molecular Endocrinology*, **1988**, 2, 1320-8		171
364	Autoradiographic localization of hormone-concentrating cells in the brain of an amphibian, Xenopus laevis. I. Testosterone. *Journal of Comparative Neurology*, **1975**, 164, 47-59	3.4	167
363	Olfactory and hormonal influences on the basal forebrain of the male rat. *Brain Research*, **1969**, 15, 137-56	3.7	166
362	A subset of beta-endorphin- or dynorphin-containing neurons in the medial basal hypothalamus accumulates estradiol. *Neuroendocrinology*, **1985**, 41, 417-26	5.6	163
361	Nature of sex hormone effects on rat sex behavior: specificity of effects and individual patterns of response. *Journal of Comparative and Physiological Psychology*, **1970**, 73, 349-58		160
360	The membrane actions of estrogens can potentiate their lordosis behavior-facilitating genomic actions. *Proceedings of the National Academy of Sciences of the United States of America*, **2004**, 101, 12354-7	11.5	156
359	Single unit recording in hypothalamus and preoptic area of estrogen-treated and untreated ovariectomized female rats. *Brain Research*, **1976**, 101, 67-78	3.7	154
358	Development of olfactory-guided behavior in infant rats. *Physiology and Behavior*, **1971**, 6, 573-6	3.5	154
357	Effects of medial hypothalamic lesions on the lordosis response and other behaviors in female golden hamsters. *Physiology and Behavior*, **1977**, 19, 223-37	3.5	151
356	Autoradiographic localization of hormone-concentrating cells in the brain of the female rhesus monkey. *Journal of Comparative Neurology*, **1976**, 170, 279-93	3.4	144
355	Acute stress and hippocampal histone H3 lysine 9 trimethylation, a retrotransposon silencing response. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 17657-62	11.5	141
354	Aggressive behavior in female hamsters: the hormonal basis for fluctuations in female aggressiveness correlated with estrous state. *Journal of Comparative and Physiological Psychology*, **1977**, 91, 443-64		141
353	Microparticle-based delivery of oxytocin receptor antisense DNA in the medial amygdala blocks social recognition in female mice. *Proceedings of the National Academy of Sciences of the United States of America*, **2007**, 104, 4670-5	11.5	140

352	Effects of daytime and nighttime stress on Fos-like immunoreactivity in the paraventricular nucleus of the hypothalamus, the habenula, and the posterior paraventricular nucleus of the thalamus. *Brain Research*, **1991**, 563, 339-44	3.7	138
351	Estrogen regulation of proenkephalin gene expression in the ventromedial hypothalamus of the rat: temporal qualities and synergism with progesterone. *Molecular Brain Research*, **1989**, 5, 51-8		137
350	Infusion of antisense oligodeoxynucleotides to the oxytocin receptor in the ventromedial hypothalamus reduces estrogen-induced sexual receptivity and oxytocin receptor binding in the female rat. *Neuroendocrinology*, **1994**, 59, 432-40	5.6	132
349	Estradiol regulation of nitric oxide synthase mRNAs in rat hypothalamus. *Neuroendocrinology*, **1996**, 64, 357-63	5.6	131
348	Estrogen receptor-beta regulates transcript levels for oxytocin and arginine vasopressin in the hypothalamic paraventricular nucleus of male mice. *Molecular Brain Research*, **2002**, 109, 84-94		130
347	Reversal of sex roles in genetic female mice by disruption of estrogen receptor gene. *Neuroendocrinology*, **1996**, 64, 467-70	5.6	129
346	Sex difference in estradiol regulation of progestin receptor mRNA in rat mediobasal hypothalamus as demonstrated by in situ hybridization. *Neuroendocrinology*, **1991**, 53, 608-13	5.6	129
345	Genotype/age interactions on aggressive behavior in gonadally intact estrogen receptor beta knockout (betaERKO) male mice. *Hormones and Behavior*, **2002**, 41, 288-96	3.7	127
344	Brain mast cells link the immune system to anxiety-like behavior. *Proceedings of the National Academy of Sciences of the United States of America*, **2008**, 105, 18053-7	11.5	124
343	Olfactory-mediated parasite recognition and avoidance: linking genes to behavior. *Hormones and Behavior*, **2004**, 46, 272-83	3.7	122
342	Autoradiographic localization of hormone-concentrating cells in the brain of an amphibian, Xenopus laevis. II. Estradiol. *Journal of Comparative Neurology*, **1975**, 164, 63-77	3.4	122
341	Hormone effects on male sex behavior in adult South African clawed frogs, Xenopus laevis. *Hormones and Behavior*, **1976**, 7, 159-82	3.7	122
340	Etiologies underlying sex differences in Autism Spectrum Disorders. *Frontiers in Neuroendocrinology*, **2014**, 35, 255-71	8.9	121
339	Metabolic pathways that mediate inhibition of hypothalamic neurons by glucose. *Diabetes*, **2004**, 53, 67-73	0.9	116
338	Estrogen facilitates fear conditioning and increases corticotropin-releasing hormone mRNA expression in the central amygdala in female mice. *Hormones and Behavior*, **2006**, 49, 197-205	3.7	114
337	Behavioral and electrophysiological responses of female mice to male urine odors. *Physiology and Behavior*, **1970**, 5, 407-11	3.5	114
336	Recovery of consciousness is mediated by a network of discrete metastable activity states. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 9283-8	11.5	113
335	Estradiol induction of proenkephalin messenger RNA in hypothalamus: dose-response and relation to reproductive behavior in the female rat. *Molecular Brain Research*, **1990**, 8, 47-54		110

334	Early estrogen-induced nuclear changes in rat hypothalamic ventromedial neurons: an ultrastructural and morphometric analysis. *Journal of Comparative Neurology*, **1985**, 239, 255-66	3.4	109
333	Modulation of the lordosis reflex of female rats by LHRH, its antiserum and analogs in the mesencephalic central gray. *Neuroendocrinology*, **1983**, 36, 218-24	5.6	108
332	Effects of estrogen on oxytocin receptor messenger ribonucleic acid expression in the uterus, pituitary, and forebrain of the female rat. *Neuroendocrinology*, **1997**, 65, 9-17	5.6	107
331	Localization of lumbar epaxial motoneurons in the rat. *Brain Research*, **1979**, 170, 23-41	3.7	107
330	The role of the estrogen receptor alpha in the medial amygdala and ventromedial nucleus of the hypothalamus in social recognition, anxiety and aggression. *Behavioural Brain Research*, **2010**, 210, 211-20	3.4	104
329	A Neuroendocrine Approach to Brain Function: Localization of Sex Steroid Concentrating Cells in Vertebrate Brains. *American Zoologist*, **1978**, 18, 447-460		104
328	Ontogenesis of neurons producing luteinizing hormone-releasing hormone (LHRH) in the nervus terminalis of the rat. *Journal of Comparative Neurology*, **1985**, 238, 348-64	3.4	103
327	Expression of a functional foreign gene in adult mammalian brain following in Vivo transfer via a herpes simplex virus type 1 defective viral vector. *Molecular and Cellular Neurosciences*, **1991**, 2, 320-30	4.8	101
326	Immunocytochemical localization of actin in dendritic spines of the cerebral cortex using colloidal gold as a probe. *Cellular and Molecular Neurobiology*, **1985**, 5, 271-84	4.6	99
325	Stress and the dynamic genome: Steroids, epigenetics, and the transposome. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 6828-33	11.5	97
324	Sexually dimorphic responses to early adversity: implications for affective problems and autism spectrum disorder. *Psychoneuroendocrinology*, **2014**, 49, 11-25	5	97
323	Mapping of neural and signal transduction pathways for lordosis in the search for estrogen actions on the central nervous system. *Behavioural Brain Research*, **1998**, 92, 169-80	3.4	97
322	Roles of second-messenger systems and neuronal activity in the regulation of lordosis by neurotransmitters, neuropeptides, and estrogen: a review. *Neuroscience and Biobehavioral Reviews*, **1994**, 18, 251-68	9	97
321	Estrogen effects on neuronal responsiveness to electrical and neurotransmitter stimulation: an in vitro study on the ventromedial nucleus of the hypothalamus. *Brain Research*, **1985**, 347, 1-10	3.7	96
320	Communication among hamsters by high-frequency acoustic signals: II. Determinants of calling by females and males.. *Journal of Comparative and Physiological Psychology*, **1977**, 91, 807-819		96
319	Localization of forebrain neurons which project directly to the medulla and spinal cord of the rat by retrograde tracing with wheat germ agglutinin. *Journal of Comparative Neurology*, **1984**, 226, 1-20	3.4	94
318	Ultrastructure of neurons in the ventromedial nucleus or the hypothalamus in ovariectomized rats with or without estrogen treatment. *Cell and Tissue Research*, **1981**, 217, 451-70	4.2	94
317	Embryonic development of gonadotropin-releasing hormone neurons in the sockeye salmon. *Journal of Comparative Neurology*, **1995**, 362, 256-70	3.4	93

