Gilles van Luijtelaar

List of Publications by Year
in descending order

138 papers	5,359 citations	66343 42 h-index	102487 66 g-index
147 all docs	147 docs citations	147 times ranked	3834 citing authors

#	Article	IF	Citations
1	Evolving Concepts on the Pathophysiology of Absence Seizures. Archives of Neurology, 2005, 62, 371.	4.5	446
2	A revised Racine's scale for PTZ-induced seizures in rats. Physiology and Behavior, 2009, 98, 579-586.	2.1	305
3	Global and focal aspects of absence epilepsy: The contribution of genetic models. Neuroscience and Biobehavioral Reviews, 2006, 30, 983-1003.	6.1	187
4	The WAG/Rij strain: A genetic animal model of absence epilepsy with comorbidity of depressiony. Progress in Neuro-Psychopharmacology and Biological Psychiatry, 2011, 35, 854-876.	4.8	161
5	Onset and propagation of spike and slow wave discharges in human absence epilepsy: A MEG study. Epilepsia, 2009, 50, 2538-2548.	5.1	159
6	Impairment of intracortical GABAergic inhibition in a rat model of absence epilepsy. Epilepsy Research, 1995, 22, 43-51.	1.6	124
7	Sleep spindles and spikeâ€“wave discharges in EEG: Their generic features, similarities and distinctions disclosed with Fourier transform and continuous wavelet analysis. Journal of Neuroscience Methods, 2009, 180, 304-316.	2.5	121
8	Spikeâ€“wave discharges are necessary for the expression of behavioral depressionâ€like symptoms. Epilepsia, 2010, 51, 146-160.	5.1	102
9	Spaceâ€“time network connectivity and cortical activations preceding spike wave discharges in human absence epilepsy: a MEG study. Medical and Biological Engineering and Computing, 2011, 49, 555-565.	2.8	96
10	Antiepileptic action of N-palmitoylethanolamine through CB1 and PPAR-Î± receptor activation in a genetic model of absence epilepsy. Neuropharmacology, 2013, 69, 115-126.	4.1	91
11	Absence Seizure Control by a Brain Computer Interface. Scientific Reports, 2017, 7, 2487.	3.3	91
12	An algorithm for real-time detection of spike-wave discharges in rodents. Journal of Neuroscience Methods, 2010, 194, 172-178.	2.5	83
13	Spikeâ€“wave discharges in WAG/Rij rats are preceded by delta and theta precursor activity in cortex and thalamus. Clinical Neurophysiology, 2011, 122, 687-695.	1.5	82
14	Thalamic lesions in a genetic rat model of absence epilepsy: Dissociation between spike-wave discharges and sleep spindles. Experimental Neurology, 2009, 217, 25-37.	4.1	80
15	Upholding WAG/Rij rats as a model of absence epileptogenesis: Hidden mechanisms and a new theory on seizure development. Neuroscience and Biobehavioral Reviews, 2016, 71, 388-408.	6.1	77
16	Dynamics of networks during absence seizure's on- and offset in rodents and man. Frontiers in Physiology, 2015, 6, 16.	2.8	76
17	The dynamics of cortico-thalamo-cortical interactions at the transition from pre-ictal to ictal LFPs in absence epilepsy. Neurobiology of Disease, 2012, 47, 49-60.	4.4	74
18	Fluoxetine Exerts Age-Dependent Effects on Behavior and Amygdala Neuroplasticity in the Rat. PLoS ONE, 2011, 6, e16646.	2.5	72

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19	Reticular nucleus-specific changes in Â3 subunit protein at GABA synapses in genetically epilepsy-prone rats. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 12512-12517.	7.1	64
20	Progress and Outlooks in a Genetic Absence Epilepsy Model (WAG/Rij). Current Medicinal Chemistry, 2014, 21, 704-721.	2.4	64
21	Methods of automated absence seizure detection, interference by stimulation, and possibilities for prediction in genetic absence models. Journal of Neuroscience Methods, 2016, 260, 144-158.	2.5	63
