



Publications 2009

	Authors	Title	Publication	Year
1.	Bianchi V., Farisello P., Baldelli P., Meskenaite V., Vecellio M., Mühlemann S., Lipp H.P., Bonanno G., Benfenati F., Toniolo D., D'Adamo P.	Cognitive impairment in Gdi1 deficient mice is associated with altered synaptic vesicle pools and short-term synaptic plasticity, and can be corrected by appropriate learning training	Hum. Mol. Genetics, 2009 18:105-17.	2009
2.	Dal Maschio, M., Canato, M., Cipullo, M., Pozzato G., Reggiani C.	Biophysical effects of high frequency electrical field (4-64 MHz) on muscle fibers in culture.	Basic and applied myology; 19:49-56, 2009.	2009
3.	Chen Y, Kun Z, Wang R, Liu Y, Kwak Y-D, Ma T, Thompson R.C, Zhao Y, Luo Z, Gasparini L, Xu H, Liao F-F	Antidiabetic drug metformin (Glucophage) increases biogenesis of Alzheimer's amyloid peptides via upregulating BACE1 transcription	Proc.Natl.Acad. Sci. USA, (2009) 106, 3907-3912	2009
4.	Contestabile, A. Benfenati, F. and Gasparini, L.	Communication breaks-Down: from neurodevelopment defects to cognitive disabilities in Down Syndrome	Prog Neurobiology, in press	2009
5.	K. Dzirasa, L. M. Santos, S. Ribeiro, J. Stapleton, R. R. Gainetdinov, M. G. Caron, M. A. L. Nicolelis.	Persistent hyperdopaminergia decreases hippocampal theta oscillation frequencies during quiet waking and REM sleep	PLOS One, 2009 [e5238]	2009
6.	Fellin T.	Communication between neurons and astrocytes: relevance to the modulation of synaptic and network activity	Journal of Neurochemistry (2009) 108:533-544.	2009
7.	Tucci V and Plazzi G.	Cataplexy an affair of pleasure or an unpleasant affair?	Neuroscience Letter 2009; 450:90-1	2009
8.	L. Berdondini, P. Massobrio, M. Chiappalone, M. Tedesco, K. Imfeld, A. Maccione, M. Koudelka-Hep and S. Martinoia.	Extracellular recordings from high density microelectrode arrays coupled to dissociated cortical neuronal cultures.	Journal of Neuroscience Methods 2009 vol 177, pp 386-396.	2009
9.	Achilli V, Facer VB, Williams H, Banks G, AlQatari M, Chia R, Tucci V, Groves M, Nickols C, Seburn K, Kendall R, Cader M, Talbot K, Minnen J, Burgess R, Brandner S, Martin J, Koltzenburg M, Greensmith L, Nolan PM, and Fisher EMC.	An ENU-induced mutation in mouse glycyl-tRNA synthetase (GARS) causes peripheral sensory and motor phenotypes creating a model of Charcot-Marie-Tooth type 2D peripheral neuropathy.	Disease Models & Mechanisms 2009;2(7-8):359-73.	2009
10.	Mirko Messa, Claudio Canale, Emanuele Marconi, Marco Salerno, Roberto Cingolani, Fabio Benfenati	Growth cone three-dimensional morphology is modified by distinct micropatterned adhesion substrates.	IEEE Trans Nanobioscience, Apr 2009	2009
11.	Axel Blau, Tanja Neumann, Christiane Ziegler and Fabio Benfenati	Replica-molded poly(dimethylsiloxane) culture vessel lids attenuate osmotic drift in long-term cell culturing	J. Biosciences. 2009, 34: 59-69, 2009	2009