316	Effect of preoptic region implants of dilute estradiol on the maternal behavior of ovariectomized, nulliparous rats. *Hormones and Behavior*, **1986**, 20, 354-63	3.7	93
315	Intracerebral administration of antisense oligodeoxynucleotides to GAD65 and GAD67 mRNAs modulate reproductive behavior in the female rat. *Brain Research*, **1994**, 636, 209-20	3.7	91
314	Identification of medial preoptic neurons that concentrate estradiol and project to the midbrain in the rat. *Journal of Comparative Neurology*, **1986**, 247, 364-82	3.4	91
313	Differential regulation of proenkephalin gene expression by estrogen in the ventromedial hypothalamus of male and female rats: implications for the molecular basis of a sexually differentiated behavior. *Brain Research*, **1990**, 536, 63-8	3.7	89
312	Estrogen and thyroid hormone receptor interactions: physiological flexibility by molecular specificity. *Physiological Reviews*, **2002**, 82, 923-44	47.9	88
311	Concepts and mechanisms of generalized central nervous system arousal. *Annals of the New York Academy of Sciences*, **2008**, 1129, 11-25	6.5	87
310	Estradiol differentially regulates lipocalin-type prostaglandin D synthase transcript levels in the rodent brain: Evidence from high-density oligonucleotide arrays and in situ hybridization. *Proceedings of the National Academy of Sciences of the United States of America*, **2003**, 100, 318-23	11.5	87
309	Estrogen-regulated progestin receptors are found in the midbrain raphe but not hippocampus of estrogen receptor alpha (ER alpha) gene-disrupted mice. *Journal of Comparative Neurology*, **2000**, 427, 185-95	3.4	86
308	Induction of FOS immunoreactivity in oxytocin neurons after sexual activity in female rats. *Neuroendocrinology*, **1993**, 58, 352-8	5.6	86
307	Hormonal control of sexual behavior in the female rat: molecular, cellular and neurochemical studies. *Biology of Reproduction*, **1987**, 36, 37-45	3.9	86
306	Preoptic implants of estradiol increase wheel running but not the open field activity of female rats. *Physiology and Behavior*, **1985**, 35, 985-92	3.5	86
305	Recognition and avoidance of the odors of parasitized conspecifics and predators: differential genomic correlates. *Neuroscience and Biobehavioral Reviews*, **2005**, 29, 1347-59	9	85
304	Hormonal and genetic influences on arousal--sexual and otherwise. *Trends in Neurosciences*, **2002**, 25, 45-50	13.3	85
303	Estradiol Regulation of Estrogen Receptor Messenger Ribonucleic Acid in Rat Mediobasal Hypothalamus: An in situ Hybridization Study. *Journal of Neuroendocrinology*, **1990**, 2, 605-11	3.8	85
302	Antagonism of sexual behavior in female rats by ventromedial hypothalamic implants of antiestrogen. *Neuroendocrinology*, **1987**, 45, 201-7	5.6	84
301	Reproducibility and replicability of rodent phenotyping in preclinical studies. *Neuroscience and Biobehavioral Reviews*, **2018**, 87, 218-232	9	83
300	Stress and corticosteroids regulate rat hippocampal mitochondrial DNA gene expression via the glucocorticoid receptor. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 9099-104	11.5	82
299	Estrogen regulation of mu-opioid receptor mRNA in the forebrain of female rats. *Molecular Brain Research*, **1997**, 47, 134-8		80

298	Communication among hamsters by high-frequency acoustic signals: III. Response evoked by natural and synthetic ultrasounds.. *Journal of Comparative and Physiological Psychology*, **1977**, 91, 820-829		80
297	Scale invariance in the dynamics of spontaneous behavior. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 10564-9	11.5	78
296	Autoradiographic and biochemical studies of steroid hormone-concentrating cells in the brain of Rana pipiens. *Brain Research*, **1978**, 140, 287-305	3.7	78
295	Genes, odours and the recognition of parasitized individuals by rodents. *Trends in Parasitology*, **2005**, 21, 423-9	6.4	76
294	Reversal of sex differences in morphine analgesia elicited from the ventrolateral periaqueductal gray in rats by neonatal hormone manipulations. *Brain Research*, **2002**, 929, 1-9	3.7	75
293	Cells in regions of rhesus monkey brain and pituitary retain radioactive estradiol, corticosterone and cortisol differentially. *Brain Research*, **1976**, 103, 603-12	3.7	73
292	Somatosensory determinants of lordosis in female rats: behavioral definition of the estrogen effect. *Journal of Comparative and Physiological Psychology*, **1977**, 91, 134-45		73
291	Sex-specific gene-environment interactions underlying ASD-like behaviors. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 1383-1388	11.5	72
290	Effects of chronic social defeat on behavioral and neural correlates of sociality: Vasopressin, oxytocin and the vasopressinergic V1b receptor. *Physiology and Behavior*, **2011**, 103, 393-403	3.5	72
289	Rapid increases in immature synapses parallel estrogen-induced hippocampal learning enhancements. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 16018-23	11.5	71
288	Distribution and partial characterization of immunoreactive prolactin in the rat brain. *Neuroendocrinology*, **1989**, 49, 7-22	5.6	69
287	Inhibition of the lordosis reflex in rats by intrahypothalamic infusion of neural excitatory agents: evidence that the hypothalamus contains separate inhibitory and facilitatory elements. *Brain Research*, **1985**, 341, 26-34	3.7	69
286	The role of the estrogen receptor in the medial preoptic area in sexual incentive motivation, proceptivity and receptivity, anxiety, and wheel running in female rats. *Behavioural Brain Research*, **2012**, 230, 11-20	3.4	68
285	Electrophysiological actions of oxytocin on hypothalamic neurons in vitro: neuropharmacological characterization and effects of ovarian steroids. *Neuroendocrinology*, **1991**, 54, 526-35	5.6	68
284	Estrogen influences on oxytocin mRNA expression in preoptic and anterior hypothalamic regions studied by in situ hybridization. *Journal of Comparative Neurology*, **1991**, 307, 281-95	3.4	68
283	Inadvertent social information and the avoidance of parasitized male mice: a role for oxytocin. *Proceedings of the National Academy of Sciences of the United States of America*, **2006**, 103, 4293-8	11.5	67
282	RNA and protein synthesis inhibitors: effects on sexual behavior in female rats. *Brain Research Bulletin*, **1984**, 12, 187-93	3.9	67
281	Communication among hamsters by high-frequency acoustic signals: I. Physical characteristics of hamster calls.. *Journal of Comparative and Physiological Psychology*, **1977**, 91, 794-806		67

