

**A Computational Model of Interactions Between Neuronal and Astrocytic Networks: The Role of Astrocytes in the Stability of the Neuronal Firing Rate**

Lenk, K., Satuvuori, E., Lallouette, J., Ladrón-de-Guevara, A., Berry, H. & Hyttinen, J. A. K., 22 Jan 2020, In : *Frontiers in Computational Neuroscience*. 13, 19 p., 92.

Research output: Contribution to journal › Article › Scientific › peer-review

**A constrained HMM-based approach to the estimation of perceptual switching dynamics in pigeons**

Otterpohl, J. R., Emmert-Streib, F. & Pawelzik, K., Jun 2001, In : *Neurocomputing*. 38-40, p. 1495-1501 7 p.

Research output: Contribution to journal › Article › Scientific › peer-review

**Advanced boundary electrode modeling for tES and parallel tES/EEG**

Pursiainen, S., Agsten, B., Wagner, S. & Wolters, C. H., 2017, In : *IEEE Transactions on Neural Systems and Rehabilitation Engineering*. 26, 1, p. 37-44

Research output: Contribution to journal › Article › Scientific › peer-review

**Advances in Human Stem Cell-Derived Neuronal Cell Culturing and Analysis**

Ylä-Outinen, L., Tanskanen, J. M. A., Kapucu, F. E., Hyysalo, A., Hyttinen, J. A. K. & Narkilahti, S., 2019, *In Vitro Neuronal Networks: From Culturing Methods to Neuro-Technological Applications*. Springer New York LLC, p. 299-329 31 p. (Advances in Neurobiology; vol. 22).

Research output: Chapter in Book/Report/Conference proceeding › Chapter › Scientific › peer-review

**Analysis of apoptosis-related genes in patients with clinically isolated syndrome and their association with conversion to multiple sclerosis**

Hagman, S., Kolasa, M., Basnyat, P., Helminen, M., Kähönen, M., Dastidar, P., Lehtimäki, T. & Elovaara, I., 15 Mar 2015, In : *JOURNAL OF NEUROIMMUNOLOGY*. 280, p. 43-48 6 p.

Research output: Contribution to journal › Article › Scientific › peer-review

**A Primal Neural Network for Online Equality-Constrained Quadratic Programming**

Chen, K. & Zhang, Z., 2018, In : *Cognitive Computation*. 10, 2, p. 381-388 8 p.

Research output: Contribution to journal › Article › Scientific › peer-review

**A realistic, accurate and fast source modeling approach for the EEG forward problem**

Miinalainen, T., Rezaei, A., Us, D., Nüßing, A., Engwer, C., Wolters, C. H. & Pursiainen, S., 2019, In : *NeuroImage*. 184, 1, p. 56-67 12 p.

Research output: Contribution to journal › Article › Scientific › peer-review

**Assessment of mutation probabilities of KRAS G12 missense mutants and their long-timescale dynamics by atomistic molecular simulations and Markov state modeling**

Pantsar, T., Rissanen, S., Dauch, D., Laitinen, T., Vattulainen, I. & Poso, A., 10 Sep 2018, In : *PLoS Computational Biology*. 14, 9, e1006458.

Research output: Contribution to journal › Article › Scientific › peer-review

**Assessment of PIV performance in validating CFD models from nasal cavity CBCT scans**

Ormiskangas, J., Valtonen, O., Kivekäs, I., Dean, M., Poe, D., Järnstedt, J., Lekkala, J., Harju, T., Saarenrinne, P. & Rautiainen, M., 1 Nov 2020, In : *Respiratory Physiology and Neurobiology*. 282, 9 p., 103508.

Research output: Contribution to journal › Article › Scientific › peer-review

**Assessment of respiratory effort during sleep with noninvasive techniques**

Tenhunen, M., Hasan, J. & Himanen, S. L., 1 Dec 2015, In : *Sleep Medicine Reviews*. 24, p. 103-104 2 p.

Research output: Contribution to journal › Article › Scientific

**Association between soluble L-selectin and anti-JCV antibodies in natalizumab-treated relapsing-remitting MS patients**

Basnyat, P., Hagman, S., Kolasa, M., Koivisto, K., Verkkoniemi-Ahola, A., Airas, L. & Elovaara, I., 1 Jul 2015, In : *Multiple Sclerosis and Related Disorders*. 4, 4, p. 334-338 5 p.

Research output: Contribution to journal › Article › Scientific › peer-review

**Astrocyte lineage cells are essential for functional neuronal differentiation and synapse maturation in human iPSC-derived neural networks**

Klapper, S. D., Garg, P., Dagar, S., Lenk, K., Gottmann, K. & Nieweg, K., 2019, In : *Glia*. 67, 10, p. 1893-1909 17 p.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Atomistic fingerprint of hyaluronan-CD44 binding**

Vuorio, J., Vattulainen, I. & Martinez-Seara, H., 1 Jul 2017, In : *PLoS Computational Biology*. 13, 7, e1005663.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Autoimmunity-related immunological serum markers and survival in a tertiary care cohort of adult patients with epilepsy**

Nevalainen, O., Auvinen, A., Ansakorpi, H., Raitanen, J. & Isojärvi, J., 1 Nov 2014, In : *EPILEPSY RESEARCH*. 108, 9, p. 1675-1679 5 p.

