Jill B Becker

List of Publications by Year
in descending order

138 papers	18,305 citations	15504 65 h-index	13771 129 g-index
144 all docs	144 docs citations	144 times ranked	9955 citing authors

#	Article	IF	Citations
1	Enduring changes in brain and behavior produced by chronic amphetamine administration: A review and evaluation of animal models of amphetamine psychosis. Brain Research Reviews, 1986, 11, 157-198.	9.0	1,852
2	Enduring changes in brain and behavior produced by chronic amphetamine administration: A review and evaluation of animal models of amphetamine psychosis. Brain Research, 1986, 396, 157-198.	2.2	1,108
3	Sex differences in drug abuse. Frontiers in Neuroendocrinology, 2008, 29, 36-47.	5.2	811
4	Strategies and Methods for Research on Sex Differences in Brain and Behavior. Endocrinology, 2005, 146, 1650-1673.	2.8	679
5	Gender Differences in Dopaminergic Function in Striatum and Nucleus Accumbens. Pharmacology Biochemistry and Behavior, 1999, 64, 803-812.	2.9	607
6	Estradiol reduces calcium currents in rat neostriatal neurons via a membrane receptor. Journal of Neuroscience, 1996, 16, 595-604.	3.6	600
7	Sex Differences in Animal Models: Focus on Addiction. Pharmacological Reviews, 2016, 68, 242-263.	16.0	557
8	Are adolescents the victims of raging hormones? Evidence for activational effects of hormones on moods and behavior at adolescence.. Psychological Bulletin, 1992, 111, 62-107.	6.1	475
9	Sex differences, gender and addiction. Journal of Neuroscience Research, 2017, 95, 136-147.	2.9	381
10	Leptin Acts via Leptin Receptor-Expressing Lateral Hypothalamic Neurons to Modulate the Mesolimbic Dopamine System and Suppress Feeding. Cell Metabolism, 2009, 10, 89-98.	16.2	370
11	Direct effect of 17?-estradiol on striatum: Sex differences in dopamine release. Synapse, 1990, 5, 157-164.	1.2	351
12	Female rats are not more variable than male rats: a meta-analysis of neuroscience studies. Biology of Sex Differences, 2016, 7, 34.	4.1	308
13	Sex differences in neural mechanisms mediating reward and addiction. Neuropsychopharmacology, 2019, 44, 166-183.	5.4	299
14	Leptin Action via Neurotensin Neurons Controls Orexin, the Mesolimbic Dopamine System and Energy Balance. Cell Metabolism, 2011, 14, 313-323.	16.2	292
15	Considering sex as a biological variable in preclinical research. FASEB Journal, 2017, 31, 29-34.	0.5	285
16	Sex Differences and Hormonal Influences on Acquisition of Cocaine Self-Administration in Rats. Neuropsychopharmacology, 2006, 31, 129-138.	5.4	277
17	Long-term facilitation of amphetamine-induced rotational behavior and striatal dopamine release produced by a single exposure to amphetamine: Sex differences. Brain Research, 1982, 253, 231-241.	2.2	264
18	Biological Basis of Sex Differences in the Propensity to Self-administer Cocaine. Neuropsychopharmacology, 2004, 29, 81-85.	5.4	264

#	Article	IF	Citations
19	Estrogen rapidly potentiates amphetamine-induced striatal dopamine release and rotational behavior during microdialysis. Neuroscience Letters, 1990, 118, 169-171.	2.1	261
20	Sex differences in the neural mechanisms mediating addiction: a new synthesis and hypothesis. Biology of Sex Differences, 2012, 3, 14.	4.1	249
21	Sex difference and estrous cycle variations in amphetamine-elicited rotational behavior. European Journal of Pharmacology, 1982, 80, 65-72.	3.5	245
22	Sex differences in striatal dopamine: in vivo microdialysis and behavioral studies. Brain Research, 1993, 610, 127-134.	2.2	230
23	Sex differences in addiction. Dialogues in Clinical Neuroscience, 2016, 18, 395-402.	3.7	218
24	Rapid Vapor Deposition of Highly Conformal Silica Nanolaminates. Science, 2002, 298, 402-406.	12.6	217