280	Estrogen receptor beta (ERbeta) protein levels in neurons depend on estrogen receptor alpha (ERalpha) gene expression and on its ligand in a brain region-specific manner. *Molecular Brain Research*, **2003**, 110, 7-14		66
279	Thyroid hormones and estrogen affect oxytocin gene expression in hypothalamic neurons. *Journal of Neuroendocrinology*, **1999**, 11, 1-10	3.8	66
278	Immunocytochemical localization of luteinizing hormone-releasing hormone (LHRH) in the brain and nervus terminalis of the adult and early neonatal gray short-tailed opossum (Monodelphis domestica). *Journal of Comparative Neurology*, **1988**, 276, 44-60	3.4	66
277	Origins of arousal: roles for medullary reticular neurons. *Trends in Neurosciences*, **2012**, 35, 468-76	13.3	65
276	Oestradiol, sexual receptivity and cytosol progestin receptors in rat hypothalamus. *Nature*, **1981**, 292, 58-9	50.4	65
275	Steroid hormone effects on picrotoxin-induced seizures in female and male rats. *Brain Research*, **1989**, 476, 240-7	3.7	64
274	Suprachiasmatic neurons in tissue slices from ovariectomized rats: electrophysiological and neuropharmacological characterization and the effects of estrogen treatment. *Brain Research*, **1984**, 297, 275-86	3.7	64
273	The two thyroid hormone receptor genes have opposite effects on estrogen-stimulated sex behaviors. *Nature Neuroscience*, **2000**, 3, 472-5	25.5	63
272	Sexual stimulation induces Fos immunoreactivity within GnRH neurons of the female rat preoptic area: interaction with steroid hormones. *Neuroendocrinology*, **1994**, 60, 283-90	5.6	63
271	Induction of lordosis in female rats: two modes of estrogen action and the effect of adrenalectomy. *Hormones and Behavior*, **1975**, 6, 259-76	3.7	63
270	Differential effects of estrogen receptor alpha and beta specific agonists on social learning of food preferences in female mice. *Neuropsychopharmacology*, **2008**, 33, 2362-75	8.7	62
269	Inhibition of neuronal phenotype by PTEN in PC12 cells. *Proceedings of the National Academy of Sciences of the United States of America*, **2004**, 101, 3627-31	11.5	62
268	Effects of spinal cord transections on lordosis reflex in female rats. *Brain Research*, **1977**, 123, 75-88	3.7	62
267	Male predominance in autism: neuroendocrine influences on arousal and social anxiety. *Autism Research*, **2011**, 4, 163-76	5.1	61
266	Continuous renewal of the axonal pathway sensor apparatus by insertion of new sensor molecules into the growth cone membrane. *Current Biology*, **1996**, 6, 1153-8	6.3	61
265	Alpha 1-adrenergic agonists act on the ventromedial hypothalamus to cause neuronal excitation and lordosis facilitation: electrophysiological and behavioral evidence. *Brain Research*, **1992**, 588, 237-45	3.7	61
264	Male hamster preference for odors of female hamster vaginal discharges: studies of experiential and hormonal determinants. *Journal of Comparative and Physiological Psychology*, **1975**, 89, 442-6		61
263	siRNA silencing of estrogen receptor-α expression specifically in medial preoptic area neurons abolishes maternal care in female mice. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 16324-9	11.5	60

262	Estrogenic regulation and sex dimorphism of growth-associated protein 43 kDa (GAP-43) messenger RNA in the rat. *Molecular Brain Research*, **1991**, 11, 125-32		60
261	Laternal nicotine exposure increases nicotine preference in periadolescent male but not female C57B1/6J mice. *Nicotine and Tobacco Research*, **2003**, 5, 117-24	4.9	60
260	Agonistic behavior in males and females: effects of an estrogen receptor beta agonist in gonadectomized and gonadally intact mice. *Psychoneuroendocrinology*, **2010**, 35, 1008-22	5	59
259	Steroidal/neuropeptide interactions in hypothalamus and amygdala related to social anxiety. *Progress in Brain Research*, **2008**, 170, 291-303	2.9	59
258	Estrogens, brain and behavior: studies in fundamental neurobiology and observations related to women's health. *Journal of Steroid Biochemistry and Molecular Biology*, **2000**, 74, 365-73	5.1	59
257	Reduction of lipocalin-type prostaglandin D synthase in the preoptic area of female mice mimics estradiol effects on arousal and sex behavior. *Proceedings of the National Academy of Sciences of the United States of America*, **2003**, 100, 15206-11	11.5	58
256	Gonadotropin-releasing hormone gene expression in teleosts. *Molecular Brain Research*, **1996**, 41, 216-27		58
255	Responses of hypothalamic paraventricular neurons in vitro to norepinephrine and other feeding-relevant agents. *Physiology and Behavior*, **1989**, 46, 265-71	3.5	58
254	Anatomical identification of neurons in selected brain regions associated with maternal behavior deficits induced by knife cuts of the lateral hypothalamus in rats. *Journal of Comparative Neurology*, **1985**, 237, 552-64	3.4	58
253	In situ hybridization for the study of gene expression in the brain. *Methods in Enzymology*, **1986**, 124, 497-510	1.7	58
252	Effect of ER-beta gene disruption on estrogenic regulation of anxiety in female mice. *Physiology and Behavior*, **2009**, 96, 300-6	3.5	57
251	Presynaptic and postsynaptic relations of mu-opioid receptors to gamma-aminobutyric acid-immunoreactive and medullary-projecting periaqueductal gray neurons. *Journal of Comparative Neurology*, **2000**, 419, 532-42	3.4	57
250	Changes in estrogenic regulation of estrogen receptor alpha mRNA and progesterone receptor mRNA in the female rat hypothalamus during aging: an in situ hybridization study. *Neuroscience Research*, **2000**, 38, 85-92	2.9	57
249	Effects of testosterone and 7 alpha-methyl-19-nortestosterone (MENT) on sexual and aggressive behaviors in two inbred strains of male mice. *Hormones and Behavior*, **1996**, 30, 74-84	3.7	57
248	Suppression of lordosis in the hormone-primed female hamster by electrical stimulation of the septal area. *Physiology and Behavior*, **1975**, 14, 595-93	3.5	57
247	Contrasting effects of leptin on food anticipatory and total locomotor activity. *PLoS ONE*, **2011**, 6, e23364	3.7	56
246	Prolactin, central nervous system and behavior: a critical review. *Neuroendocrinology*, **1994**, 59, 413-9	5.6	55
245	Mutant herpes simplex virus induced regression of tumors growing in immunocompetent rats. *Journal of Neuro-Oncology*, **1994**, 19, 137-47	4.8	55

244	Distribution of luteinizing hormone-releasing hormone in the nervus terminalis and brain of the mouse detected by immunocytochemistry. *Journal of Comparative Neurology*, **1987**, 255, 231-44	3.4	55
243	Estrogen-induced sexual incentive motivation, proceptivity and receptivity depend on a functional estrogen receptor alpha in the ventromedial nucleus of the hypothalamus but not in the amygdala. *Neuroendocrinology*, **2010**, 91, 142-54	5.6	54
242	Differential interaction of estrogen receptor and thyroid hormone receptor isoforms on the rat oxytocin receptor promoter leads to differences in transcriptional regulation. *Neuroendocrinology*, **2001**, 74, 309-24	5.6	54
241	Topographical organization in medullary reticulospinal systems as demonstrated by the horseradish peroxidase technique. *Brain Research*, **1979**, 174, 161-6	3.7	54
240	Specificity and neural sites of action of anisomycin in the reduction or facilitation of female sexual behavior in rats. *Hormones and Behavior*, **1985**, 19, 237-51	3.7	51
239	Vasopressin excites ventromedial hypothalamic glucose-responsive neurons in vitro. *Physiology and Behavior*, **1986**, 37, 153-8	3.5	51
238	The effects of long-term estrogen exposure on the induction of sexual behavior and measurements of brain estrogen and progestin receptors in the female rat. *Hormones and Behavior*, **1979**, 13, 301-13	3.7	51
237	Clitoral sexual arousal: an immunocytochemical and innervation study of the clitoris. *BJU International*, **2008**, 101, 1407-13	5.6	50
236	Cellular uptake of intracerebrally administered oligodeoxynucleotides in mouse brain. *Regulatory Peptides*, **1995**, 59, 143-9		50
235	Intrinsic synapses in the ventromedial nucleus of the hypothalamus: an ultrastructural study. *Journal of Comparative Neurology*, **1989**, 286, 260-8	3.4	50
234	Distribution of estrogen receptor □containing cells in the brains of bacterial artificial chromosome transgenic mice. *Brain Research*, **2010**, 1351, 74-96	3.7	49
233	Responses of ventromedial hypothalamic neurons in vitro to norepinephrine: dependence on dose and receptor type. *Brain Research*, **1987**, 413, 220-8	3.7	49
232	Estrogen receptor-beta gene disruption potentiates estrogen-inducible aggression but not sexual behaviour in male mice. *European Journal of Neuroscience*, **2006**, 23, 1860-8	3.5	48
231	Estrogenic maintenance of lordotic responsiveness: requirement for hypothalamic action potentials. *Brain Research*, **1983**, 268, 67-78	3.7	48
230	Differential crosstalk between estrogen receptor (ER)alpha and ERbeta and the thyroid hormone receptor isoforms results in flexible regulation of the consensus ERE. *Molecular Brain Research*, **2001**, 95, 9-17		46
229	Nerve growth factor affects defense-related behaviors, but not lordosis, in ovariectomized, estrogen-treated rats. *Brain Research*, **1993**, 610, 256-66	3.7	46
228	The oxytocin receptor: a target for steroid hormones. *Regulatory Peptides*, **1993**, 45, 115-9		46
227	Suppression of sexual receptivity in the female hamster: neuroanatomical projections from preoptic and anterior hypothalamic electrode sites. *Brain Research*, **1980**, 181, 267-84	3.7	46

