# Christelle Baunez

List of Publications by Year
in descending order



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|---|---|---|---|
| 66 papers | 4,577 citations | 147801 31 h-index | 128289 60 g-index |
| 78 all docs | 78 docs citations | 78 times ranked | 3922 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Stop-Signal Reaction-Time Task Performance: Role of Prefrontal Cortex and Subthalamic Nucleus. Cerebral Cortex, 2008, 18, 178-188. | 2.9 | 344 |
| 2 | Chronic dopaminergic stimulation in Parkinson's disease: from dyskinesias to impulse control disorders. Lancet Neurology, The, 2009, 8, 1140-1149. | 10.2 | 337 |
| 3 | Deep brain stimulation: from neurology to psychiatry?. Trends in Neurosciences, 2010, 33, 474-484. | 8.6 | 262 |
| 4 | Bilateral Lesions of the Subthalamic Nucleus Induce Multiple Deficits in an Attentional Task in Rats. European Journal of Neuroscience, 1997, 9, 2086-2099. | 2.6 | 233 |
| 5 | Addiction in Parkinson's disease: Impact of subthalamic nucleus deep brain stimulation. Movement Disorders, 2005, 20, 1052-1055. | 3.9 | 223 |
| 6 | Is there an inhibitory-response-control system in the rat? Evidence from anatomical and pharmacological studies of behavioral inhibition. Neuroscience and Biobehavioral Reviews, 2010, 34, 50-72. | 6.1 | 222 |
| 7 | The subthalamic nucleus exerts opposite control on cocaine and 'natural' rewards. Nature Neuroscience, 2005, 8, 484-489. | 14.8 | 210 |
| 8 | Reducing the desire for cocaine with subthalamic nucleus deep brain stimulation. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 1196-1200. | 7.1 | 181 |
| 9 | Chronic But Not Acute Treatment with a Metabotropic Glutamate 5 Receptor Antagonist Reverses the Akinetic Deficits in a Rat Model of Parkinsonism. Journal of Neuroscience, 2002, 22, 5669-5678. | 3.6 | 174 |
| 10 | Effects of dopamine depletion of the dorsal striatum and further interaction with subthalamic nucleus lesions in an attentional task in the rat. Neuroscience, 1999, 92, 1343-1356. | 2.3 | 149 |
| 11 | Enhanced Food-Related Motivation after Bilateral Lesions of the Subthalamic Nucleus. Journal of Neuroscience, 2002, 22, 562-568. | 3.6 | 149 |
| 12 | Parkinson's <scp>D</scp>isease, the <scp>S</scp>ubthalamic <scp>N</scp>ucleus, <scp>I</scp>nhibition, and <scp>I</scp>mpulsivity. Movement Disorders, 2015, 30, 128-140. | 3.9 | 147 |
| 13 | Deep brain stimulation in neurological diseases and experimental models: From molecule to complex behavior. Progress in Neurobiology, 2009, 89, 79-123. | 5.7 | 135 |
| 14 | Lesions of the medial and lateral striatum in the rat produce differential deficits in attentional performance.. Behavioral Neuroscience, 2001, 115, 799-811. | 1.2 | 116 |
| 15 | Effects of STN lesions on simple vs choice reaction time tasks in the rat: preserved motor readiness, but impaired response selection. European Journal of Neuroscience, 2001, 13, 1609-1616. | 2.6 | 106 |
| 16 | Functional Disconnection of the Medial Prefrontal Cortex and Subthalamic Nucleus in Attentional Performance: Evidence for Corticosubthalamic Interaction. Journal of Neuroscience, 2003, 23, 5477-5485. | 3.6 | 103 |
| 17 | Lesions to the subthalamic nucleus decrease impulsive choice but impair autoshaping in rats: the importance of the basal ganglia in Pavlovian conditioning and impulse control. European Journal of Neuroscience, 2005, 21, 3107-3116. | 2.6 | 95 |
| 18 | Beyond the Reward Pathway: Coding Reward Magnitude and Error in the Rat Subthalamic Nucleus. Journal of Neurophysiology, 2009, 102, 2526-2537. | 1.8 | 89 |