25	Sex differences in the rapid and acute effects of estrogen on striatal D2 dopamine receptor binding. Brain Research, 1994, 637, 163-172.	2.2	206
26	Behavioral sensitization is accompanied by an enhancement in amphetamine-stimulated dopamine release from striatal tissue in vitro. European Journal of Pharmacology, 1982, 85, 253-254.	3.5	196
27	Quantitative microdialysis determination of extracellular striatal dopamine concentration in male and female rats: effects of estrous cycle and gonadectomy. Neuroscience Letters, 1994, 180, 155-158.	2.1	195
28	Increased extracellular dopamine in the nucleus accumbens and striatum of the female rat during paced copulatory behavior.. Behavioral Neuroscience, 1995, 109, 354-365.	1.2	195
29	Estrous cycle-dependent variation in amphetamine-induced behaviors and striatal dopamine release assessed with microdialysis. Behavioural Brain Research, 1989, 35, 117-125.	2.2	190
30	Sex differences in the amphetamine stimulated release of catecholamines from rat striatal tissue in vitro. Brain Research, 1981, 204, 361-372.	2.2	187
31	Effects of Sex and Estrogen on Behavioral Sensitization to Cocaine in Rats. Journal of Neuroscience, 2003, 23, 693-699.	3.6	186
32	The Role of Dopamine in the Nucleus Accumbens and Striatum during Sexual Behavior in the Female Rat. Journal of Neuroscience, 2001, 21, 3236-3241.	3.6	182
33	Rapid Effects of Estrogen or Progesterone on the Amphetamine-Induced Increase in Striatal Dopamine Are Enhanced by Estrogen Priming. Pharmacology Biochemistry and Behavior, 1999, 64, 53-57.	2.9	170
34	Intracerebral adrenal medulla grafts: A review. Experimental Neurology, 1990, 110, 139-166.	4.1	166
35	Gender Differences in the Behavioral Responses to Cocaine and Amphetamine. Annals of the New York Academy of Sciences, 2001, 937, 172-187.	3.8	165
36	The influence of estrogen on nigrostriatal dopamine activity. Behavioural Brain Research, 1986, 19, 27-33.	2.2	162

#	Article	IF	Citations
37	The influence of estrous cycle and intrastriatal estradiol on sensorimotor performance in the female rat. Pharmacology Biochemistry and Behavior, 1987, 27, 53-59.	2.9	155
38	Sex differences in amphetamine-elicited rotational behavior and the lateralization of striatal dopamine in rats. Brain Research Bulletin, 1980, 5, 539-545.	3.0	154
39	Stress and Disease: Is Being Female a Predisposing Factor?. Journal of Neuroscience, 2007, 27, 11851-11855.	3.6	137
40	The effects of novelty-seeking phenotypes and sex differences on acquisition of cocaine self-administration in selectively bred High-Responder and Low-Responder rats. Pharmacology Biochemistry and Behavior, 2008, 90, 331-338.	2.9	127
41	The effects of footshock stress on regional brain dopamine metabolism and pituitary Î²-endorphin release in rats previously sensitized to amphetamine. Neuropharmacology, 1987, 26, 679-691.	4.1	126
42	Sex differences in the effects of early experience on the development of behavioral and brain asymmetries in rats. Physiology and Behavior, 1984, 33, 433-439.	2.1	124
43	Rapid effects of ovarian hormones in dorsal striatum and nucleus accumbens. Hormones and Behavior, 2018, 104, 119-129.	2.1	123
44	Acquisition of cocaine self-administration in ovariectomized female rats: Effect of estradiol dose or chronic estradiol administration. Drug and Alcohol Dependence, 2008, 94, 56-62.	3.2	120
45	The long-term effects of repeated amphetamine treatment in vivo on amphetamine, KCl and electrical stimulation evoked striatal dopamine release in vitro. Life Sciences, 1988, 42, 2447-2456.	4.3	116
46	Estradiol, Dopamine and Motivation. Central Nervous System Agents in Medicinal Chemistry, 2015, 14, 83-89.	1.1	114
47	Sexual differentiation of motivation: A novel mechanism?. Hormones and Behavior, 2009, 55, 646-654.	2.1	113