226	Estradiol modulates behavioral arousal and induces changes in gene expression profiles in brain regions involved in the control of vigilance. *European Journal of Neuroscience*, **2009**, 29, 795-801	3.5	45
225	Hormone-driven mechanisms in the central nervous system facilitate the analysis of mammalian behaviours. *Journal of Endocrinology*, **2005**, 184, 447-53	4.7	45
224	Patterns of steroid hormone effects on electrical and molecular events in hypothalamic neurons. *Molecular Neurobiology*, **1989**, 3, 135-54	6.2	44
223	Selective brain stem transections affecting reproductive behavior of female rats: the role of hypothalamic output to the midbrain. *Hormones and Behavior*, **1980**, 14, 277-302	3.7	44
222	Success of treatment modalities for labial fusion: a retrospective evaluation of topical and surgical treatments. *Journal of Pediatric and Adolescent Gynecology*, **2009**, 22, 247-50	2	43
221	Tyrosine hydroxylase mRNA in the neurons of the tuberoinfundibular region and zona incerta examined after gonadal steroid hormone treatment. *Molecular Endocrinology*, **1989**, 3, 1426-33		43
220	Alteration by estrogen of the nucleoli in nerve cells of the rat hypothalamus. *Cell and Tissue Research*, **1984**, 235, 485-9	4.2	43
219	Cellular [3H]estradiol and [3H]testosterone localization in the brains of garter snakes: an autoradiographic study. *General and Comparative Endocrinology*, **1982**, 46, 211-24	3	43
218	Multimodal sensory responses of nucleus reticularis gigantocellularis and the responsesQrelation to cortical and motor activation. *Journal of Neurophysiology*, **2010**, 103, 2326-38	3.2	42
217	Expression of EGFR-, p75NGFR-, and PSTAIR (cdc2)-like immunoreactivity by proliferating cells in the adult rat hippocampal formation and forebrain. *Developmental Neuroscience*, **1996**, 18, 199-209	2.2	42
216	Immunocytochemical study of GnRH and GnRH-associated peptide in male Syrian hamsters as a function of photoperiod and gonadal alterations. *Neuroendocrinology*, **1992**, 55, 134-45	5.6	42
215	Transmitter and peptide actions on hypothalamic neurons in vitro: implications for lordosis. *Brain Research Bulletin*, **1988**, 20, 857-61	3.9	42
214	Actions of feeding-relevant agents on hypothalamic glucose-responsive neurons in vitro. *Brain Research Bulletin*, **1985**, 15, 509-13	3.9	42
213	Impact of generalized brain arousal on sexual behavior. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 2265-70	11.5	41
212	Interactions of estrogen- and thyroid hormone receptors on a progesterone receptor estrogen response element (ERE) sequence: a comparison with the vitellogenin A2 consensus ERE. *Molecular Endocrinology*, **1997**, 11, 1581-92		41
211	Two forces for arousal: Pitting hunger versus circadian influences and identifying neurons responsible for changes in behavioral arousal. *Proceedings of the National Academy of Sciences of the United States of America*, **2007**, 104, 20078-83	11.5	41
210	Social and sexual motivation in the mouse. *Behavioral Neuroscience*, **2005**, 119, 1628-39	2.1	41
209	Oxytocin, vasopressin and estrogen receptor gene expression in relation to social recognition in female mice. *Physiology and Behavior*, **2012**, 105, 915-24	3.5	40

208	In Situ Hybridization: A Methodological Guide. *Methods in Neurosciences*, **1989**, 1, 98-126		40
207	Brain region specificity in estradiol effects on neuronal ultrastructure in rats. *Molecular and Cellular Endocrinology*, **1985**, 40, 159-66	4.4	40
206	The diagnostic dilemma of pathological appearance and performance enhancing drug use. *Drug and Alcohol Dependence*, **2011**, 114, 1-11	4.9	39
205	The gonadotropin-releasing hormone system does not develop in Small-Eye (Sey) mouse phenotype. *Developmental Brain Research*, **1998**, 107, 233-40		39
204	Temporal patterning of pulses during deep brain stimulation affects central nervous system arousal. *Behavioural Brain Research*, **2010**, 214, 377-85	3.4	38
203	Effects of an intrahypothalamic injection of antisense oligonucleotides for preproenkephalin mRNA in female rats: evidence for opioid involvement in lordosis reflex. *Brain Research*, **1997**, 777, 60-8	3.7	38
202	Changes in preproenkephalin messenger RNA level in the rat ventromedial hypothalamus during the estrous cycle. *Molecular Brain Research*, **1995**, 28, 129-34		38
201	Epigenetic changes in the developing brain: Effects on behavior. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 6789-95	11.5	37
200	Effects of the phytoestrogen coumestrol on locomotor and fear-related behaviors in female mice. *Hormones and Behavior*, **2001**, 40, 65-76	3.7	37
199	A subset of neurons containing immunoreactive prolactin is a target for estrogen regulation of gene expression in rat hypothalamus. *Neuroendocrinology*, **1989**, 49, 23-7	5.6	37
198	Conceptualizing the role of estrogens and serotonin in the development and maintenance of bulimia nervosa. *Clinical Psychology Review*, **2010**, 30, 655-68	10.8	36
197	Regulation of neuronal nitric oxide synthase mRNA in lordosis-relevant neurons of the ventromedial hypothalamus following short-term estrogen treatment. *Molecular Brain Research*, **1998**, 59, 105-8		36
196	A theoretical framework for CNS arousal. *BioEssays*, **2007**, 29, 803-10	4.1	36
195	Neuroendocrine aspects of chronic fatigue syndrome. *NeuroImmunoModulation*, **2004**, 11, 65-74	2.5	36
194	DNA binding of hypothalamic nuclear proteins on estrogen response element and preproenkephalin promoter: modification by estrogen. *Neuroendocrinology*, **1995**, 62, 454-66	5.6	36
193	Steady state analysis of hypothalamic GnRH mRNA levels in male Syrian hamsters: influences of photoperiod and androgen. *Neuroendocrinology*, **1992**, 55, 146-55	5.6	36
192	Quantitative in situ hybridization to measure single-cell changes in vasopressin and oxytocin mRNA levels after osmotic stimulation. *Cellular and Molecular Neurobiology*, **1990**, 10, 59-71	4.6	36
191	Electrophysiologic determination of projections from ventromedial hypothalamus to midbrain central gray: differences between female and male rats. *Brain Research*, **1981**, 225, 184-8	3.7	36

