

Liste de publications

(ISI web of Knowledge, juin 2023)

h-index : 29, nombre total de citations : 5 814, nombre moyen de citations par article : 89,45.

2023

P50 - Cauli B, Dusart I, Li D. Lactate as a determinant of neuronal excitability, neuroenergetics and beyond. *Neurobiol Dis.* 2023 Jun 16:106207.

2022

P49 - Fayad SL, Ourties G, Le Gac B, Jouffre B, Lamoine S, Fruquière A, Laffray S, Gasmi L, Cauli B, Mallet C, Bourinet E, Bessaih T, Lambert RC, Leresche N. Centrally expressed Cav3.2 T-type calcium channel is critical for the initiation and maintenance of neuropathic pain. *Elife.* 2022 Nov 23;11:e79018.

P48 - Lépine M, Douceau S, Devienne G, Prunotto P, Lenoir S, Regnaud C, Pouette E, Piquet J, Lebouvier L, Hommet Y, Maubert E, Agin V, Lambalez B, Cauli B, Ali C, Vivien D. Parvalbumin interneuron-derived tissue-type plasminogen activator shapes perineuronal net structure. *BMC Biol.* 2022 Oct 5;20(1):218.

2021

P47 - Karagiannis A, Gallopin T, Lacroix A, Plaisier F, Piquet J, Geoffroy H, Hepp R, Naudé J, Le Gac B, Egger R, Lambalez B, Li D, Rossier J, Staiger JF, Imamura H, Seino S, Roeper J, Cauli B. Lactate is an energy substrate for rodent cortical neurons and enhances their firing activity. *Elife.* 2021 Nov 12;10:e71424. **(16 citations)**.

P46 - Devienne G, Picaud S, Cohen I, Piquet J, Tricoire L, Testa D, Di Nardo AA, Rossier J, Cauli B, Lambalez B. Regulation of perineuronal nets in the adult cortex by the activity of the cortical network. *J Neurosci.* 2021 May 27;41(27):5779-90. **(11 citations)**

P45 - Pham C, Héroult K, Oheim M, Maldera S, Vialou V, Cauli B, Li D. Astrocytes respond to a neurotoxic A β fragment with state-dependent Ca²⁺ alteration and multiphasic transmitter release. *Acta Neuropathol Commun.* 2021 Mar 16;9(1):44. **(11 citations)**

2020

P44 - Pham C, Moro DH, Mouffle C, Didienne S, Hepp R, Priefer FW, Mangin JM, Legendre P, Martin C, Luquet S, Cauli B, Li D. Mapping astrocyte activity domains by light sheet imaging and spatio-temporal correlation screening. *Neuroimage.* 2020 Jun 22;220:117069. **(6 citations)**

P43 - Le Douce J, Maugard M, Veran J, Matos M, Jégo P, Vigneron PA, Faivre E, Toussay X, Vandenberghe M, Balbastre Y, Piquet J, Guiot E, Tran NT, Taverna M, Marinesco S, Koyanagi A, Furuya S, Gaudin-Guérif M, Goutal S, Ghetas A, Pruvost A, Bemelmans AP, Gaillard MC, Cambon K, Stimmer L, Sazdovitch V, Duyckaerts C, Knott G, Hérard AS, Delzescaux T, Hantraye P, Brouillet E, Cauli B, Olié SHR, Panatier A, Bonvento G. Impairment of Glycolysis-Derived l-Serine Production in Astrocytes Contributes to Cognitive Deficits in Alzheimer's Disease. *Cell Metab.* 2020 Mar 3;31(3):503-517.e8. **(85 citations)**

2019

P42 - Tricoire L, Drobac E, Tsuzuki K, Gallopin T, Picaud S, Cauli B, Rossier J, Lambalez B. Bioluminescence calcium imaging of network dynamics and their cholinergic modulation in slices of cerebral cortex from male rats. *J Neurosci Res.* 2019 Apr;97(4):414-432. **(3 citations)**

2018

P41 - Piquet J, Toussay X, Hepp R, Lerchundi R, Le Douce J, Faivre É, Guiot E, Bonvento G, Cauli B. Supragranular Pyramidal Cells Exhibit Early Metabolic Alterations in the 3xTg-AD Mouse Model of Alzheimer's Disease. *Front Cell Neurosci.* 2018 Jul 18;12:216. **(8 citations)**

P40 - Devienne G, Le Gac B, Piquet J, Cauli B. Single Cell Multiplex Reverse Transcription Polymerase Chain Reaction After Patch-clamp. *J Vis Exp.* 2018 Jun 20;(136). **(7 citations)**

P39 – Cauli B, Hamel E. Excitation Brain Perfusion and Astrocytes. ent of Sleep Homeostasis. *Trends Neurosci*. 2018 Jul;41(7):409-413. (18 citations)