48	Double Transduction with GTP Cyclohydrolase I and Tyrosine Hydroxylase Is Necessary for Spontaneous Synthesis ofl-DOPA by Primary Fibroblasts. Journal of Neuroscience, 1996, 16, 4449-4456.	3.6	112
49	Viral Vector-Mediated Overexpression of Estrogen Receptor-Î± in Striatum Enhances the Estradiol-Induced Motor Activity in Female Rats and Estradiol-Modulated GABA Release. Journal of Neuroscience, 2009, 29, 1897-1903.	3.6	109
50	Sensitization to stress: The enduring effects of prior stress on amphetamine-induced rotational behavior. Life Sciences, 1985, 37, 1039-1042.	4.3	102
51	NIH initiative to balance sex of animals in preclinical studies: generative questions to guide policy, implementation, and metrics. Biology of Sex Differences, 2014, 5, 15.	4.1	98
52	Sex differences in the effects of estradiol in the nucleus accumbens and striatum on the response to cocaine: Neurochemistry and behavior. Drug and Alcohol Dependence, 2014, 135, 22-28.	3.2	94
53	Effects of estrogen agonists on amphetamine-stimulated striatal dopamine release. Synapse, 1998, 29, 379-391.	1.2	88
54	The rotational behavior model: asymmetry in the effects of unilateral 6-OHDA lesions of the substantia nigra in rats. Brain Research, 1983, 264, 127-131.	2.2	83

#	Article	IF	Citations
55	Sociocultural context for sex differences in addiction. Addiction Biology, 2016, 21, 1052-1059.	2.6	83
56	The Development of a Preference for Cocaine over Food Identifies Individual Rats with Addiction-Like Behaviors. PLoS ONE, 2013, 8, e79465.	2.5	81
57	Effects of a selectively bred novelty-seeking phenotype on the motivation to take cocaine in male and female rats. Biology of Sex Differences, 2011, 2, 3.	4.1	76
58	Experimental Studies on the Development of Sex Differences in the Release of Dopamine from Striatal Tissue Fragments in vitro. Neuroendocrinology, 1981, 32, 168-173.	2.5	74
59	Role of the striatum and nucleus accumbens in paced copulatory behavior in the female rat. Behavioural Brain Research, 2001, 121, 119-128.	2.2	74
60	Cortical noradrenaline depletion eliminates sparing of spatial learning after neonatal frontal cortex damage in the rat. Neuroscience Letters, 1982, 32, 125-130.	2.1	73
61	Hormonal Activation of the Striatum and the Nucleus Accumbens Modulates Paced Mating Behavior in the Female Rat. Hormones and Behavior, 1997, 32, 114-124.	2.1	71
62	Female rats develop conditioned place preferences for sex at their preferred interval. Hormones and Behavior, 2003, 43, 503-507.	2.1	70
63	Why we should consider sex (and study sex differences) in addiction research. Addiction Biology, 2016, 21, 995-1006.	2.6	70
64	Sex differences in the effects of gonadectomy on amphetamine-induced rotational behavior in rats. Behavioral and Neural Biology, 1986, 46, 491-495.	2.2	69
65	Striatal dopamine release stimulated by amphetamine or potassium: influence of ovarian hormones and the light-dark cycle. Brain Research, 1984, 311, 157-160.	2.2	68
66	Sex differences and estrous cycle dependent variation in rotational behavior elicited by electrical stimulation of the mesostriatal dopamine system. Behavioural Brain Research, 1982, 6, 273-287.	2.2	66
67	Sex differences in vulnerability to addiction. Neuropharmacology, 2021, 187, 108491.	4.1	64
68	Dynamic increases in dopamine during paced copulation in the female rat. European Journal of Neuroscience, 2003, 18, 1997-2001.	2.6	63
69	Gonadectomy attenuates turning behavior produced by electrical stimulation of the nigrostriatal dopamine system in female but not male rats. Neuroscience Letters, 1981, 23, 203-208.	2.1	61
70	Enduring enhancement in frontal cortex dopamine utilization in an animal model of amphetamine psychosis. Brain Research, 1985, 343, 374-377.	2.2	61