190	Alpha 1 adrenergic regulation of estrogen-induced increases in luteinizing hormone-releasing hormone mRNA levels and release. *Molecular Brain Research*, **1993**, 17, 77-82		35
189	Effects of lordosis-relevant neuropeptides on midbrain periaqueductal gray neuronal activity in vitro. *Peptides*, **1992**, 13, 965-75	3.8	35
188	Migration of LHRH-immunoreactive neurons from the olfactory placode rationalizes olfacto-hormonal relationships. *Journal of Steroid Biochemistry and Molecular Biology*, **1991**, 39, 565-72	5.1	35
187	Hormone effects on hypothalamic neurons: analysing gene expression and neuromodulator action. *Trends in Neurosciences*, **1985**, 8, 105-110	13.3	35
186	Persistent increase in hypothalamic arginine vasopressin gene expression during protracted withdrawal from chronic escalating-dose cocaine in rodents. *Neuropsychopharmacology*, **2011**, 36, 2062-73	8.7	34
185	Oestrogen receptors and their relation to neural receptive tissue of the labia minora. *BJU International*, **2008**, 101, 1401-6	5.6	34
184	Genetic influences on aggressive behaviors and arousability in animals. *Annals of the New York Academy of Sciences*, **2004**, 1036, 257-66	6.5	34
183	Vasopressin stimulates ventromedial hypothalamic neurons via oxytocin receptors in oxytocin gene knockout male and female mice. *Neuroendocrinology*, **2004**, 80, 92-9	5.6	34
182	Sex steroids and fos expression in rat brain and uterus. *Molecular and Cellular Neurosciences*, **1990**, 1, 29-40	4.8	34
181	Single-unit activity of hypothalamic arcuate neurons in brain tissue slices. Effects of anterior pituitary hormones, cholecystokinin-octapeptide, and neurotransmitters. *Neuroendocrinology*, **1986** , 43, 189-96	5.6	34
180	Dorsal root recording relevant for mating reflexes in female rats: identification of receptive fields and effects of peripheral denervation. *Journal of Neurobiology*, **1975**, 6, 23-37		34
179	Significance of topical estrogens to labial fusion and vaginal introital integrity. *Journal of Pediatric and Adolescent Gynecology*, **2006**, 19, 337-9	2	33
178	Luteinizing hormone-releasing hormone receptor messenger ribonucleic acid expression in the rat pituitary during lactation and the estrous cycle. *Journal of Neuroendocrinology*, **1994**, 6, 261-6	3.8	33
177	Progestin receptors with and without estrogen induction in male and female hamster brain. *Neuroendocrinology*, **1987**, 45, 487-91	5.6	33
176	Glucocorticoid repression of gonadotropin-releasing hormone gene expression and secretion in morphologically distinct subpopulations of GT1-7 cells. *Molecular and Cellular Endocrinology*, **1997**, 131, 241-55	4.4	32
175	Mechanisms for the regulation of state changes in the central nervous system: an introduction. *Annals of the New York Academy of Sciences*, **2008**, 1129, 1-7	6.5	32
174	Attentional phenotypes for the analysis of higher mental function. *Scientific World Journal, The*, **2002**, 2, 217-23	2.2	32
173	Application of antisense DNA method for the study of molecular bases of brain function and behavior. *Behavior Genetics*, **1996**, 26, 279-92	3.2	32

172	Localization of choline acetyltransferase and vasoactive intestinal polypeptide-like immunoreactivity in the nervus terminalis of the fetal and neonatal rat. *Peptides*, **1986**, 7, 899-906	3.8	32
171	Stimulation of expression of the oxytocin gene in rat supraoptic neurons at parturition. *Brain Research*, **1998**, 782, 167-74	3.7	31
170	Histamine-induced excitatory responses in mouse ventromedial hypothalamic neurons: ionic mechanisms and estrogenic regulation. *Journal of Neurophysiology*, **2007**, 98, 3143-52	3.2	31
169	CNS arousal mechanisms bearing on sex and other biologically regulated behaviors. *Physiology and Behavior*, **2006**, 88, 283-93	3.5	30
168	Thyroid hormone can increase estrogen-mediated transcription from a consensus estrogen response element in neuroblastoma cells. *Proceedings of the National Academy of Sciences of the United States of America*, **2005**, 102, 4890-5	11.5	30
167	Statistical analysis of measures of arousal in ovariectomized female mice. *Hormones and Behavior*, **2001**, 39, 39-47	3.7	30
166	Estrogen regulation of gonadotropin-releasing hormone receptor messenger RNA in female rat pituitary tissue. *Molecular Brain Research*, **1996**, 38, 243-50		30
165	Brain stem and cerebellar lesions in female rats. II. Lordosis reflex. *Brain Research*, **1976**, 106, 47-56	3.7	30
164	Maternal diabetes induces autism-like behavior by hyperglycemia-mediated persistent oxidative stress and suppression of superoxide dismutase 2. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 23743-23752	11.5	29
163	Estrogen receptor-mediated transcription involves the activation of multiple kinase pathways in neuroblastoma cells. *Journal of Steroid Biochemistry and Molecular Biology*, **2014**, 139, 45-53	5.1	29
162	Temporally-patterned deep brain stimulation in a mouse model of multiple traumatic brain injury. *Behavioural Brain Research*, **2014**, 273, 123-32	3.4	29
161	Innervation of the labia minora of prepubertal girls. *Journal of Pediatric and Adolescent Gynecology*, **2010**, 23, 352-7	2	29
160	Antisense oligodeoxynucleotides as specific tools for studying neuroendocrine and behavioral functions: some prospects and problems. *Journal of Neuroscience Methods*, **1997**, 71, 45-53	3	29
159	Oestrogen receptor expression and neuronal nitric oxide synthase in the clitoris and preputial gland structures of mice. *BJU International*, **2008**, 102, 1719-23	5.6	29
158	Arousal of cerebral cortex electroencephalogram consequent to high-frequency stimulation of ventral medullary reticular formation. *Proceedings of the National Academy of Sciences of the United States of America*, **2007**, 104, 18292-6	11.5	29
157	Temporal and spatial quantitation of nesting and mating behaviors among mice housed in a semi-natural environment. *Hormones and Behavior*, **2002**, 42, 294-306	3.7	29
156	Prolactin receptor messenger RNA is synthesized by the epithelial cells of the choroid plexus. *Molecular Brain Research*, **1992**, 16, 163-7		29
155	Intrahypothalamic colchicine infusions disrupt lordotic responsiveness in estrogen-treated female rats. *Brain Research*, **1982**, 238, 153-67	3.7	29

154	How generalized CNS arousal strengthens sexual arousal (and vice versa). *Hormones and Behavior*, **2011**, 59, 689-95	3.7	28
153	Generalized arousal of mammalian central nervous system. *Journal of Comparative Neurology*, **2005**, 493, 86-91	3.4	28
152	Colocalization of estrogen receptor alpha and NMDA-2D mRNAs in amygdaloid and hypothalamic nuclei of the mouse brain. *Molecular Brain Research*, **2002**, 104, 47-54		28
151	NADPH diaphorase activity and nitric oxide synthase immunoreactivity in lordosis-relevant neurons of the ventromedial hypothalamus. *Brain Research*, **1996**, 740, 291-306	3.7	28
150	Detection of vasopressin mRNA in the neurointermediate lobe of the rat pituitary. *Molecular Brain Research*, **1990**, 8, 325-9		28
149	Molecular analysis of estrogen induction of preproenkephalin gene expression and its modulation by thyroid hormones. *Molecular Brain Research*, **2001**, 91, 23-33		27
148	In vitro electro-pharmacological and autoradiographic analyses of muscarinic receptor subtypes in rat hypothalamic ventromedial nucleus: implications for cholinergic regulation of lordosis. *Brain Research*, **1995**, 694, 29-39	3.7	27
147	Electrical stimulation of the midbrain central gray facilitates lateral vestibulospinal activation of back muscle EMG in the rat. *Brain Research*, **1987**, 421, 397-400	3.7	27
146	Quantitative assessment of early and discontinuous estradiol-induced effects on ventromedial hypothalamic and preoptic area proteins in female rat brain. *Neuroendocrinology*, **1988**, 48, 561-8	5.6	27
145	Brattleboro rat hypothalamic neurons transcribe vasopressin gene: evidence from in situ hybridization. *Neuroendocrinology*, **1986**, 44, 361-4	5.6	27
144	Phorbol esters and forskolin infused into midbrain central gray facilitate lordosis. *Pharmacology Biochemistry and Behavior*, **1989**, 34, 665-7	3.9	26
143	Histamine excites arcuate neurons in vitro through H1 receptors. *Brain Research*, **1989**, 502, 171-9	3.7	26
142	Lordosis in the male golden hamster elicited by manual stimulation: characteristics and hormonal sensitivity. *Journal of Comparative and Physiological Psychology*, **1976**, 90, 26-40		26
141	Histaminergic responses by hypothalamic neurons that regulate lordosis and their modulation by estradiol. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 12311-6	11.5	25
140	Estradiol regulation of lipocalin-type prostaglandin D synthase promoter activity: evidence for direct and indirect mechanisms. *Neuroscience Letters*, **2010**, 474, 17-21	3.3	25
139	Sexual reinforcement in the female rat. *Journal of the Experimental Analysis of Behavior*, **1997**, 68, 399-410	2.1	25
138	Involvement of the oxytocin gene in the recognition and avoidance of parasitized males by female mice. *Animal Behaviour*, **2005**, 70, 693-702	2.8	25
137	A cis-acting element that directs circular adeno-associated virus replication and packaging. *Journal of Virology*, **2002**, 76, 12792-802	6.6	25