	Authors	Title	Publication	Year
12.	Vara H., Onofri F., Benfenati F., Sassoè-Pognetto M., and Giustetto M.	ERK activation in presynaptic varicosities modulates post-tetanic potentiation in the CA3 region of the hippocampus through synapsin I.	Proc. Natl. Acad. Sci. USA, 106: 9872-7.	2009
13.	Hoffmann K., Sivukhina E., Potschka H., Schachner M., Löscher W., Dityatev A.	Retarded kindling progression in mice deficient in the extracellular matrix glycoprotein tenascin-R.	Epilepsia, 2009; 50: 859-69	2009
14.	Maccione, A., Gandolfo, M., Massobrio, P. Novellino, A., Martinoia, S. and Chiappalone. M	A novel algorithm for precise identification of spikes in extracellularly recorded neuronal signals	Journal of Neuroscience Methods 2009, 177:241-9.	2009
15.	Oleksandr Chernyavskiy, Luca Vannucci, Paolo Bianchini, Francesco Difato, Mustafa Sajeh, and Lucie Kubínová	Imaging of mouse experimental melanoma in vivo and ex vivo by combination of confocal and nonlinear microscopy	Microscopy Research and Technique. 2009 72, 411-23.	2009
16.	Sotnikova T.D., Caron, M.G. and Gainetdinov R.R.	Trace amine associated receptors (TAARs) as emerging therapeutic targets.	Mol Pharmacol. 2009. 76, 229-35.	2009
17.	Beaulieu, J.M, Gainetdinov, R., Caron, M.G.	Akt/GSK3 Signaling in the action of psychotropic drugs.	Annual. Review. Pharmacol Toxicol. 2009; 49:327-47.	2009
18.	de Castro BM, Pereira GS, Magalhães V, Rossato JI, De Jaeger X, Martins-Silva C, Leles B, Lima P, Gomez MV, Gainetdinov RR, Caron MG, Izquierdo I, Cammarota M, Prado VF, Prado MA.	Reduced expression of the vesicular acetylcholine transporter causes learning deficits in mice.	Genes Brain Behav. 2009; 8:23-35	2009
19.	Ghisi, V., Ramsey, A.J., Masri, B., Gainetdinov, R., Caron, M. and Salahpuor, A	Reduced D2-mediated signalling activity and trans-synaptic upregulation of D1 and D2 dopamine receptors in mice overexpressing the dopamine transporter.	Cellular Signalling 21: 87-94, 2009.	2009
20.	Ronzitti E, Vicidomini G, Caorsi V, Diaspro A.	Annular pupil filter under shot-noise condition for linear and non linear microscopy.	Opt Express. 2009; 17:6867-80.	2009
21.	Mapelli L, Rossi P, Nieuws T, D'Angelo E.	Tonic activation of GABA-B receptors reduces release probability at inhibitory connections in the cerebellar glomerulus	J Neurophysiol. 2009 101, 3089-99.	2009
22.	Cella, F., Lavagnino, Z and Diaspro, A	Non-linear effects and role of scattering in multiphoton imaging of thick and biological samples	Proc. of SPIE, 2009; 7183: 718324-7.	2009
23.	Bianchini P, Diaspro, A.	SHIM and TPDM: getting more information from non linear excitation.	Proc. of SPIE, 2009, 7183: 718335-1-4.	2009
24.	Pasquale, V., Chiappalone, M., Benfenati, F and Martinoia, S.	A novel algorithm for burst and network burst detection.	Proceedings of the 4th International IEEE EMBS Conference on Neural Engineering. Antalya, Turkey, April 29 - May 2, 2009	2009