71	Estradiol attenuates the K+-induced increase in extracellular GABA in rat striatum. Synapse, 2006, 59, 122-124.	1.2	61
72	Analysis of sex differences in pre-clinical and clinical data sets. Neuropsychopharmacology, 2019, 44, 2155-2158.	5.4	61

#	Article	IF	Citations
73	Dynamics of Endogenous Catecholamine Release from Brain Fragments of Male and Female Rats. Neuroendocrinology, 1980, 31, 18-25.	2.5	58
74	Sustained behavioral recovery from unilateral nigrostriatal damage produced by the controlled release of dopamine from a silicone polymer pellet placed into the denervated striatum. Brain Research, 1990, 508, 60-64.	2.2	58
75	Sex-specific susceptibility to cocaine in rats with a history of prenatal stress. Physiology and Behavior, 2009, 97, 270-277.	2.1	54
76	Sensitization enhances acquisition of cocaine self-administration in female rats: Estradiol further enhances cocaine intake after acquisition. Hormones and Behavior, 2010, 58, 8-12.	2.1	54
77	Sensitization of rotational behavior produced by a single exposure to cocaine. Pharmacology Biochemistry and Behavior, 1985, 22, 901-903.	2.9	52
78	Adrenal medulla grafts enhance functional activity of the striatal dopamine system following substantia nigra lesions. Brain Research, 1988, 462, 401-406.	2.2	52
79	Impact of pubertal and adult estradiol treatments on cocaine self-administration. Hormones and Behavior, 2013, 64, 573-578.	2.1	51
80	Transient Hypoxia Alters Striatal Catecholamine Metabolism in Immature Brain: An In Vivo Microdialysis Study. Journal of Neurochemistry, 1990, 54, 605-611.	3.9	50
81	Changes in blood-brain barrier permeability are associated with behavioral and neurochemical indices of recovery following intraventricular adrenal medulla grafts in an animal model of parkinson's disease. Experimental Neurology, 1991, 114, 184-192.	4.1	49
82	Pair housing differentially affects motivation to self-administer cocaine in male and female rats. Behavioural Brain Research, 2013, 252, 68-71.	2.2	48
83	The Effect of Estradiol in the Striatum Is Blocked by ICI 182,780 but Not Tamoxifen: Pharmacological and Behavioral Evidence. Neuroendocrinology, 2003, 77, 239-245.	2.5	47
84	Effects of neonatal forebrain noradrenaline depletion on recovery from brain damage: Performance on a spatial navigation task as a function of age of surgery and postsurgical housing. Behavioral and Neural Biology, 1986, 46, 285-307.	2.2	46
85	The Roles of Dopamine and Î±1-Adrenergic Receptors in Cocaine Preferences in Female and Male Rats. Neuropsychopharmacology, 2015, 40, 2696-2704.	5.4	45
86	Enduring enhancement in amphetamine-stimulated striatal dopamine release in vitro produced by prior exposure to amphetamine or stress in vivo. European Journal of Pharmacology, 1986, 124, 375-376.	3.5	44
87	Effects of adrenal medulla grafts on plasma catecholamines and rotational behavior. Experimental Neurology, 1992, 118, 24-34.	4.1	42
88	Oestradiol influences on dopamine release from the nucleus accumbens shell: sex differences and the role of selective oestradiol receptor subtypes. British Journal of Pharmacology, 2019, 176, 4136-4148.	5.4	42
89	Estradiol-Induced Potentiation of Dopamine Release in Dorsal Striatum Following Amphetamine Administration Requires Estradiol Receptors and mGlu5. ENeuro, 2019, 6, ENEURO.0446-18.2019.	1.9	40
90	Oestrogen Effects on Dopaminergic Function in Striatum. Novartis Foundation Symposium, 2008, , 134-151.	1.1	39

#	Article	IF	Citations
91	Interactions among ovarian hormones and time of testing on behavioral sensitization and cocaine self-administration. Behavioural Brain Research, 2007, 184, 174-184.	2.2	38
92	Sex differences in the effect of amphetamine on immediate early gene expression in the rat dorsal striatum. Brain Research, 1996, 712, 245-257.	2.2	37