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|---|---|---|---|
| 19 | High frequency stimulation of the subthalamic nucleus has beneficial antiparkinsonian effects on motor functions in rats, but less efficiency in a choice reaction time task. European Journal of Neuroscience, 2003, 18, 951-956. | 2.6 | 87 |
| 20 | Cocaine and Amphetamine Depress Striatal GABAergic Synaptic Transmission through D2 Dopamine Receptors. Neuropsychopharmacology, 2002, 26, 164-175. | 5.4 | 78 |
| 21 | Reward-related neuronal activity in the subthalamic nucleus of the monkey. NeuroReport, 2005, 16, 1241-1244. | 1.2 | 77 |
| 22 | Effects of transient inactivation of the subthalamic nucleus by local muscimol and APV infusions on performance on the five-choice serial reaction time task in rats. Psychopharmacology, 1999, 141, 57-65. | 3.1 | 73 |
| 23 | Bilateral high-frequency stimulation of the subthalamic nucleus on attentional performance: transient deleterious effects and enhanced motivation in both intact and parkinsonian rats. European Journal of Neuroscience, 2007, 25, 1187-1194. | 2.6 | 70 |
| 24 | Alcohol Preference Influences the Subthalamic Nucleus Control on Motivation for Alcohol in Rats. Neuropsychopharmacology, 2008, 33, 634-642. | 5.4 | 60 |
| 25 | The human subthalamic nucleus encodes the subjective value of reward and the cost of effort during decision-making. Brain, 2016, 139, 1830-1843. | 7.6 | 57 |
| 26 | Deep brain stimulation for addiction: why the subthalamic nucleus should be favored. Current Opinion in Neurobiology, 2013, 23, 713-720. | 4.2 | 56 |
| 27 | Different populations of subthalamic neurons encode cocaine vs. sucrose reward and predict future error. Journal of Neurophysiology, 2013, 110, 1497-1510. | 1.8 | 43 |
| 28 | High-Frequency Stimulation of the Subthalamic Nucleus Blocks Compulsive-Like Re-Escalation of Heroin Taking in Rats. Neuropsychopharmacology, 2017, 42, 1850-1859. | 5.4 | 43 |
| 29 | Frontal Cortex-Like Functions of the Subthalamic Nucleus. Frontiers in Systems Neuroscience, 2011, 5, 83. | 2.5 | 42 |
| 30 | Functional interaction between mGlu 5 and NMDA receptors in a rat model of Parkinson?s disease. Psychopharmacology, 2005, 179, 117-127. | 3.1 | 39 |
| 31 | The Dopamine Agonist Piribedil with L-DOPA Improves Attentional Dysfunction: Relevance for Parkinson's Disease. Journal of Pharmacology and Experimental Therapeutics, 2006, 319, 914-923. | 2.5 | 37 |
| 32 | Subthalamic nucleus high frequency stimulation prevents and reverses escalated cocaine use. Molecular Psychiatry, 2018, 23, 2266-2276. | 7.9 | 35 |
| 33 | Chronic D<sub>2/3</sub> agonist ropinirole treatment increases preference for uncertainty in rats regardless of baseline choice patterns. European Journal of Neuroscience, 2017, 45, 159-166. | 2.6 | 34 |
| 34 | Social modulation of drug use and drug addiction. Neuropharmacology, 2019, 159, 107545. | 4.1 | 32 |
| 35 | Differential effects of prolonged high frequency stimulation and of excitotoxic lesion of the subthalamic nucleus on dopamine denervation-induced cellular defects in the rat striatum and globus pallidus. European Journal of Neuroscience, 2004, 20, 3331-3341. | 2.6 | 29 |
| 36 | Deep-Brain Stimulation of the Subthalamic Nucleus Selectively Decreases Risky Choice in Risk-Preferring Rats. ENeuro, 2017, 4, ENEURO.0094-17.2017. | 1.9 | 28 |