## Publications 2008

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25.	Maccione, A. Imfeld K , Gandolfo M., Tedesco M, Koudelka-Hep M, Martinoia S., Benfenati F. and Berdondini, L.	Imaging extracellular neuronal signaling on high resolution microelectrode arrays (MEAs)	Proceedings of the 4th International IEEE EMBS Conference on Neural Engineering. Antalya, Turkey, April 29 - May 2, 2009	2009
26.	D'Ascenzo M., Podda M.V., Fellin T., Azzena G.B., Haydon P.G., Grassi C.	Activation of mGluR5 induces spike afterdepolarization and enhanced excitability in medium spiny neurons of the nucleus accumbens by modulating persistent Na <sup>+</sup> currents"	Journal of Physiology, 587: 3233-50.	2009
27.	Dityatev A., Fellin T.	Extracellular matrix in plasticity and epileptogenesis	Neuron Glia Biology, 5:1-13	2009
28.	Halassa M., Florian C., Fellin T., Munoz J.R., Lee S.Y., Abel T., Haydon P.G., Frank M.	Astrocytic adenosine controls sleep homeostasis and cognitive consequences of sleep loss	Neuron, 61:213-219.	2009
29.	Jacob, T.C, Wan, Q., Vithlani, M., Saliba, R. S., Succol, F., Pangalos, M. N. and Moss, S. J.	"GABAA receptor membrane trafficking regulates spine maturity"	PNAS 106: 12500-5.	2009
30.	Palazzolo, I., Stack,C., Kong,L., Musaro A., Adachi,H., Katsuno,M, Sobue,G Taylor, JP, Sumner, C., Fischbeck, K., and Pennuto M.	"Overexpression of IGF-1 in Muscle Attenuates Disease in a Mouse Model of Spinal and Bulbar Muscular Atrophy	Neuron, 63: 316-28.	2009
32.	Zullo, L., Sumbre, G., Agnisola C., Flash, T., Hochner, B.	Non-somatotopic organization of the higher motor centers in octopus	Current Biology,19. 1632-1636	2009
33.	Fellin T., Halassa M., Terunuma M., Succol F., Takano H., Frank M.G., Moss S.J., Haydon P.G.	Endogenous non neuronal modulators of synaptic transmission control cortical slow oscillations in vivo	Proc. Natl. Acad. Sci. USA 106, 15037-15042.	2009
34.	Halassa M., Fellin T., Haydon P.G.	Tripartite synapse: roles of astrocytic purines in the control of synaptic physiology and behavior"	Neuropharmacology. 57, 343-6.	2009
35.	V. Sousa, S Bellani, M. Gianandrea, M. Yousuf, F. Valtorta, J. Meldolesi and E. Chiaregatti.	"Alpha-synuclein and its A30P mutant affect actin cytoskeletal structure and dynamics".	Molecular Biology of the Cell, 20:3725-3739, 2009.	2009
36.	Scattoni M.L. Gasparini L., Alleva E., Goedert M., Calamandrei G., and Spillantini M.G.	Neonatal ultrasonic vocalizations as early markers of pathology in P301S tau transgenic mice.	Manuscript under revision, July 2009.	2009
37.	Novellino A., Chiappalone M., Maccione A., Martinoia S	Neural Signal Manager: a collection of classical and innovative tools for multichannel spike train analysis.	International Journal of Adaptive Control and Signal Processing, DOI: 10.1002/acs.1076, (2009).	2009
38.	Berdondini L., Imfeld K., Maccione A., Tedesco M., Neukom S., Koudelka-Hep M. and Martinoia S.,	Active pixel sensor array for high spatio-temporal resolution electrophysiological recordings from single cell to large scale neuronal networks	Lab on a Chip, 9: 2644-51.	2009