P38 – Williams RH, Black SW, Thomas AM, Piquet J, **Cauli B**, Kilduff TS. Excitation of Cortical nNOS/NK1R Neurons by Hypocretin 1 Is Independent of Sleep Homeostasis. *Cereb Cortex*. 2019 Mar 1;29(3):1090-1108. (5 citations)

2017

P37 – Williams RH, Vazquez-DeRose J, Thomas AM, Piquet J, **Cauli B**, Kilduff TS. Cortical nNOS/NK1 Receptor Neurons are Regulated by Cholinergic Projections From the Basal Forebrain. *Cereb Cortex*. 2017 May 2:1-21. (6 citations)

2016

P36 – Leger PL, Pansiot J, Besson V, Palmier B, Renolleau S, Baud O, **Cauli B**, Charriaut-Marlangue C. Cyclooxygenase-2-Derived Prostaglandins Mediate Cerebral Microcirculation in a Juvenile Ischemic Rat Model. *Stroke*. 2016 Dec;47(12):3048-3052. (12 citations)

P35 – Barth L, Burkhalter A, Callaway EM, Connors BW, **Cauli B**, DeFelipe J, Feldmeyer D, Freund T, Kawaguchi Y, Kisvárdy Z, Kubota Y, McBain C, Oberlaender M, Rossier J, Rudy B, Staiger JF, Somogyi P, Tamas G, Yuste R.. Multiscale Comment on "Principles of connectivity among morphologically defined cell types in adult neocortex". *Science*. 2016 Sep 9;353(6304):1108. (15 citations, *Commentaire*)

P34 – Fernandez SP, **Cauli B**, Cabezas C, Muzerelle A, Poncer JC, Gaspar P. Multiscale single-cell analysis reveals unique phenotypes of raphe 5-HT neurons projecting to the forebrain. *Brain Struct Funct*. 2016 Nov;221(8):4007-4025. (64 citations)

P33 – Louessard M, Lacroix A, Martineau M, Mondielli G, Montagne A, Lesept F, Lambolez B, **Cauli B**, Mothet JP, Vivien D, Maubert E. Tissue Plasminogen Activator Expression Is Restricted to Subsets of Excitatory Pyramidal Glutamatergic Neurons. *Mol Neurobiol*. 2016 Sep;53(7):5000-12. (27 citations)

2015

P32 – Lacroix A, Toussay X, Anenberg E, Lecrux C, Ferreiros N, Karagiannis A, Plaisier F, Chausson P, Jarlier F, Burgess SA, Hillman EMC, Tegeder I, Murphy TH, Hamel E, **Cauli B**. COX-2-Derived prostaglandin E2 produced by pyramidal neurons contributes to neurovascular coupling in the rodent cerebral cortex. *J. Neurosci*. 2015 Aug 35(34): 11791-11810. (71 citations)

2014

P31 - Nomura S, Bouhadana M, Morel C, Faure P, **Cauli B**, Lambolez B, Hepp R. Noradrenalin and dopamine receptors both control cAMP-PKA signaling throughout the cerebral cortex. *Front Cell Neurosci*. 2014 Aug 21;8:247. (23 citations)

P30 - **Cauli B**, Zhou X, Tricoire L, Toussay X, Staiger JF. Revisiting enigmatic cortical calretinin-expressing interneurons. *Front Neuroanat*. 2014 Jun 24;8:52. (55 citations)

P29 - Pohlkamp T, Dávid C, **Cauli B**, Gallopin T, Bouché E, Karagiannis A, May P, Herz J, Frotscher M, Staiger JF, Bock HH. Characterization and distribution of Reelin-positive interneuron subtypes in the rat barrel cortex. *Cereb Cortex*. 2014 Nov;24(11):3046-58. doi: 10.1093/cercor/bht161. Epub 2013 Jun 26. (29 citations)

2013

P28 - Tricoire L, Kubota Y, **Cauli B**. Cortical NO interneurons: from embryogenesis to functions. *Front Neural Circuits*. 2013 Jun 3;7:105. doi: 10.3389/fncir.2013.00105. eCollection 2013. (3 citations, *Editorial*)

P27 - Cabezas C, Irinopoulou T, **Cauli B**, Poncer JC. Molecular and functional characterization of GAD67-expressing, newborn granule cells in mouse dentate gyrus. *Front Neural Circuits*. 2013 Apr 2;7:60. (23 citations)

P26 - Battaglia, Karagiannis A, Gallopin T, Gutch HW, **Cauli B**. Beyond the frontiers of neuronal types. *Front Neural circuits*. 2013 Feb 7;7:13 (38 citations)