Research output: Contribution to journal › Article › Scientific › peer-review

**Automatic assessment of the myoclonus severity from videos recorded according to standardized Unified Myoclonus Rating Scale protocol and using human pose and body movement analysis**

Hyppönen, J., Hakala, A., Annala, K., Zhang, H., Peltola, J., Mervaala, E. & Kälviäinen, R., 1 Mar 2020, In : *Seizure*. 76, p. 72-78 7 p.

Research output: Contribution to journal › Article › Scientific › peer-review

**Automatic objective thresholding to detect neuronal action potentials**

Tanskanen, J. M. A., Kapucu, F. E., Välikki, I. & Hyttinen, J. A. K., 29 Aug 2016, *Proceedings of 2016 24th European Signal Processing Conference (EUSIPCO)*. p. 662-666 5 p.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**Building new computational models to support health behavior change and maintenance: new opportunities in behavioral research**

Spruijt-Metz, D., Hekler, E., Saranummi, N., Intille, S., Korhonen, I., Nilsen, W., Rivera, D. E., Spring, B., Michie, S., Asch, D. A., Sanna, A., Salcedo, V. T., Kukakfa, R. & Pavel, M., 17 Sep 2015, In : *Translational Behavioral Medicine*. 5, 3, p. 335-346 12 p.

Research output: Contribution to journal › Article › Scientific › peer-review

**Calcium Assists Dopamine Release by Preventing Aggregation on the Inner Leaflet of Presynaptic Vesicles**

Mokkila, S., Postila, P. A., Rissanen, S., Juhola, H., Vattulainen, I. & Róg, T., 21 Jun 2017, In : *ACS Chemical Neuroscience*. 8, 6, p. 1242-1250 9 p.

Research output: Contribution to journal › Article › Scientific › peer-review

**Cell culture chamber with gas supply for prolonged recording of human neuronal cells on microelectrode array**

Kreutzer, J., Ylä-Outinen, L., Mäki, A., Ristola, M., Narkilahti, S. & Kallio, P., 15 Mar 2017, In : *Journal of Neuroscience Methods*. 280, p. 27-35 9 p.

Research output: Contribution to journal › Article › Scientific › peer-review

**CNN-based edge filtering for object proposals**

Waris, M. A., Iosifidis, A. & Gabbouj, M., 2 Jun 2017, In : *Neurocomputing*. 266, p. 631-640

Research output: Contribution to journal › Article › Scientific › peer-review

**Cognitive load and metacognitive confidence extraction from pupillary response**

Gavas, R. D., Tripathy, S. R., Chatterjee, D. & Sinha, A., 1 Dec 2018, In : *Cognitive Systems Research*. 52, p. 325-334 10 p.

Research output: Contribution to journal › Article › Scientific › peer-review

**Comparison of eye movement filters used in HCI**

Špakov, O., 2012, *Proceedings - ETRA 2012: Eye Tracking Research and Applications Symposium*. p. 281-284 4 p.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

### **Comparison of Feature Selection Techniques in Machine Learning for Anatomical Brain MRI in Dementia**

Tohka, J., Moradi, E., Huttunen, H., Alzheimer's Disease Neuroimaging Initiative & Alzheimer's Disease Neuroimaging Initiative 2, 2016, In : *Neuroinformatics*. 14, 3, p. 279-296 18 p.

Research output: Contribution to journal › Article › Scientific › peer-review

### **Comparison of stapedotomy minus prosthesis, circumferential stapes mobilization, and small fenestra stapedotomy for stapes fixation**

Acar, G. O., Kivekäs, I., Hanna, B. M., Huang, L., Gopen, Q. & Poe, D. S., 2014, In : *OTOLOGY AND NEUROTOLOGY*. 35, 4

Research output: Contribution to journal › Article › Scientific › peer-review

### **Computational modeling of growth in cortical cultures using the NETMORPH simulation tool**

Acimovic, J., Mäki-Marttunen, T. & Linne, M-L., 2010, *Neuroscience 2010, 40th Annual Meeting, San Diego, USA, 13-17 November 2010*. p. 2 p

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

### **Computational study of structural changes in neuronal networks during growth: a model of dissociated neocortical cultures**

Acimovic, J., Mäki-Marttunen, T. & Linne, M-L., 2011, *Twentieth Annual Computational Neuroscience Meeting: CNS\*2011*. Fellous, J-M. & Prinz, A. (eds.). Stockholm: BioMed Central, Vol. 12 (Suppl 1). p. P203 1 p. P203. (Annual Computational Neuroscience Meeting CNS; vol. 12).

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

### **Computational tools for assessing the properties of 2D neural cell cultures**

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Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

### **Concerted regulation of npc2 binding to endosomal/lysosomal membranes by bis(monoacylglycero)phosphate and sphingomyelin**

Enkavi, G., Mikkolainen, H., Güngör, B., Ikonen, E. & Vattulainen, I., 1 Oct 2017, In : *PLoS Computational Biology*. 13, 10, e1005831.