	Authors	Title	Publication	Year
39.	Blau, A., Murr, A., Trelenkamp, S., Dautermann, C., Wolff, S., Heuschkel, M., Wuesten, J., Ziegler, C., and Benfenati, F.	Prototyping all-polymer bioelectrical signal transducers".	Proceedings of the World Congress 2009 on Medical Physics and Biomedical Engineering. Munich, Sept. 7-12 2009.	2009
40.	Chiappalone M., Casagrande S. Tedesco M., Valtorta F., Baldelli P., Martinoia S., Benfenati F.	Opposite changes in glutamatergic and GABAergic transmission underlie the diffuse hyperexcitability of Synapsin I-deficient cortical networks.	Cerebral Cortex, 19: 1422-1439, 2009.	2009
41.	G. Fattorini, C. Verderio, M. Melone, S. Giovedi, F. Benfenati, M. Matteoli, and F. Conti.	VGLUT1 and VGAT are sorted to the same populations of synaptic vesicles in subsets of cortical axon terminals.	J. Neurochem., 110: 1538-46.	2009
42.	Raehal, K.M., Schmid C.L., Medvedev I. O., Gainetdinov, R. R, Premon, t R. T., Bohn, L. M.	Morphine-Induced Physiological and Behavioral Responses in Mice Lacking G Protein-Coupled Receptor Kinase 6.	Drug and Alcohol Dependence 104: 187-96.	2009
43.	Dzirasa, K., Ramsey, A.J., Takahashi, D.Y., Stapleton, J., Potes J.M., Williams J.K., Gainetdinov, R. , Sameshima, K., Caron, M. G and Nicolelis M..	Hyperdopaminergia and NMDA receptor hypofunction disrupt neuronal phase signaling.	J. Neurosci. 29, 8215-24.	2009
45.	Petrini, E. M, Lu, J., Cognet, L., Lounis, B., Ehlers, M. D and Choquet, D.	Endocytic trafficking and recycling maintain a pool of mobile surface AMPA receptors required for synaptic potentiation.	Neuron 16, 92-105.	2009
46.	Yamada, H., Padilla-Parra, S., Park, S. J., Itoh, T., Chaineau, M., Monaldi, I., Cremona, O., Benfenati, F., De Camilli, P., Coppey-Moisan, M., Tramier, M., Galli, T. and Takei K.	Dynamic interaction of amphiphysin with n-wasp regulates actin assembly.	J. Biol. Chem. Epub PMID 19759398.	2009
47.	Garofalo, M., Nieuw, T., Massobrio, P. and Martinoia, S.	Evaluation of the performances of information theory-based methods and cross-correlation to estimate the functional connectivity in cultured cortical networks.	PLoS One, 4(8): e6482.	2009
48.	Antognazza, M. R., Ghezzi, D., Musitelli, D., Garbugli, M. and Lanzani, G.	A hybrid solid-liquid polymer photodiode for the bioenvironment.	Appl. Phys. Lett. 94, 243501-3.	2009
49.	Xu, T.-X., Sotnikova, T. D., Liang, C., Zhang, J., Jung, J. U., Spealman, R. D., Gainetdinov, R. and Yao, W-D. (2009).	Hyperdopaminergic Tone Erodes Prefrontal LTP via a D2 Receptor-operated Protein Phosphatase Gate.	J. Neurosci. 29,14086-14099.	2009
50.	I. Monaldi, M. Vassalli, A. Bachi, S. Giovedi, E. Millo, F. Valtorta, R. Raiteri, F. Benfenati, A. Fassio	The highly conserved synapsin domain E mediates synapsin dimerization and vesicle clustering	Biochem. J., in press	2009
51.	F. Facchiano, F. Deloye, F. Doussau, S. Beninati, G. Innamorati, A. C. Ashton, Dolly, J. O. Facchiano, A. Luini, A. Poulain, B. Benfenati F.	Transglutaminase 2 participates in the blockade of neurotransmitter release by tetanus toxin	Amino Acids, in press	2009

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52.	Bologna L.L., Nieuw T., Tedesco M, Chiappalone M., Benfenati F. and Martinoia S.	Low-frequency stimulation enhances burst activity in cortical cultures during development.	Neuroscience, in press	2009
53.	L. Bragina, S. Giovedi, P. Barbaresi, F. Benfenati, F. Conti	Molecular dissection of cortical glutamatergic and GABAergic axon terminals and synaptic vesicles reveals inter- and intra-terminal heterogeneity	Neuroscience, in press	2009
54.	F. Doussau, Y. Humeau, F. Benfenati, B. Poulain	A novel form of presynaptic plasticity based on the fast reactivation of release sites switched off during low frequency depression	J. Neurosci., in press	2009
55.	Yamada H, Padilla-Parra S, Park SJ, Itoh T, Chaineau M, Monaldi I, Cremona O, Benfenati F, De Camilli P, Coppey-Moisan M, Tramier M, Galli T, Takei K.	Dynamic interaction of amphiphysin with N-WASP regulates actin assembly	J. Biol. Chem. 284: 34244-34256, 2009.	2009
56.	Fornasiero E., Bonanomi D., Benfenati F.*, Valtorta F.*	The role of synapsins in neuronal development	Cellular and Molecular Life Sciences, in press.	2009
57.	Musazzi, L. Milanese, M. Farisello, P. Zappettini, S. Tardito, D. Barbiero, V. S. Bonifacino, T. Mallei, A. Baldelli, P. Racagni, G. Raiteri, M. Benfenati, F. Bonanno, G. Popoli M	Dampening action of antidepressants on the enhancement of glutamatergic transmission induced by acute stress in prefrontal/frontal cortex.	PLOSone, in press.	2009
58.	Patricia M-J. Lievens, Elena Zanolli, Silvio Garofal, Elio Liboi.	Cell adaptation to activated FGFR3 includes Sprouty4 up regulation to inhibit the receptor-mediated ERKs activation from the endoplasmic reticulum	FEBS Letters 583: 3254–3258	2009
59.	Bottino, E., Massobrio, P., Martinoia, S., Pruzzo, G. and Valle, M.	Low-noise low-power CMOS preamplifier for multisite extracellular neuronal recordings	Microelectronics Journal 40: 1779-1787.	2009
60.	C. Huber, B. Oules, M. Bertoli, M. Chami, M. Fradin, Y. Alanay, L. I. Al-Gazali, M. G.E.M. Ausems, P. Bitoun, D. P. Cavalcanti, A. Krebs, M. Le Merrer, G. Mortier, Y. Shafeghati, A. Superti-Furga, S. P. Robertson, C. Le Goff, A. Onetti Muda, Patrizia Paterlini-Brechot, A. Munnich and V. Cormier-Daire	Identification of CANT1 Mutations in Desbuquois Dysplasia	The American Journal of Human Genetics 85, 706–710	2009
61.	Shahapure, R., Difato, F., Laio, A., Bisson, G., Ercolini, E., Amin, L., Ferrari, E. and Torre, V.	Force generation in lamellipodia is a probabilistic process with fast growth and retraction events.	Biophysical Journal, in press.	2009
62.	Maya Shelly, Byung Kook Lim, Laura Cancedda, Sarah C. Heilshorn, Hongfeng Gao and Mu-ming Poo	Local and Long-Range Reciprocal Regulation of cAMP and cGMP in Axon/ Dendrite Formation	Science, in press	2009