93	Quantitative assessment of female sexual motivation in the rat: Hormonal control of motivation. Journal of Neuroscience Methods, 2012, 204, 227-233.	2.5	37
94	A simple in vitro technique to measure the release of endogenous dopamine and dihydroxyphenylacetic acid from striatal tissue using high performance liquid chromatography with electrochemical detection. Journal of Neuroscience Methods, 1984, 11, 19-28.	2.5	34
95	High density carbon fiber arrays for chronic electrophysiology, fast scan cyclic voltammetry, and correlative anatomy. Journal of Neural Engineering, 2020, 17, 056029.	3.5	32
96	The role of nigrostriatal dopamine in metabotropic glutamate agonist-induced rotation. Neuroscience, 1998, 87, 881-891.	2.3	31
97	Women, opioid use and addiction. FASEB Journal, 2021, 35, e21303.	0.5	29
98	Synergistic effect of intrastriatal co-administration of L-NAME and quinolinic acid. NeuroReport, 1995, 6, 1505-1508.	1.2	28
99	Chapter 68 Neurochemical correlates of behavioral changes following intraventricular adrenal medulla grafts: intraventricular microdialysis in freely moving rats. Progress in Brain Research, 1988, 78, 527-533.	1.4	26
100	Akinesia and postural abnormality after unilateral dopamine depletion. Behavioural Brain Research, 1999, 104, 189-196.	2.2	26
101	Male rats that differ in novelty exploration demonstrate distinct patterns of sexual behavior.. Behavioral Neuroscience, 2013, 127, 47-58.	1.2	25
102	Adrenal medulla grafts in the hemiparkinsonian rat: profile of behavioral recovery predicts restoration of the symmetry between the two striata in measures of pre- and postsynaptic dopamine function. Journal of Neuroscience, 1993, 13, 3864-3877.	3.6	21
103	Perspective: Sex Matters: Gonadal Steroids and the Brain. Neuropsychopharmacology, 2009, 34, 537-538.	5.4	21
104	The federal plan for health science and technologyâ€™s response to the opioid crisis: understanding sex and gender differences as part of the solution is overlooked. Biology of Sex Differences, 2019, 10, 3.	4.1	21
105	Chapter 57 Mechanisms of action of adrenal medulla grafts: the possible role of peripheral and central dopamine systems. Progress in Brain Research, 1990, 82, 499-507.	1.4	19
106	Effect of social housing and oxytocin on the motivation to self-administer methamphetamine in female rats. Physiology and Behavior, 2019, 203, 10-17.	2.1	18
107	Intraventricular microdialysis: a new method for determining monoamine metabolite concentrations in the cerebrospinal fluid of freely moving rats. Journal of Neuroscience Methods, 1988, 24, 259-269.	2.5	17
108	A novel device for chronic intracranial drug delivery via microdialysis. Journal of Neuroscience Methods, 1991, 40, 1-8.	2.5	17

#	Article	IF	Citations
109	Enhanced Striatal Î²1-Adrenergic Receptor Expression Following Hormone Loss in Adulthood Is Programmed by Both Early Sexual Differentiation and Puberty: A Study of Humans and Rats. Endocrinology, 2013, 154, 1820-1831.	2.8	16
110	Ovarian Hormones Mediate Changes in Adaptive Choice and Motivation in Female Rats. Frontiers in Behavioral Neuroscience, 2019, 13, 250.	2.0	16
111	Activation of G-protein coupled estradiol receptor 1 in the dorsolateral striatum attenuates preference for cocaine and saccharin in male but not female rats. Hormones and Behavior, 2021, 130, 104949.	2.1	16
112	Sex differences in motivated behaviors in animal models. Current Opinion in Behavioral Sciences, 2018, 23, 98-102.	3.9	13
113	Adrenal medulla graft induced recovery of function in an animal model of Parkinson's disease: Possible mechanisms of action.. Canadian Journal of Psychology, 1990, 44, 293-310.	0.8	12