22	Macroscopic and microscopic spectral properties of brain networks during local and global synchronization. Physical Review E, 2017, 96, 012316.	2.1	61
23	Environmental manipulations early in development alter seizure activity,Ihand HCN1 protein expression later in life. European Journal of Neuroscience, 2006, 23, 3346-3358.	2.6	59
24	Genetic Models of Absence Epilepsy in the Rat. , 2006, , 233-248.		58
25	The involvement of limbic structures in typical and atypical absence epilepsy. Epilepsy Research, 2013, 103, 111-123.	1.6	58
26	Cortical control of generalized absence seizures: effect of lidocaine applied to the somatosensory cortex in WAG/Rij rats. Brain Research, 2004, 1012, 127-137.	2.2	57
27	On the Origin and Suddenness of Absences in Genetic Absence Models. Clinical EEG and Neuroscience, 2011, 42, 83-97.	1.7	54
28	The ovarian hormones and absence epilepsy: a long-term EEG study and pharmacological effects in a genetic absence epilepsy model. Epilepsy Research, 2001, 46, 225-239.	1.6	53
29	Granger causality: Cortico-thalamic interdependencies during absence seizures in WAG/Rij rats. Journal of Neuroscience Methods, 2008, 170, 245-254.	2.5	53
30	WAG/Rij rats show a reduced expression of CB₁ receptors in thalamic nuclei and respond to the CB₁ receptor agonist, R(+)WIN55,212â€2, with a reduced incidence of spikeâ€wave discharges. Epilepsia, 2010, 51, 1511-1521.	5.1	53
31	Cortical and thalamic coherence during spikeâ€“wave seizures in WAG/Rij rats. Epilepsy Research, 2006, 71, 159-180.	1.6	52
32	EEG Findings in Burnout Patients. Journal of Neuropsychiatry and Clinical Neurosciences, 2010, 22, 208-217.	1.8	52
33	Animal models of absence epilepsies: What do they model and do sex and sex hormones matter?. Neurobiology of Disease, 2014, 72, 167-179.	4.4	50
34	Chromosomal Mapping of Genetic Loci Controlling Absence Epilepsy Phenotypes in the WAG/Rij Rat. Epilepsia, 2004, 45, 908-915.	5.1	49
35	Anti-epileptogenesis: Electrophysiology, diffusion tensor imaging and behavior in a genetic absence model. Neurobiology of Disease, 2013, 60, 126-138.	4.4	49
36	Corticosterone increases spike-wave discharges in a dose- and time-dependent manner in WAG/Rij rats. Pharmacology Biochemistry and Behavior, 2004, 78, 369-375.	2.9	48

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37	Midfrequency cortico-thalamic oscillations and the sleep cycle: Genetic, time of day and age effects. Epilepsy Research, 2007, 73, 259-265.	1.6	48
38	Electroencephalographic characterization of spike-wave discharges in cortex and thalamus in WAG/Rij rats. Epilepsia, 2007, 48, 2296-311.	5.1	48
39	Electroencephalographic precursors of spike-wave discharges in a genetic rat model of absence epilepsy: Power spectrum and coherence EEG analyses. Epilepsy Research, 2009, 84, 159-171.	1.6	47
40	Absence seizures are reduced by the enhancement of GABA-ergic inhibition in the hippocampus in WAG/Rij rats. Neuroscience Letters, 2007, 416, 17-21.	2.1	46
41	Sensory Gating in Rats: Lack of Correlation Between Auditory Evoked Potential Gating and Prepulse Inhibition. Schizophrenia Bulletin, 1999, 25, 777-788.	4.3	44
42	Peri-ictal network dynamics of spike-wave discharges: Phase and spectral characteristics. Experimental Neurology, 2013, 239, 235-247.	4.1	44
43	Effect of systemic and intracortical administration of phenytoin in two genetic models of absence epilepsy. British Journal of Pharmacology, 2006, 148, 1076-1082.	5.4	43