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|---|---|---|---|
| 37 | The Good and Bad Differentially Encoded within the Subthalamic Nucleus in Rats. ENeuro, 2015, 2, ENEURO.0014-15.2015. | 1.9 | 27 |
| 38 | Targeting the subthalamic nucleus in a preclinical model of alcohol use disorder. Psychopharmacology, 2017, 234, 2127-2137. | 3.1 | 27 |
| 39 | Revealing a novel nociceptive network that links the subthalamic nucleus to pain processing. ELife, 2018, 7, . | 6.0 | 27 |
| 40 | Cognitive and limbic effects of deep brain stimulation in preclinical studies. Frontiers in Bioscience - Landmark, 2009, Volume, 1891. | 3.0 | 26 |
| 41 | Linking reward processing to behavioral output: motor and motivational integration in the primate subthalamic nucleus. Frontiers in Computational Neuroscience, 2013, 7, 175. | 2.1 | 25 |
| 42 | The subthalamic nucleus keeps you high on emotion: behavioral consequences of its inactivation. Frontiers in Behavioral Neuroscience, 2014, 8, 414. | 2.0 | 25 |
| 43 | Evidence for Functional Differences between Entopeduncular Nucleus and Substantia Nigra: Effects of APV (DL-2-amino-5-phosphonovaleric acid) Microinfusion on Reaction Time Performance in the Rat. European Journal of Neuroscience, 1996, 8, 1972-1982. | 2.6 | 23 |
| 44 | Modulation of neuronal activity by reward identity in the monkey subthalamic nucleus. European Journal of Neuroscience, 2015, 42, 1705-1717. | 2.6 | 23 |
| 45 | Subthalamic low-frequency oscillations predict vulnerability to cocaine addiction. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, . | 7.1 | 23 |
| 46 | Effects of GPi and STN inactivation on physiological, motor, cognitive and motivational processes in animal models of Parkinsonâ€™s disease. Progress in Brain Research, 2010, 183, 235-258. | 1.4 | 22 |
| 47 | Subthalamic nucleus high-frequency stimulation modulates neuronal reactivity to cocaine within the reward circuit. Neurobiology of Disease, 2015, 80, 54-62. | 4.4 | 18 |
| 48 | Neurons in the Monkey's Subthalamic Nucleus Differentially Encode Motivation and Effort. Journal of Neuroscience, 2022, 42, 2539-2551. | 3.6 | 15 |
| 49 | Subthalamic nucleus mediates the modulation on cocaine selfâ€administration induced by ultrasonic vocalization playback in rats. Addiction Biology, 2020, 25, e12710. | 2.6 | 13 |
| 50 | Posttraumatic Stress Disorder is associated with altered reward mechanisms during the anticipation and the outcome of monetary incentive cues. NeuroImage: Clinical, 2020, 25, 102073. | 2.7 | 13 |
| 51 | Increased motor impulsivity in a rat gambling task during chronic ropinirole treatment: potentiation by win-paired audiovisual cues. Psychopharmacology, 2019, 236, 1901-1915. | 3.1 | 12 |
| 52 | Effects of subthalamic nucleus stimulation and levodopa on decisionâ€making in Parkinson's disease. Movement Disorders, 2019, 34, 377-385. | 3.9 | 10 |
| 53 | A few examples of the contribution of animal research in rodents for clinical application of deep brain stimulation. Progress in Brain Research, 2011, 194, 105-116. | 1.4 | 9 |
| 54 | Evidence for a vocal signature in the rat and its reinforcing effects: a key role for the subthalamic nucleus. Proceedings of the Royal Society B: Biological Sciences, 2021, 288, 20212260. | 2.6 | 7 |

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|---|---|---|---|
| 55 | Decreased riskâ€taking and lossâ€chasing after subthalamic nucleus lesion in rats. European Journal of Neuroscience, 2021, 53, 2362-2375. | 2.6 | 5 |
| 56 | Repeated cocaine exposure prior to fear conditioning induces persistency of PTSD-like symptoms and enhancement of hippocampal and amygdala cell density in male rats. Brain Structure and Function, 2021, 226, 2219-2241. | 2.3 | 4 |
| 57 | Repeated ethanol exposure following avoidance conditioning impairs avoidance extinction and modifies conditioningâ€associated prefrontal dendritic changes in a mouse model of postâ€traumatic stress disorder. European Journal of Neuroscience, 2021, 54, 7710-7732. | 2.6 | 4 |
| 58 | Harnessing Circuits for the Treatment of Addictive Disorders. , 2019, , 271-285. | | 1 |
| 59 | Inactivating the Subthalamic Nucleus in the Rat Induces Various Cognitive Deficits and Motivational Exacerbation. Advances in Behavioral Biology, 2002, , 591-602. | 0.2 | 1 |
| 60 | The Subthalamic Nucleus and Reward-Related Processes. Innovations in Cognitive Neuroscience, 2016, , 319-337. | 0.3 | 1 |
| 61 | Surgical Strategies for Parkinsonâ€™s Disease Based on Animal Model Data: GPi and STN Inactivation on Various Aspects of Behavior (Motor, Cognitive and Motivational Processes). , 2009, , 1-21. | | 0 |
| 62 | 45. The Subthalamic Nucleus at the Nexus of Decision-Making Processes. Biological Psychiatry, 2017, 81, S19. | 1.3 | 0 |
| 63 | Ablative Neurotherapeutics and Deep Brain Stimulation in Animal Models of Psychiatric Disorders. , 2016, , 187-207. | | 0 |
| 64 | Subthalamic stimulation breaks the balance between distal and axial signs in Parkinsonâ€™s disease. Scientific Reports, 2021, 11, 21810. | 3.3 | 0 |
| 65 | The Ventral/Dorsal Divide: To Integrate or Separate. , 2005, , 437-456. | | 0 |
| 66 | Editorial Special Issue on â€œNature vs nurture in addiction researchâ€• Psychopharmacology, 2022, 239, 989-991. | 3.1 | 0 |