114	Synergistic effects of chronic exposure to subthreshold concentrations of quinolinic acid and malonate in the rat striatum. Brain Research, 1996, 718, 228-232.	2.2	12
115	Single prolonged stress decreases sign-tracking and cue-induced reinstatement of cocaine-seeking. Behavioural Brain Research, 2019, 359, 799-806.	2.2	12
116	The rodent vaginal microbiome across the estrous cycle and the effect of genital nerve electrical stimulation. PLoS ONE, 2020, 15, e0230170.	2.5	12
117	Involvement of nigrostriatal dopamine neurons in the contraversive rotational behavior evoked by electrical stimulation of the lateral hypothalamus. Brain Research, 1985, 327, 143-151.	2.2	11
118	Behavioral changes associated with grafts of embryonic ventral mesencephalon tissue into the striatum and/or substantia nigra in a rat model of Parkinson's Disease. Behavioural Brain Research, 1999, 104, 179-187.	2.2	11
119	Intranigral Grafts of Fetal Ventral Mesencephalic Tissue in Adult 6-Hydroxydopamine-Lesioned Rats can Induce Behavioral Recovery. Cell Transplantation, 1997, 6, 267-276.	2.5	10
120	Chronic intrastriatal administration of quinolinic acid produces transient nocturnal hypermotility in the rat. Brain Research Bulletin, 1996, 39, 69-73.	3.0	8
121	Sex Differences in Motivation. , 2007, , 177-200.		8
122	Role of gonadal hormones on mu-opioid-stimulated [35S]GTPÎ³S binding and morphine-mediated antinociception in male and female Sprague–Dawley rats. Psychopharmacology, 2011, 218, 483-492.	3.1	8
123	Sex differences in prenatal stress effects on cocaine pursuit in rats. Physiology and Behavior, 2019, 203, 3-9.	2.1	8
124	Activation of G protein-coupled estradiol receptor 1 in the dorsolateral striatum enhances motivation for cocaine and drug-induced reinstatement in female but not male rats. Biology of Sex Differences, 2021, 12, 46.	4.1	7
125	Sex Differences and Addiction. , 2016, , 129-147.		6
126	Effects of Nerve Growth Factor Infusion on Behavioral Recovery and Graft Survival Following Intraventricular Adrenal Medulla Grafts in the Unilateral6-Hydroxydopamine Lesioned Rat. Journal of Neural Transplantation & Plasticity, 1994, 5, 163-167.	0.7	5

#	Article	IF	Citations
127	Sex-specific and generational effects of alcohol and tobacco use on epigenetic age acceleration in the Michigan longitudinal study. , 2022, 4, 100077.		5
128	Behavioral effects of fetal substantia nigra tissue grafted into the dopamine-denervated striatum: responses to selective D1 and D2 dopamine receptor agonists. Restorative Neurology and Neuroscience, 1991, 3, 187-195.	0.7	4
129	Gender differences in the transmission of risk for antisocial behavior problems across generations. PLoS ONE, 2017, 12, e0177288.	2.5	4
130	Comparison of the cycloheximide and food satiation effects on a discrimination task. Pharmacology Biochemistry and Behavior, 1977, 6, 631-635.	2.9	3
131	Variation in lateralization: Selected samples do not a population make. Behavioral and Brain Sciences, 1981, 4, 34-35.	0.7	3
132	Rapid Effects of Estradiol on Motivated Behaviors. , 2005, , 155-172.		2
133	Malonic Acid and the Chronic Administration Model of Excitotoxicity. , 2000, , 219-231.		2
134	Worlds Colliding: Trans-disciplinary approaches to gender and addictions. social history of alcohol and drugs, The, 2017, 31, 107-125.	0.2	1
135	Intrastriatal grafts of fetal ventral mesencephalic tissue restore quantitative and qualitative D1/D2 dopamine receptor synergism in the striatum. Restorative Neurology and Neuroscience, 1997, 11, 13-20.	0.7	0
136	Puberty and shifting values (Commentary on Bell etÂal.). European Journal of Neuroscience, 2013, 37, 455-456.	2.6	0
137	Sex Hormones. , 2014, , 1-5.		0
138	Recovery of Function After Tissue Transplantation in the Nigrostriatal Dopamine System. , 1988, , 225-234.		0