## Book Chapters 2009

	Authors	Title	Publication	Year
1.	Caron, M. G and Gainetdinov, R. R.	Role of Dopamine Transporters in Neuronal Homeostasis.	Chapter in a book. In Iversen, L., Iversen, S. And Bjorklund, A. DOPAMINE Handbook 88-99. Oxford University Press.	2009
2.	Difato F., Ferrari E., Shahapure R., Torre V., and Cojoc, D. (2009).	Optical Tweezers Microscopy: picoNewton forces in cell and molecular biology.	Nanoscopy and Multidimensional Optical Fluorescence Microscopy. Chapter 16, Taylor & Francis Group	2009

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1.	R. Carrillo, E. Ros, S. Tolu, T. Nieus, E. D'Angelo.	Event-driven simulation of cerebellar granule cells.	Biosystems. 94:10-17. 2008	2008
2.	Medini P, Pizzorusso T.	Visual experience and plasticity of the visual cortex: a role for epigenetic mechanisms.	Front Biosci., 13: 3000-3007, 2008	2008
3.	Neumann T, Ziegler C, Blau A.	Multielectrode array recordings reveal physiological diversity of intrinsically photosensitive retinal ganglion cells in the chick embryo	Brain Res. 1207:120-127, 2008.	2008
4.	Gasparini L., Dityatev A.	b-amyloid and glutamate receptors.	Exp. Neurology. 212: 1-4, 2008.	2008
5.	Pasquale V., Massobrio P., Chiappalone M., Bologna L. L., Martinoia S.	Self-organization and Neuronal Avalanches in Networks of Dissociated Cortical Neurons	Neuroscience, 153: 1354-69, 2008	2008
6.	Chiappalone M., Massobrio P. and Martinoia S.	Network plasticity in cortical assemblies.	European J. of Neuroscience 28:221-37,2008	2008
7.	Bergami M, Santi S, Formaggio E, Cagnoli C, Verderio C, Blum R, Berninger B, Matteoli M and Canossa M.	Uptake and recycling of proBDNF for transmitter-induced secretion by cortical astrocytes.	J. Cell Biol., 183:213-21, 2008,	2008
8.	Corradi A., Zanardi A., Giacomini C., Onofri F., Valtorta F., Zoli M., Benfenati F.	Synapsin I and synapsin II null mice display an increased age-dependent cognitive impairment.	J. Cell Sci., 121: 3042-51, 2008.	2008
9.	Ponimaskin E., Dityateva G., Ruonala M.O., Fukata M., Fukata Y., Kobe F., Wouters F.S., Delling M., Brecht D.S., Schachner M., Dityatev A.	Fibroblast Growth Factor-Regulated Palmitoylation of NCAM Determines Neuronal Morphogenesis	J. Neurosci., 28: 8897-907, 2008.	2008
10.	Bergami M, Rimondini R, Santi S, Blum R, Götz M, and Canossa M et al.	Deletion of TrkB in adult progenitors alters newborn neuron integration into hippocampal circuits and increases anxiety-like behavior.	Proc. Natl. Acad. Sci. USA, 105: 15570-5 2008.	2008
11.	Imfeld, K., Neukom, S., Maccione, A., Bornat, Y., Martinoia, S. Farine, PA; Koudelka-Hep, M., and Berdondini L.	Large-Scale, High-Resolution Data Acquisition System for Extracellular Recording of Electrophysiological Activity,	IEEE. Trans Biomed Eng, 55: 2064-73. 2008	2008
12.	Arnaiz-Cot J.J., González J.C., Sobrado M., Baldelli P., Carbone E., Gandía L., García A.G. and Hernández-Guijo J.M	Allosteric modulation of alpha-7 nicotinic receptors selectively depolarizes hippocampal interneurons enhancing spontaneous GABAergic transmission	European Journal Neuroscience 27, 1097-1110	2008
13.	Ghezzi D., Menegon A., Pedrocchi A., Valtorta F., Ferrigno G.	A Micro-Electrode Array device coupled to a laser-based system for the local stimulation of neurons by optical release of glutamate	J. Neuroscience Methods; 175:70-8, 2008	2008
14.	Vianello, M., Bisson, G., Dal Maschio M., Vassanelli, M., Girardi, S., Mucignat C., Fountzoulas, K., Giometto, B.	Increased spontaneous activity of a network of hippocampal neurons in culture caused by suppression of inhibitory potentials mediated by anti-gad antibodies.	Autoimmunity, 41: 66-73. February, 2008	2008