P25 – DeFelipe J, López-Cruz PL, Benavides-Piccione R, Bielza C, Larrañaga P, Anderson S, Burkhalter A, **Cauli B**, Fairén A, Feldmeyer D, Fishell G, Fitzpatrick D, Freund TF, González-Burgos G, Hestrin S, Hill S, Hof PR, Huang J, Jones EG, Kawaguchi Y, Kisvárdy Z, Kubota Y, Lewis DA, Marín O, Markram H, McBain CJ, Meyer HS, Monyer H, Nelson SB, Rockland K, Rossier J, Rubenstein JLR, Rudy B, Scanziani M, Shepherd GM, Sherwood CC, Staiger JF, Tamás G, Thomson A, Wang Y, Yuste R, Ascoli GA. New Insights in the Classification and Nomenclature of Cortical GABAergic Interneurons *Nat Rev Neurosci*. 2013 Mar;14(3):202-16. (520 citations)

2012

P24 - Szabo A, Somogyi J, **Cauli B**, Lambolez B, Somogyi P, Lamsa KP. Calcium-permeable AMPA receptors provide a common mechanism for LTP in glutamatergic synapses of distinct hippocampal interneuron types. *J. Neurosci.* 2012 May 9;32(19):6511-6. (57 citations)

2011

P23 - Lecrux C, Toussay X, Kocharyan A, Fernandes P, Lévesque M, Plaisier F, **Cauli B**, Hamel E. Pyramidal neurons are "neurogenic hubs" in the neurovascular coupling response to whisker stimulation. *J. Neurosci.* 2011 Jul 6;31(27):9836-47. (123 citations, sélectionné pour la rubrique "This week in the journal")

P22 - McCaslin AF, Chen BR, Radosevich AJ, **Cauli B**, Hillman EM. In vivo 3D morphology of astrocyte-vasculature interactions in the somatosensory cortex: implications for neurovascular coupling. *J Cereb Blood Flow Metab.* 2011 Mar;31(3):795-806. (107 citations, délectionné pour la rubrique "Feature article" et pour la couverture du journal)

P21 - Kilduff TS, **Cauli B**, Gerashchenko D. Activation of cortical interneurons during sleep: an anatomical link to homeostatic sleep regulation? *Trends Neurosci.* 2011 Jan;34(1):10-9. (63 citations)

P20 - Hu E, Demmou L, **Cauli B**, Gallopin T, Geoffroy H, Harris-Warrick RM, Paupardin-Tritsch D, Lambolez B, Vincent P, Hepp R. VIP, CRF, and PACAP Act at Distinct Receptors to Elicit Different cAMP/PKA Dynamics in the Neocortex. *Cereb Cortex.* 2011 Mar;21(3):708-18. (27 citations)

2010

P19 - **Cauli B**, Hamel E. Revisiting the role of neurons in neurovascular coupling. *Front Neuroenergetics.* 2010 Jun 23;2:9. (163 citations)

P18 - Tricoire L, Pelkey KA, Daw MI, Sousa VH, Miyoshi G, Jeffries B, **Cauli B**, Fishell G, McBain CJ. Common origins of hippocampal Ivy and nitric oxide synthase expressing neurogliaform cells. *J Neurosci.* 2010 Feb 10;30(6):2165-76. (115 citations)

2009

P17 - Karagiannis A, Gallopin T, David C, Battaglia D, Geoffroy H, Rossier J, Hillman EMC, Staiger JF, **Cauli B**. Classification of NPY-expressing neocortical interneurons. *J Neurosci.* 2009 Mar 18;29(11):3642-59. (179 citations)

P16 - Andjelic S, Gallopin T, **Cauli B**, Hill EL, Roux L, Badr S, Hu E, Tamás G, Lambolez B. Glutamatergic Nonpyramidal Neurons From Neocortical Layer VI and Their Comparison With Pyramidal and Spiny Stellate Neurons. *J. Neurophysiol.* 2009 Feb;101(2):641-54. (47 citations)

2008

P15 - Petilla Interneuron Nomenclature Group, Ascoli GA, Alonso-Nanclares L, Anderson SA, Barrionuevo G, Benavides-Piccione R, Burkhalter A, Buzsáki G, **Cauli B**, Defelipe J, Fairén A, Feldmeyer D, Fishell G, Fregnac Y, Freund TF, Gardner D, Gardner EP, Goldberg JH, Helmstaedter M, Hestrin S, Karube F, Kisvárdy ZF, Lambolez B, Lewis DA, Marin O, Markram H, Muñoz A, Packer A, Petersen CC, Rockland KS, Rossier J, Rudy B, Somogyi P, Staiger JF, Tamas G, Thomson AM, Toledo-Rodriguez M, Wang Y, West DC, Yuste R. Petilla terminology: nomenclature of features of GABAergic interneurons of the cerebral cortex. *Nat Rev Neurosci.* 2008 Jul;9(7):557-68. (1023 citations)