136	Thyroid hormone coadministration inhibits the estrogen-stimulated elevation of preproenkephalin mRNA in female rat hypothalamic neurons. *Neuroendocrinology*, **1999**, 70, 168-74	5.6	25
135	Hypothalamic serotonin lesions unmask hormone responsiveness of lordosis behavior in adult male rats. *Neuroendocrinology*, **1988**, 47, 453-8	5.6	24
134	CCK-8 stimulation of ventromedial hypothalamic neurons in vitro: a feeding-relevant event?. *Peptides*, **1986**, 7, 473-9	3.8	24
133	Anosmin-1 immunoreactivity during embryogenesis in a primitive eutherian mammal. *Developmental Brain Research*, **2003**, 140, 157-67		23
132	Mathematical exploration of pulsatility in cultured gonadotropin-releasing hormone neurons. *Neuroendocrinology*, **1998**, 67, 2-17	5.6	23
131	In the ventromedial nucleus of the rat hypothalamus, GABA-immunolabeled neurons are abundant and are innervated by both enkephalin- and GABA-immunolabeled axon terminals. *Brain Research*, **1999**, 816, 58-67	3.7	23
130	Aggressive behaviors of transgenic estrogen-receptor knockout male mice. *Annals of the New York Academy of Sciences*, **1996**, 794, 384-5	6.5	23
129	Histone modifications proposed to regulate sexual differentiation of brain and behavior. *BioEssays*, **2010**, 32, 932-9	4.1	22
128	Reproductive functions illustrating direct and indirect effects of genes on behavior. *Hormones and Behavior*, **1996**, 30, 487-94	3.7	22
127	Activation of the transcription factor NF-KB in GH3 pituitary cells. *Molecular and Cellular Endocrinology*, **1994**, 106, 9-15	4.4	22
126	Brain stem and cerebellar lesions in female rats. I. Tests of posture and movement. *Brain Research*, **1976**, 106, 31-46	3.7	22
125	Hormone-dependent medial preoptic/lumbar spinal cord/autonomic coordination supporting male sexual behaviors. *Molecular and Cellular Endocrinology*, **2018**, 467, 21-30	4.4	21
124	Relationship of arousal to circadian anticipatory behavior: ventromedial hypothalamus: one node in a hunger-arousal network. *European Journal of Neuroscience*, **2009**, 30, 1730-8	3.5	21
123	Estrogen and stress interact to regulate the hypothalamic expression of a human proenkephalin promoter-beta-galactosidase fusion gene in a site-specific and sex-specific manner. *Journal of Neuroendocrinology*, **1997**, 9, 317-26	3.8	21
122	Hormones, genes and the structure of sexual arousal. *Behavioural Brain Research*, **1999**, 105, 5-27	3.4	21
121	Hypothalamic sites of progestin action on aggression and sexual behavior in female Syrian hamsters. *Physiology and Behavior*, **1990**, 47, 219-23	3.5	21
120	Parsimonious biological models of memory and reinforcement. *Psychological Review*, **1969**, 76, 70-81	6.3	21
119	Effects of gender and personality on the Conners Continuous Performance Test. *Journal of Clinical and Experimental Neuropsychology*, **2010**, 32, 66-70	2.1	20

118	Differential regulation of AP-1 DNA binding activity in rat hypothalamus and pituitary by estrogen. *Molecular Brain Research*, **1998**, 55, 115-25		20
117	Co-expression of estrogen and thyroid hormone receptors in individual hypothalamic neurons. *Journal of Comparative Neurology*, **2001**, 437, 286-95	3.4	20
116	Ovarian steroid modulation of oxytocin receptor binding in the ventromedial hypothalamus. *Annals of the New York Academy of Sciences*, **1992**, 652, 374-86	6.5	20
115	Effects of fimbria-fornix and angular bundle transection on expression of the p75NGFR mRNA by cells in the medial septum and diagonal band of Broca: correlations with cell survival, synaptic reorganization and sprouting. *Molecular Brain Research*, **1991**, 11, 207-19		20
114	Temporal pattern of HRP spread from an iontophoretic deposit site and description of a new HRP-gel implant method. *Journal of Comparative Neurology*, **1984**, 225, 605-19	3.4	20
113	Facilitation of the lordosis reflex in female rats by electrical stimulation of the lateral vestibular nucleus. *Brain Research*, **1977**, 134, 333-45	3.7	20
112	Hypothalamic neuroanatomy: steroid hormone binding and patterns of axonal projections. *International Review of Cytology*, **1978**, 54, 245-65		20
111	X-ray cinematographic analysis of lordosis in female rats.. *Journal of Comparative and Physiological Psychology*, **1978**, 92, 937-941		20
110	Implications of Epigenetic Variability within a Cell Population for "Cell Type" Classification. *Frontiers in Behavioral Neuroscience*, **2015**, 9, 342	3.5	19
109	Preproenkephalin mRNA is regulated by an interaction between steroid hormones and nociceptive stimulation. *Journal of Neuroendocrinology*, **1997**, 9, 913-22	3.8	19
108	Postnatal environment affects behavior of adult transgenic mice. *Experimental Biology and Medicine*, **2004**, 229, 935-9	3.7	19
107	Calcium flux in neuroblastoma cells is a coupling mechanism between non-genomic and genomic modes of estrogens. *Neuroendocrinology*, **2005**, 81, 174-82	5.6	19
106	Potential interactions between estrogen receptor and thyroid receptors relevant for neuroendocrine systems. *Journal of Steroid Biochemistry and Molecular Biology*, **1995**, 53, 27-31	5.1	19
105	Cell-specific expression of preproenkephalin intronic heteronuclear RNA in the rat forebrain. *Molecular Brain Research*, **1993**, 19, 22-30		19
104	Estradiol modulation of phenylephrine-induced excitatory responses in ventromedial hypothalamic neurons of female rats. *Proceedings of the National Academy of Sciences of the United States of America*, **2008**, 105, 7333-8	11.5	18
103	Temporal actions of 16 alpha-hydroxyestrone in the rat: comparisons of lordosis dynamics with other estrogen metabolites and between sexes. *The Journal of Steroid Biochemistry*, **1989**, 33, 417-21		18
102	Electrophysiological test of an amphiphilic beta-structure in LHRH action. *Molecular and Cellular Endocrinology*, **1986**, 48, 161-6	4.4	18
101	Molecular profiling of reticular gigantocellularis neurons indicates that eNOS modulates environmentally dependent levels of arousal. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, E6900-E6909	11.5	18