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15.	Vassanelli, S., Bandiera, L., Borgo, M., Cellere G., Santoni, L., Bersani, C., Salamon, M., Zaccolo, M., Lorenzelli, L., Girardi, S., Maschietto, M., Dal Maschio, M., Paccagnella, A.	Space and time-resolved gene expression experiments on cultured mammalian cells by a single-cell electroporation microarray	New Biotechnology 25:55-67 June,2008	2008
16.	A Vinuela, P.J. Hallett, C Reske-Nielsen, M Patterson, TD Sotnikova, MG Caron, RR Gainetdinov and O.Isacson	Implanted reuptake-deficient or wild-type dopaminergic neurons improve ON L-dopa dyskinesias without OFF-dyskinesias in a rat model of Parkinson's disease	Brain 2008 131:3361-79	2008
17.	Imfeld K., Maccione A., Gandolfo M., Martinoia S., Farine P. A., Koudelka-Hep M., Berdondini L.	Real-time signal processing for high-density MEA systems	Int. J. of Adaptive Control and Signal Processing, 20 oct 2008 [Epub].	2008
18.	Vajda I, van Pelt J, Wolters P, Chiappalone M, Martinoia S, van Someren E, and van Ooyen A	Low-frequency stimulation induces stable transitions in stereotypical activity in cortical networks	Biophysical Journal 2008. 94: 5028-39.	2008
19.	Bianchini, P. and Diaspro A.	Three-dimensional (3D) Backward and forward second harmonic generation (SHG) microscopy of biological tissues	J. Biophoton. 1-8 (2008)	2008
20.	Massobrio G., Massobrio P., Martinoia S.,	Modeling CarbonNanoTube-ISFET junction to investigate Electrophysiological Neuronal Activity	Nanoletters, 2008. 8:4433-40	2008
21.	D. Ghezzi, R. M. Vazquez, R. Osellame, F. Valtorta, A. Pedrocchi, G. Della Valle, R. Ramponi, G. Ferrigno, G. Cerullo.	Femtosecond laser microfabrication of an integrated device for optical release and sensing of bioactive compounds	Sensors 2008, 8, 6595-6604. ISSN 1424-8220.	2008
22.	Bonanomi D., Fornasiero E.F., Valdez G., Haleboua S., Benfenati F., Menegon A., Valtorta F.	Identification of a developmentally-regulated pathway of membrane retrieval in neuronal growth cones.	J. Cell Sci., 2008, Nov 15;121(Pt 22):3757-69.	2008
23.	M. Bergami B. Berninger and M. Canossa.	Conditional deletion of TrkB alters adult hippocampal neurogenesis and anxiety-related behavior	Communicative and Integrative Biology 2008, 2:1, 14-16.	2008