44	Metabotropic glutamate receptors in the thalamocortical network: Strategic targets for the treatment of absence epilepsy. Epilepsia, 2011, 52, 1211-1222.	5.1	43
45	Endogenous rhythm of absence epilepsy: Relationship with general motor activity and sleepâ€“wake states. Epilepsy Research, 2011, 93, 120-127.	1.6	42
46	Thalamic stimulation in absence epilepsy. Epilepsy Research, 2013, 106, 136-145.	1.6	42
47	The Effect of Generalized Absence Seizures on the Progression of Kindling in the Rat. Epilepsia, 2007, 48, 150-156.	5.1	41
48	Amygdala Kindling in the WAG/Rij Rat Model of Absence Epilepsy. Epilepsia, 2006, 47, 33-40.	5.1	40
49	Timeâ€“frequency analysis of spike-wave discharges using a modified wavelet transform. Journal of Neuroscience Methods, 2006, 154, 80-88.	2.5	40
50	Application of adaptive nonlinear Granger causality: Disclosing network changes before and after absence seizure onset in a genetic rat model. Journal of Neuroscience Methods, 2014, 226, 33-41.	2.5	40
51	Effects of neurosteroids on spike-wave discharges in the genetic epileptic WAG/Rij rat. Epilepsy Research, 1999, 33, 23-29.	1.6	38
52	Gas mixtures for anaesthesia and euthanasia in broiler chickens. World's Poultry Science Journal, 2000, 56, 225-234.	3.0	37
53	AMPA and GABAB receptor antagonists and their interaction in rats with a genetic form of absence epilepsy. European Journal of Pharmacology, 2001, 430, 251-259.	3.5	37
54	Targeting metabotropic glutamate receptors in the treatment of epilepsy: rationale and current status. Expert Opinion on Therapeutic Targets, 2019, 23, 341-351.	3.4	37

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55	Stress, glucocorticoids and absences in a genetic epilepsy model. Hormones and Behavior, 2012, 61, 706-710.	2.1	36
56	Modulation of thalamocortical oscillations by TRIP8b, an auxiliary subunit for HCN channels. Brain Structure and Function, 2018, 223, 1537-1564.	2.3	36
57	Cortical and limbic excitability in rats with absence epilepsy. Epilepsy Research, 2004, 62, 189-198.	1.6	35
58	Cognition and Vigilance: Differential Effects of Diazepam and Buspirone on Memory and Psychomotor Performance. Neuropsychobiology, 1992, 26, 146-150.	1.9	34
59	NMDA-NR1 and AMPA-GluR4 receptor subunit immunoreactivities in the absence epileptic WAG/Rij rat. Epilepsy Research, 2006, 69, 119-128.	1.6	32
60	Genetically epileptic rats show a pronounced intermediate stage of sleep. Physiology and Behavior, 1990, 47, 213-215.	2.1	31
61	Morphometric Golgi study of cortical locations in WAG/Rij rats: the cortical focus theory. Neuroscience Research, 2005, 51, 119-128.	1.9	30
62	Antiâ€absence activity of mGlu1 and mGlu5 receptor enhancers and their interaction with a GABA reuptake inhibitor: Effect of local infusions in the somatosensory cortex and thalamus. Epilepsia, 2015, 56, 1141-1151.	5.1	30
63	Electroencephalographic Characterization of Spikeâ€Wave Discharges in Cortex and Thalamus in WAG/Rij Rats. Epilepsia, 2007, 48, 2296-2311.	5.1	28
64	Cytokines and Absence Seizures in a Genetic Rat Model. Neurophysiology, 2012, 43, 478-486.	0.3	28
65	Termination of ongoing spike-wave discharges investigated by corticoâ€“thalamic network analyses. Neurobiology of Disease, 2014, 70, 127-137.	4.4	28
66	Mixed forms of epilepsy in a subpopulation of WAG/Rij rats. Epilepsy and Behavior, 2004, 5, 655-661.	1.7	27
67	Reduction of adrenergic neurotransmission with clonidine aggravates spike-wave seizures and alters activity in the cortex and the thalamus in WAG/Rij rats. Brain Research Bulletin, 2005, 64, 533-540.	3.0	26