2007

P14 - Hill EL, Gallopin T, Ferezou I, **Cauli B**, Rossier J, Schweitzer P, Lambolez B. Functional CB1 receptors are broadly expressed in neocortical GABAergic and glutamatergic neurons. *J Neurophysiol.* 2007 Apr;97(4):2580-9. (123 citations)

P13 - Ferezou I, Hill EL, **Cauli B**, Gibelin N, Kaneko T, Rossier J, Lambolez B. Extensive Overlap of μ -Opioid and Nicotinic Sensitivity in Cortical Interneurons. *Cereb Cortex.* 2007 Aug;17(8):1948-57. (51 citations)

2006

P12 - Rancillac A, Rossier J, Guille M, Tong XK, Geoffroy H, Amatore C, Arbault S, Hamel E, **Cauli B**. Glutamatergic Control of Microvascular Tone by Distinct GABA Neurons in the Cerebellum. *J Neurosci.* 2006 Jun 28;26(26):6997-7006. (102 citations, sélectionné pour la couverture du journal).

P11 - Amatore C, Arbault S, Bouret Y, **Cauli B**, Guille M, Rancillac A, Rossier J. Nitric oxide release during evoked neuronal activity in cerebellum slices: detection with platinized carbon-fiber microelectrodes. *Chemphyschem.* 2006 Jan 16;7(1):181-7. (58 citations)

2005

- P10 - Gallopin T, Luppi PH, **Cauli B**, Urade Y, Rossier J, Hayaishi O, Lambolez B, and Fort P. The endogenous somnogen adenosine excites a subset of sleep-promoting neurons via A2A receptors in the ventrolateral preoptic nucleus. *Neuroscience*. 2005;134(4):1377-90. **(146 citations)**
- P9 - Price C, **Cauli B**, Kovacs E, Kulik A, Lambolez B, Shigemoto R, and Marco Capogna M. Neurogliaform neurons form a novel inhibitory network in the hippocampal CA1 area. *J Neurosci*. 2005 Jul 20;25(29):6775-86. **(177 citations)**

2004

- P8 - **Cauli B**, Tong XK, Rancillac A, Serluca N, Lambolez B, Rossier J, Hamel E. Cortical GABA interneurons in neurovascular coupling: relays for subcortical vasoactive pathways. *J Neurosci*. 2004 Oct 13;24(41):8940-9. **(419 citations, sélectionné pour la rubrique "This week in the journal")**.

2003

- P7 - Thoby-Brisson M, **Cauli B**, Champagnat J, Fortin G, Katz DM. Expression of functional tyrosine kinase B receptors by rhythmically active respiratory neurons in the pre-Botzinger complex of neonatal mice. *J Neurosci*. 2003 Aug 20;23(20):7685-9. **(79 citations)**

2002

- P6 - Ferezou I, **Cauli B**, Hill EL, Rossier J, Hamel E, Lambolez B. 5-HT₃ receptors mediate serotonergic fast synaptic excitation of neocortical vasoactive intestinal peptide/cholecystokinin interneurons. *J Neurosci*. 2002 Sep 1;22(17):7389-97. **(181 citations)**

2000

- P5 - **Cauli B**, Porter JT, Tsuzuki K, Lambolez B, Rossier J, Quenet B, Audinat E. Classification of fusiform neocortical interneurons based on unsupervised clustering. *Proc Natl Acad Sci U S A*. 2000 May 23;97(11):6144-9. **(255 citations)**
- P4 - Gallopin T, Fort P, Eggermann E, **Cauli B**, Luppi PH, Rossier J, Audinat E, Muhlethaler M, Serafin M. Identification of sleep-promoting neurons in vitro. *Nature*. 2000 Apr 27;404(6781):992-5. **(352 citations)**

1999

- P3 - Porter JT, **Cauli B**, Tsuzuki K, Lambolez B, Rossier J, Audinat E. Selective excitation of subtypes of neocortical interneurons by nicotinic receptors. *J Neurosci*. 1999 Jul 1;19(13):5228-35. **(216 citations)**

1998

- P2 - Porter JT, **Cauli B**, Staiger JF, Lambolez B, Rossier J, Audinat E. Properties of bipolar VIPergic interneurons and their excitation by pyramidal neurons in the rat neocortex. *Eur J Neurosci*. 1998 Dec;10(12):3617-28. **(125 citations)**

1997

- P1 - **Cauli B**, Audinat E, Lambolez B, Angulo MC, Ropert N, Tsuzuki K, Hestrin S, Rossier J. Molecular and physiological diversity of cortical nonpyramidal cells. *J Neurosci*. 1997 May 15;17(10):3894-906. **(559 citations)**