#### Books 2008

1	Tucci V, Tucci G. Carocci Editore.	Introduzione alla Genetica Comportamentale.	In PRESS	2008
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#### Book Chapters 2008

1	Cancedda L. and Poo	M-M Synapse Formation and Elimination	Competition and the Role of Activity(New Encyclopedia of Neuroscience, 2008)	2008
2	Tucci V.	Towards the understanding of the function of sleep: new insights from mouse genetics.	In Evolution of sleep: Phylogenetic and functional perspectives. Patrick McNamara, Robert Barton and Charles Nunn (Editors) Cambridge University Press. In PRESS	2008

## Publications 2007

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1.	Santillo M, Secondo A, Seru R, Damiano S, Garbi C, Taverna E, Rosa P, Giovedi S, Benfenati F, Mondola P.	Evidence of calcium- and SNARE-dependent release of CuZn superoxide dismutase from rat pituitary GH3 cells and synaptosomes in response to depolarization	J. Neurochem. 102:679-685, 2007	2007
2.	Bragina L., Candiracci C., Barbaresi P., Giovedi S., Benfenati F., Conti F.	Heterogeneity of glutamatergic and GABAergic release machineries in cerebral cortex.	Neuroscience, 146: 1829-1840, 2007.	2007
3.	Onofri F, Messa M, Matafora V, Bonanno G, Corradi A, Bachi A, Valtorta F, Benfenati F.	Synapsin phosphorylation by SRC tyrosine kinase enhances SRC activity in synaptic vesicles.	J. Biol. Chem., 282: 15754-15767, 2007.	2007
4.	Bonanomi D, Rusconi L, Colombo CA, Benfenati F, Valtorta F.	Synaptophysin I selectively specifies the exocytic pathway of synaptobrevin2/VAMP2.	Biochem J., 404: 525-534, 2007	2007
5.	Benfenati F.	Synaptic plasticity and the neurobiology of learning and memory.	Acta Biomed., 78: 58-66, 2007.	2007
6.	Awizio AK, Onofri F, Benfenati F, Bonaccorso E.	Influence of synapsin I on synaptic vesicles: an analysis by force-volume-mode of the atomic force microscope and dynamic light scattering.	Biophys J., 93: 1051-1060, 2007.	2007
7.	Evergren E., Benfenati F., Shupliakov O.	The synapsin cycle: a view from the synaptic endocytic zone.	J. Neurosci. Res. 85: 2648-2656, 2007	2007
8.	Fiumara F., Milanese C., Corradi A., Giovedi S., Leitinger G., Menegon A., Montarolo P.G., Benfenati F., Ghirardi M.	Synapsin domain A phosphorylation is required for post-tetanic potentiation.	J. Cell Sci. 120: 3228-3237, 2007.	2007
9.	Humeau Y., Doussau F., Popoff M.R., Benfenati F., Poulain B.	Fast changes in the functional status of release sites during short-term plasticity: involvement a frequency-dependent bypass of Rac at Aplysia synapses.	J. Physiol. (London) 583: 983-1004, 2007	2007
10.	Baldelli P., Fassio A., Valtorta F., Benfenati F.	Lack of synapsin I reduces the readily releasable pool of synaptic vesicles at central inhibitory synapses.	J. Neurosci. 27:13520-13531, 2007.	

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1.	Menegon A., Bonanomi D., Albertinazzi C., Lotti F., Ferrari G., Kao H-T., Benfenati F., Baldelli P., Valtorta F.	Protein kinase A-mediated synapsin I phosphorylation is a central modulator of Ca <sup>2+</sup> -dependent synaptic activity.	J. Neurosci., 26: 11670-11681, 2006	2006
2.	Fassio A., Merlo D., Mapelli J., Menegon A., Corradi A., Mete M., Zappettini S., Bonanno G., Valtorta F., D'Angelo E., Benfenati F.	The synapsin domain E accelerates the exo-endocytotic cycle of synaptic vesicles in cerebellar Purkinje cells.	J. Cell Sci., 119: 4257-4268, 2006.	2006
3.	Bonanomi D., Benfenati F., Valtorta F.	Protein sorting in the synaptic vesicle life cycle.	Prog Neurobiol., 80: 177-217, 2006.	2006