68	Modeling spike-wave discharges by a complex network of neuronal oscillators. Neural Networks, 2018, 98, 271-282.	5.9	26
69	Establishing Drug Effects on Electrocorticographic Activity in a Genetic Absence Epilepsy Model: Advances and Pitfalls. Frontiers in Pharmacology, 2020, 11, 395.	3.5	26
70	Inhibition errors in borderline personality disorder with psychotic-like symptoms. Progress in Neuro-Psychopharmacology and Biological Psychiatry, 2008, 32, 267-273.	4.8	25
71	The role of the environment on the development of spike-wave discharges in two strains of rats. Physiology and Behavior, 2005, 84, 379-386.	2.1	24
72	Circadian Rhythms and Epilepsy: A Suitable Case for Absence Epilepsy. Frontiers in Neurology, 2020, 11, 245.	2.4	24

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73	P50 Gating is Not Affected by Selective Attention. Journal of Psychophysiology, 2003, 17, 23-29.	0.7	24
74	Effects of Diazepam and Buspirone on Reaction Time of Saccadic Eye Movements. Neuropsychobiology, 1995, 32, 156-160.	1.9	22
75	Finasteride inhibits the progesterone-induced spike-wave discharges in a genetic model of absence epilepsy. Pharmacology Biochemistry and Behavior, 2003, 75, 889-894.	2.9	22
76	The effects of vigabatrin on type II spike wave discharges in rats. Neuroscience Letters, 2003, 338, 177-180.	2.1	22
77	Modulation of Hyperpolarization-Activated Inward Current and Thalamic Activity Modes by Different Cyclic Nucleotides. Frontiers in Cellular Neuroscience, 2018, 12, 369.	3.7	22
78	The effect of acupuncture on mood and working memory in patients with depression and schizophrenia. Journal of Integrative Medicine, 2015, 13, 380-390.	3.1	21
79	The prevention of behavioral consequences of idiopathic generalized epilepsy: Evidence from rodent models. Neuroscience Letters, 2011, 497, 177-184.	2.1	19
80	Effects of the Tranquillizer Diazepam and the Stimulant Methylphenidate on Alertness and Memory. Neuropsychobiology, 1997, 36, 42-48.	1.9	18
81	On the relationship between anticipatory behaviour in a Pavlovian paradigm and Pavlovian-to-Instrumental Transfer in rats (Rattus norvegicus). Behavioural Brain Research, 2004, 153, 397-408.	2.2	18
82	The role of ovarian steroid hormones in the regulation of basal and stress induced absence seizures. Journal of Steroid Biochemistry and Molecular Biology, 2007, 104, 281-288.	2.5	18
83	Unilateral and Bilateral Cortical Resection: Effects on Spike-Wave Discharges in a Genetic Absence Epilepsy Model. PLoS ONE, 2015, 10, e0133594.	2.5	18
84	Neural correlates of sensory gating in the rat: decreased Fos induction in the lateral septum. Brain Research Bulletin, 2001, 54, 145-151.	3.0	17
85	Metabotropic glutamate receptors as drug targets for the treatment of absence epilepsy. Current Opinion in Pharmacology, 2018, 38, 43-50.	3.5	17
86	Can absence seizures be predicted by vigilance states?: Advanced analysis of sleepâ€“wake states and spikeâ€“wave discharges' occurrence in rats. Epilepsy and Behavior, 2019, 96, 200-209.	1.7	17
87	The Brain Network in a Model of Thalamocortical Dysrhythmia. Brain Connectivity, 2019, 9, 273-284.	1.7	17
88	The Î±2Î´ Subunit and Absence Epilepsy: Beyond Calcium Channels?. Current Neuropharmacology, 2017, 15, 918-925.	2.9	17
89	Absence seizures during pregnancy in WAG/Rij rats. Physiology and Behavior, 2004, 81, 623-627.	2.1	15
90	Timing of high-frequency cortical stimulation in a genetic absence model. Neuroscience, 2016, 324, 191-201.	2.3	15

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91	Does arousal interfere with operant conditioning of spike-wave discharges in genetic epileptic rats?. Epilepsy Research, 2010, 90, 75-82.	1.6	14