100	Development of Electrophysiological Properties of Nucleus Gigantocellularis Neurons Correlated with Increased CNS Arousal. *Developmental Neuroscience*, **2016**, 38, 295-310	2.2	17
99	Nonmammalian gonadotropin-releasing hormone molecules in the brain of promoter transgenic rats. *Proceedings of the National Academy of Sciences of the United States of America*, **2005**, 102, 5880-5	11.5	17
98	Sex differences in response to discrete estradiol injections. *Hormones and Behavior*, **1986**, 20, 445-51	3.7	17
97	Ablations of lumbar epaxial musculature: effects on lordosis behavior of female rats. *Brain, Behavior and Evolution*, **1980**, 17, 67-88	1.5	17
96	Lordosis in female rats following medial forebrain bundle lesions. *Behavioral Biology*, **1976**, 18, 135-41		17
95	Estrogen receptors alpha and beta mediate different aspects of the facilitatory effects of female cues on male risk taking. *Psychoneuroendocrinology*, **2008**, 33, 634-42	5	16
94	Graphical and statistical approaches to data analysis for in situ hybridization. *Methods in Enzymology*, **1989**, 168, 822-48	1.7	16
93	Sex steroids and fos expression in the CNS of prepubertal and newborn rats. *Molecular and Cellular Neurosciences*, **1990**, 1, 250-61	4.8	16
92	Quantitative assessment of the synergistic and independent effects of estradiol and progesterone on ventromedial hypothalamic and preoptic-area proteins in female rat brain. *Metabolic Brain Disease*, **1987**, 2, 271-81	3.9	16
91	Regional specificity in estradiol effects on [3H]uridine incorporation in rat brain. *Molecular and Cellular Endocrinology*, **1986**, 45, 57-63	4.4	16
90	Distinct behavioral phenotypes in male mice lacking the thyroid hormone receptor or isoforms. *Hormones and Behavior*, **2013**, 63, 742-51	3.7	15
89	Sex differences in estrogenic regulation of neuronal activity in neonatal cultures of ventromedial nucleus of the hypothalamus. *Proceedings of the National Academy of Sciences of the United States of America*, **2005**, 102, 14907-12	11.5	15
88	Estrogen regulation of preproenkephalin messenger RNA in the forebrain of female mice. *Journal of Chemical Neuroanatomy*, **1996**, 12, 29-36	3.2	15
87	Competition for DNA steroid response elements as a possible mechanism for neuroendocrine integration. *Journal of Steroid Biochemistry and Molecular Biology*, **1994**, 49, 373-9	5.1	15
86	Ultrastructural characterization of prolactin-like immunoreactivity in rat medial basal hypothalamus. *Neuroendocrinology*, **1990**, 51, 249-54	5.6	15
85	Lordosis as a sexually dimorphic neural function. *Progress in Brain Research*, **1984**, 61, 239-55	2.9	15
84	Segmental organization of rat lateral longissimus, a muscle involved in lordosis behavior: EMG and muscle nerve recordings. *Brain Research*, **1984**, 299, 247-57	3.7	15
83	Self-assessment of anatomy, sexual sensitivity, and function of the labia and vagina. *Clinical Anatomy*, **2015**, 28, 355-62	2.5	14

82	Gender-specific induction of pituitary RNA by estrogen and its modification by thyroid hormone. *Journal of Neuroendocrinology*, **1997**, 9, 395-403	3.8	14
81	Differential LHRH secretion, dye coupling, and protein expression in two morphologically distinct cell types identified in GT1-7 cultures. *Journal of Neuroendocrinology*, **1997**, 9, 467-78	3.8	14
80	A recently identified hypothalamic nucleus expressing estrogen receptor alpha. *Proceedings of the National Academy of Sciences of the United States of America*, **2008**, 105, 13632-7	11.5	14
79	Expression of the SCAMP-4 gene, a new member of the secretory carrier membrane protein family, is repressed by progesterone in brain regions associated with female sexual behavior. *Molecular Brain Research*, **2001**, 88, 144-54		14
78	Analgesia after lesions of nucleus reticularis magnocellularis: differential effect on supraspinal versus spinal pain reflexes. *Pain*, **1984**, 18, 221-237	8	14
77	Correlation between pre-optic area unit activity and the cortical electroencephalogram. Difference between normal and castrated male rats. *Electroencephalography and Clinical Neurophysiology*, **1971**, 31, 223-30		14
76	Terminal innervation of the male genitalia, cutaneous sensory receptors of the male foreskin. *Clinical Anatomy*, **2015**, 28, 385-91	2.5	13
75	Gene expression in neuroendocrine cells during the critical period for sexual differentiation of the brain. *Progress in Brain Research*, **2010**, 186, 97-111	2.9	13
74	Anesthesia during hormone administration abolishes the estrogen induction of preproenkephalin mRNA in ventromedial hypothalamus of female rats. *Molecular Brain Research*, **1996**, 35, 297-303		13
73	Stochastic modeling of mouse motor activity under deep brain stimulation: the extraction of arousal information. *PLoS Computational Biology*, **2015**, 11, e1003883	5	12
72	Terminal innervation of female genitalia, cutaneous sensory receptors of the epithelium of the labia minora. *Clinical Anatomy*, **2015**, 28, 392-8	2.5	12
71	Functional genomics of sex hormone-dependent neuroendocrine systems: specific and generalized actions in the CNS. *Progress in Brain Research*, **2006**, 158, 243-72	2.9	12
70	In vitro electrophysiological characterization of midbrain periaqueductal gray neurons in female rats: responses to GABA- and Met-enkephalin-related agents. *Brain Research*, **1994**, 666, 239-49	3.7	12
69	Immunocytochemistry of steroid hormone receiving cells in the central nervous system. *Methods in Enzymology*, **1983**, 103, 639-62	1.7	12
68	On-line data acquisition system using an Apple computer: ISI and PST histograms. *Brain Research Bulletin*, **1984**, 13, 205-23	3.9	12
67	Implanted strain gauge and EMG amplifier to record motor behavior in unrestrained rats. *Physiology and Behavior*, **1980**, 25, 475-9	3.5	12
66	Mechanisms for the Approach/Avoidance Decision Applied to Autism. *Trends in Neurosciences*, **2019**, 42, 448-457	13.3	11
65	Statistical analysis of hormonal influences on arousal measures in ovariectomized female mice. *Hormones and Behavior*, **2002**, 42, 414-23	3.7	11

64	Effects of total and partial spinal transections on the pudendal nerve-evoked response in rat lumbar axial muscle. *Brain Research*, **1987**, 401, 103-12	3.7	11
63	Elimination of lordosis in decerebrate female rats: observations from acute and chronic preparations. *Physiology and Behavior*, **1978**, 20, 171-4	3.5	11
62	Impact of Thyroid Hormones on Estrogen Receptor Dependent Transcriptional Mechanisms in Ventromedial Hypothalamus and Preoptic Area. *Neuroendocrinology*, **2015**, 101, 331-46	5.6	10
61	Exercise reinforcement, stress, and endorphins: an initial examination of exercise in anabolic-androgenic steroid dependence. *Drug and Alcohol Dependence*, **2014**, 139, 86-92	4.9	10
60	Thyrotropin-releasing hormone (TRH) has independent excitatory and modulatory actions on lamina IX neurons of lumbosacral spinal cord slices from adult rats. *Peptides*, **1996**, 17, 131-8	3.8	10
59	The immunocytochemical localization of luteinizing hormone-releasing hormone in the brain of the gray short-tailed opossum (Monodelphis domestica). *Annals of the New York Academy of Sciences*, **1987**, 519, 213-28	6.5	10
58	Cybernetic principles in the systematic concept of hypothalamic feeding control. *European Journal of Endocrinology*, **2006**, 154, 167-73	6.5	9
57	Mechanisms underlying sexual and affiliative behaviors of mice: relation to generalized CNS arousal. *Social Cognitive and Affective Neuroscience*, **2006**, 1, 260-70	4	9
56	Interactions between estrogen effects and hunger effects in ovariectomized female mice. I. Measures of arousal. *Hormones and Behavior*, **2007**, 52, 546-53	3.7	9
55	DNA Methylation and DNase-Hypersensitive Sites in the 5 Flanking and Transcribed Regions of the Rat Preproenkephalin Gene: Studies of Mediobasal Hypothalamus. *Molecular and Cellular Neurosciences*, **1993**, 4, 499-509	4.8	9
54	In situ hybridization for creatine kinase-B messenger RNA in rat uterus and brain. *Molecular and Cellular Endocrinology*, **1993**, 92, 111-9	4.4	9
53	Differential regulation of luteinizing hormone-releasing hormone and galanin messenger ribonucleic Acid levels by alpha(1) adrenergic agents in the ovariectomized rat. *Journal of Neuroendocrinology*, **1992**, 4, 331-6	3.8	9
52	Progesterone effects on sexual behavior and neuronal ultrastructure in female rats. *Brain Research*, **1988**, 463, 153-7	3.7	9
51	Fish as a model in social neuroscience: conservation and diversity in the social brain network. *Biological Reviews*, **2021**, 96, 999-1020	13.5	9
50	Estrogens, androgens and generalized behavioral arousal in gonadectomized female and male C57BL/6 mice. *Physiology and Behavior*, **2015**, 147, 255-63	3.5	8
49	Angiogenesis in association with the migration of gonadotropic hormone-releasing hormone (GnRH) systems in embryonic mice, early human embryos and in a fetus with Kallmann syndrome. *Progress in Brain Research*, **2002**, 141, 59-77	2.9	8
48	Comprehensive polypeptide analysis of microdissected rat brain areas: combining 2-dimensional gel electrophoresis with 2-dimensional HPLC and immunoanalysis and sequencing procedures. *Journal of Neuroscience Methods*, **1989**, 29, 5-15	3	8
47	Synaptology of luteinizing hormone-releasing hormone (LHRH)-immunoreactive cells in the nervus terminalis of the gray short-tailed opossum (Monodelphis domestica). *Journal of Comparative Neurology*, **1990**, 295, 327-37	3.4	8