92	Endocannabinoid system protects against cryptogenic seizures. Pharmacological Reports, 2011, 63, 165-168.	3.3	14
93	A network approach to investigate the bi-hemispheric synchrony in absence epilepsy. Clinical Neurophysiology, 2019, 130, 1611-1619.	1.5	14
94	Is There Such a Thing as â€œGeneralizedâ€•Epilepsy?. Advances in Experimental Medicine and Biology, 2014, 813, 81-91.	1.6	14
95	Cholinergic stimulation of the nucleus basalis of Meynert and reticular thalamic nucleus affects spike-and-wave discharges in WAG/Rij rats. Neuroscience Letters, 2009, 463, 249-253.	2.1	13
96	Internal desynchronization facilitates seizures. Epilepsia, 2012, 53, 1511-1518.	5.1	13
97	Altered SWD stopping mechanism in WAG/Rij rats subchronically treated with the cannabinoid agonist R(+)WIN55,212-2. Epilepsy and Behavior, 2020, 102, 106722.	1.7	13
98	Simulation of sleep spindles and spike and wave discharges using a novel method for the calculation of field potentials in rats. Journal of Neuroscience Methods, 2007, 164, 161-176.	2.5	12
99	Does antiepileptogenesis affects sleep in genetic epileptic rats?. International Journal of Psychophysiology, 2012, 85, 49-54.	1.0	11
100	The effects of lamotrigine and ethosuximide on seizure frequency, neuronal loss, and astrogliosis in a model of temporal-lobe epilepsy. Brain Research, 2019, 1712, 1-6.	2.2	11
101	Experimental Treatment Options in Absence Epilepsy. Current Pharmaceutical Design, 2018, 23, 5577-5592.	1.9	11
102	Pharmacological activation of mGlu5 receptors with the positive allosteric modulator VU0360172, modulates thalamic GABAergic transmission. Neuropharmacology, 2020, 178, 108240.	4.1	10
103	The role of hippocampal theta activity in sensory gating in the rat. Physiology and Behavior, 2001, 74, 257-266.	2.1	9
104	The effects of diazepam on sensory gating in healthy volunteers. Neuroscience Letters, 2003, 341, 65-68.	2.1	9
105	The <scp>MMPI</scp>â€2 in chronic psychiatric illness. Scandinavian Journal of Psychology, 2014, 55, 513-519.	1.5	9
106	Thalamo-Cortical and Thalamo-Thalamic Coupling During Sleep and Wakefulness in Rats. Brain Connectivity, 2022, 12, 650-659.	1.7	9
107	Increased P50 Gating but Intact Prepulse Inhibition in Borderline Personality Disorder. Journal of Neuropsychiatry and Clinical Neurosciences, 2008, 20, 348-356.	1.8	8
108	The anti-absence effect of mGlu5 receptor amplification with VU0360172 is maintained during and after antiepileptogenesis. Pharmacology Biochemistry and Behavior, 2016, 146-147, 50-59.	2.9	8

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109	H1 histamine receptor densities are increased in brain regions of rats with genetically generalized epilepsies. Epilepsy Research, 2016, 127, 135-140.	1.6	8
110	Alterations in the Î±₂Î´ ligand, thrombospondinâ€1, in a rat model of spontaneous absence epilepsy and in patients with idiopathic/genetic generalized epilepsies. Epilepsia, 2017, 58, 1993-2001.	5.1	8
111	Spikeâ€“Wave Discharges and Sleepâ€“Wake States during Circadian Desynchronization: No Effects of Agomelatine upon Re-Entrainment. Neuroscience, 2019, 408, 327-338.	2.3	8
112	Immediate versus late effects of vigabatrin on spike and wave discharges. Epilepsy Research, 2020, 165, 106379.	1.6	8
113	Spatiotemporal mapping of interictal epileptiform discharges in human absence epilepsy: A MEG study. Epilepsy Research, 2016, 119, 67-76.	1.6	7
114	Cannabinoid antagonist SLV326 induces convulsive seizures and changes in the interictal EEG in rats. PLoS ONE, 2017, 12, e0165363.	2.5	7