46	Theoretical consideration of cross-fiber pattern coding in the neural signalling of phreomones and other chemical stimuli. *Psychoneuroendocrinology*, **1975**, 1, 79-93	5	8
45	Sex on the brain. *Cell*, **2009**, 139, 19-21	56.2	7
44	Development of a sexually differentiated behavior and its underlying CNS arousal functions. *Current Topics in Developmental Biology*, **2007**, 79, 37-59	5.3	7
43	Gene transfer and in vivo promoter analysis of the rat progesterone receptor using a herpes simplex virus viral vector. *Molecular Brain Research*, **2003**, 114, 91-100		7
42	Behavioral change after local administration of antisense sequence for progesterone receptor mRNA in female rat hypothalamus. *Annals of the New York Academy of Sciences*, **1992**, 660, 298-9	6.5	7
41	Considerations in the quantitative analysis of autoradiograms from 2-dimensional gels. *Journal of Neuroscience Methods*, **1989**, 29, 17-26	3	7
40	Terminations of LHRH-immunoreactive fibers in the subfornical organ of the opossum: an ultrastructural study. *Neuroendocrinology*, **1990**, 51, 413-24	5.6	7
39	Correlations between EEG state and spontaneous and evoked axial muscle EMG. *Brain Research*, **1986**, 368, 197-200	3.7	7
38	Tinbergen's challenge for the neuroscience of behavior. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 9704-9710	11.5	6
37	Generalized Brain Arousal Mechanisms Contributing to Libido. *Neuropsychoanalysis*, **2007**, 9, 173-181	0.8	6
36	Gender comparisons of control of breathing and metabolism in conscious mice exposed to cold. *Neuroendocrinology*, **2002**, 76, 381-9	5.6	6
35	Attempts to reinstate lordosis reflex in estrogen-primed spinal female rats with monoamine agonists. *Hormones and Behavior*, **1979**, 13, 232-40	3.7	6
34	Protein-DNA-Binding Assay for Analysis of Steroid-Sensitive Neurons in Mammalian Brain. *Methods in Neurosciences*, **1994**, 22, 245-264		6
33	Estradiol regulates responsiveness of the dorsal premammillary nucleus of the hypothalamus and affects fear- and anxiety-like behaviors in female rats. *European Journal of Neuroscience*, **2014**, 40, 2344-51	3.5	5
32	Increase in c-erbA alpha 2 mRNA in the parvocellular region of the paraventricular nucleus of the hypothalamus following thyroidectomy in the adult male rat. *Neuroscience Letters*, **1993**, 164, 159-62	3.3	5
31	In situ hybridization for showing hormone effects on oxytocin mRNA in specific populations of hypothalamic neurons and their possible participation in multiplicative hormonal responses. *Annals of the New York Academy of Sciences*, **1992**, 652, 347-56	6.5	5
30	Genes for sex hormone receptors controlling mouse aggression. *Novartis Foundation Symposium*, **2005**, 268, 78-89; discussion 89-95, 96-9		5
29	Definition of arousal and mechanistic studies in intact and brain-damaged mice. *Annals of the New York Academy of Sciences*, **2009**, 1157, 24-31	6.5	4

28	Molecular and biophysical mechanisms of arousal, alertness, and attention. Preface. *Annals of the New York Academy of Sciences*, **2008**, 1129, xi	6.5	4
27	Abolition of sex-dependent effects of prenatal exposure to diethylstilbestrol on emotional behavior in estrogen receptor-alpha knockout mice. *NeuroReport*, **2006**, 17, 1169-73	1.7	4
26	Disruption of estrous cyclicity following administration of a luteinizing hormone-releasing hormone antagonist to the preoptic area of the rat. *Biology of Reproduction*, **1994**, 50, 1178-82	3.9	4
25	Ultrastructural and morphometric analysis of neurons in the arcuate nucleus of the female rat hypothalamus following estradiol. *Brain Research Bulletin*, **1991**, 26, 181-4	3.9	4
24	Estradiol-Regulated Neuronal Plasticity. *Current Topics in Membranes and Transport*, **1987**, 31, 191-215		4
23	Gene expression for behaviorally relevant peptides in hypothalamic neurons. *Progress in Brain Research*, **1987**, 72, 129-36	2.9	4
22	Phase-Amplitude Coupling in Spontaneous Mouse Behavior. *PLoS ONE*, **2016**, 11, e0162262	3.7	4
21	Can distinctly different rapid estrogen actions share a common mechanistic step?. *Hormones and Behavior*, **2018**, 104, 156-164	3.7	3
20	Detection of RXFP1 receptors in skin biopsies from children with congenital adrenal hyperplasia: a preliminary report. *Journal of Pediatric Urology*, **2010**, 6, 389-95	1.5	3
19	Youth violence. Scientific approaches to prevention. Prologue. *Annals of the New York Academy of Sciences*, **2004**, 1036, ix-xii	6.5	3
18	Linear dimeric interleukin-2 obtained by the use of a defective herpes simplex viral vector: conformation-activity relationship. *Molecular Brain Research*, **1994**, 26, 156-62		3
17	Axial muscle EMG responses evoked by cutaneous flank nerves in the female rat: effects of spinal transection, steroid hormones, and anesthesia. *Brain Research*, **1992**, 595, 39-49	3.7	3
16	Vertebral Muscles of the Back and Tail of the Albino Rat (Rattus norvegicus albinus); pp. 24–47. *Brain, Behavior and Evolution*, **1980**, 17, 24-47	1.5	3
15	Dispensability of spinal monoaminergic systems in mediating the lordosis reflex of the female rat. *Pharmacology Biochemistry and Behavior*, **1981**, 14, 707-11	3.9	3
14	Building Bridges through Science. *Neuron*, **2017**, 96, 730-735	13.9	2
13	Immunocytochemical characterization of pacinian-like corpuscles in the labia minora of prepubertal girls. *Journal of Pediatric and Adolescent Gynecology*, **2011**, 24, 353-8	2	2
12	Reproductive behaviors: new developments in concepts and in molecular mechanisms progress in brain research, Luciano Martini, editor, January 19, 2010. *Progress in Brain Research*, **2010**, 181, 35-41	2.9	2
11	In situ PCR for in vivo detection of foreign genes transferred into rat brain. *Brain Research*, **1998**, 783, 347-54	3.7	2

10	Novel approaches to the study of oxytocin neurotransmission in the rat brain. *Regulatory Peptides*, **1993**, 45, 159-63		2
9	Hormone/brain relations serving the unity of the body. *Physiology and Behavior*, **2010**, 99, 149-50	3.5	1
8	Passive immunization of fetal rats with antiserum to luteinizing hormone-releasing hormone (LHRH) or transection of the central roots of the nervus terminalis does not affect rat pupsQ preference for home nest. *Physiology and Behavior*, **1987**, 41, 613-9	3.5	1
7	In Situ Hybridization for Detecting Gonadotropin-Releasing Hormone Messenger RNA and Measuring Physiologically Stimulated Changes. *Methods in Neurosciences*, **1989**, 1, 208-222		1
6	Potassium channels and the development of arousal-relevant action potential trains in primary hindbrain neurons. *Brain Research*, **2021**, 1768, 147574	3.7	1
5	Equation representing the dark-entrained transition from inaction to action in male and female mice. *Behavioural Brain Research*, **2020**, 392, 112673	3.4	
4	Development of mechanisms that regulate global CNS states: an introduction. *Developmental Neuroscience*, **2009**, 31, 251-4	2.2	
3	Mathematical analysis of locomotor behavior by mice in a radial maze. *Proceedings of the National Academy of Sciences of the United States of America*, **2006**, 103, 15710-5	11.5	
2	Gene-hormone-environment interactions in the regulation of aggressive responses: elegant analysis of complex behavior. *Scienceis STKE: Signal Transduction Knowledge Environment*, **2007**, 2007, pe55		
1	Kv2.1 expression in giant reticular neurons of the postnatal mouse brain. *Journal of Chemical Neuroanatomy*, **2021**, 117, 102005	3.2	