115	The effect of haloperidol on maternal behavior in WAG/Rij rats and its consequences in the offspring. Acta Neurobiologiae Experimentalis, 2011, 71, 339-47.	0.7	6
116	The role of thalamic nuclei in genetic generalized epilepsies. Epilepsy Research, 2022, 182, 106918.	1.6	6
117	Neonatal exposure to AY-9944 increases typical spike and wave discharges in WAG/Rij and Wistar rats. Epilepsy Research, 2019, 157, 106184.	1.6	5
118	Brain-computer interface for the epileptic seizures prediction and prevention. , 2020, , .		5
119	Maternal behavior in a genetic animal model of absence epilepsy. Acta Neurobiologiae Experimentalis, 2008, 68, 502-8.	0.7	5
120	Early onset of age-related changes on neural processing in rats. Physiology and Behavior, 2011, 103, 134-143.	2.1	4
121	Sleep disorders in patients with depression or schizophrenia: A randomized controlled trial using acupuncture treatment. European Journal of Integrative Medicine, 2016, 8, 789-796.	1.7	4
122	On the Yin and Yang of spike and waves. Journal of Physiology, 2020, 598, 2279-2280.	2.9	4
123	The prefrontal cortex shows widespread decrease in H3 histamine receptor binding densities in rats with genetic generalized epilepsies. Epilepsy Research, 2022, 182, 106921.	1.6	4
124	The effects of methylphenidate and diazepam on the acoustic startle reflex in stand alone and prepulse trials in healthy volunteers. Neuroscience Research Communications, 2002, 31, 45-56.	0.2	3
125	Discrete-Trial SCP and GSR Training and the Interrelationship Between Central and Peripheral Arousal. Journal of Neurotherapy, 2010, 14, 217-228.	0.9	3
126	Group I metabotropic glutamate receptor-mediated long term depression is disrupted in the hippocampus of WAG/Rij rats modelling absence epilepsy. Neuropharmacology, 2021, 196, 108686.	4.1	3

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127	Differences in responses to propofol in elderly and young adult WISW rats. Neuroscience Research Communications, 1997, 21, 125-134.	0.2	2
128	A new method for automatic marking epileptic spike-wave discharges in local field potential signals. Proceedings of SPIE, 2015, , .	0.8	2
129	Evaluation of nonlinear properties of epileptic activity using largest Lyapunov exponent. Proceedings of SPIE, 2016, , .	0.8	2
130	Control of epileptic seizures in WAG/Rij rats by means of brain-computer interface. , 2018, , .		2
131	Effect of appetitive Pavlovian conditioning on the N150 of the amygdalar Auditory Evoked Potential in the rat. Brain Research, 2009, 1267, 57-64.	2.2	1
132	Imaging Neural Excitability and Networks in Genetic Absence Epilepsy Models. , 2019, , 181-192.		1
133	Equivalence of Traditional and Internet-Delivered Testing of Word Fluency Tasks. Jurnal Psikologi Undip, 2021, 20, 35-49.	0.3	1
134	The behavioral pharmacology of sleep. Handbook of Behavioral Neuroscience, 1993, 10, 575-602.	0.0	1
135	M. Steriade: Neuronal Substrates of Sleep and Epilepsy E. F. Pace-Schott, M. Solms, M. Blagrove and S. Harnad (eds): Sleep and Dreaming: Scientific Advances and Reconsiderations. Genes, Brain and Behavior, 2004, 3, 125-126.	2.2	0
136	Biomarkers bij burn-outpatiÃ«nten. Neuropraxis, 2010, 14, 165-173.	0.1	0
137	Photic Stimulation in Rats and What Does It Tell Us About Absence Epilepsy. , 2021, , 237-251.		0
138	Seizure prediction in genetic rat models of absence epilepsy: improved performance through multiple-site cortico-thalamic recordings combined with machine learning. ENeuro, 2021, , ENEURO.0160-21.2021.	1.9	0