Research output: Contribution to journal › Article › Scientific › peer-review

### **Cortical spreading depression in alpha-synuclein knockout mice**

Pelkonen, A. & Yavich, L., Jan 2012, In : *SYNAPSE*. 66, 1, p. 81-84 4 p.

Research output: Contribution to journal › Article › Scientific › peer-review

### **Cost-effectiveness of decompressive craniectomy in non-traumatic neurological emergencies**

Malmivaara, K., Ohman, J., Kivisaari, R., Hernesniemi, J. & Siironen, J., Mar 2011, In : *European Journal of Neurology*. 18, 3, p. 402-409 8 p.

Research output: Contribution to journal › Article › Scientific › peer-review

### **COX-2 regulates the proliferation of glioma stem like cells**

Sharma, V., Dixit, D., Ghosh, S. & Sen, E., Oct 2011, In : *NEUROCHEMISTRY INTERNATIONAL*. 59, 5, p. 567-571 5 p.

Research output: Contribution to journal › Article › Scientific › peer-review

### **Data-driven study of synchronous population activity in generic spiking neuronal networks: How much do we capture using the minimal model for the considered phenomena?**

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Research output: Other conference contribution › Paper, poster or abstract › Scientific

### **Data-driven study of synchronous population activity in generic spiking neuronal networks: How much do we capture using the minimal model for the considered phenomena?**

Acimovic, J., Teppola, H., Mäki-Marttunen, T. M. & Linne, M-L., 29 Oct 2018, In : *BMC Neuroscience*. 19, Suppl 2, p. 68-69 1 p.

Research output: Contribution to journal › Meeting Abstract › Scientific › peer-review

**Deep audio-visual saliency: Baseline model and data**

Tavakoli, H. R., Borji, A., Kannala, J. & Rahtu, E., 6 Feb 2020, *Proceedings ETRA 2020 Short Papers - ACM Symposium on Eye Tracking Research and Applications, ETRA 2020*. Spencer, S. N. (ed.). ACM, 3

Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

**Defining the anterior nucleus of the thalamus (ANT) as a deep brain stimulation target in refractory epilepsy: Delineation using 3 T MRI and intraoperative microelectrode recording**

Möttönen, T., Katisko, J., Haapasalo, J., Tähtinen, T., Kiekara, T., Kähärä, V., Peltola, J., Öhman, J. & Lehtimäki, K., 2015, In : *NeuroImage: Clinical*. 7, p. 823-829 7 p.

Research output: Contribution to journal > Article > Scientific > peer-review

**Diffusion tensor imaging and disability progression in multiple sclerosis: A 4-year follow-up study**

Kolasa, M., Hakulinen, U., Brander, A., Hagman, S., Dastidar, P., Elovaara, I. & Sumelahti, M-L., Jan 2019, In : *Brain and Behavior*. 9, 1, e01194.

Research output: Contribution to journal > Article > Scientific > peer-review

**Disconnection between periodic leg movements and cortical arousals in spinal cord injury**

Salminen, A. V., Manconi, M., Rimpilä, V., Luoto, T. M., Koskinen, E., Ferri, R., Öhman, J. & Polo, O., 2013, In : *JOURNAL OF CLINICAL SLEEP MEDICINE*. 9, 11, p. 1207-1209 3 p.

Research output: Contribution to journal > Article > Scientific > peer-review

**Disease-associated inflammatory biomarker profiles in blood in different subtypes of multiple sclerosis: Prospective clinical and MRI follow-up study**

Hagman, S., Raunio, M., Rossi, M., Dastidar, P. & Elovaara, I., May 2011, In : *JOURNAL OF NEUROIMMUNOLOGY*. 234, 1-2, p. 141-147 7 p.

Research output: Contribution to journal > Article > Scientific > peer-review

**Distance-based human action recognition using optimized class representations**

Iosifidis, A., Tefas, A. & Pitas, I., 5 Aug 2015, In : *Neurocomputing*. 161, p. 47-55 9 p.

Research output: Contribution to journal > Article > Scientific > peer-review

**DropELM: Fast neural network regularization with Dropout and DropConnect**

Iosifidis, A., Tefas, A. & Pitas, I., 25 Aug 2015, In : *Neurocomputing*. 162, p. 57-66 10 p.

Research output: Contribution to journal > Article > Scientific > peer-review

**Effect of rhodopsin phosphorylation on dark adaptation in mouse rods**

Berry, J., Frederiksen, R., Yao, Y., Nymark, S., Chen, J. & Cornwall, C., 29 Jun 2016, In : *Journal of Neuroscience*. 36, 26, p. 6973-6987 15 p.

Research output: Contribution to journal > Article > Scientific > peer-review

**Effects of cytokine activation and oxidative stress on the function of the human embryonic stem cell-derived retinal pigment epithelial cells**

Juuti-Uusitalo, K., Nieminen, M., Treumer, F., Ampuja, M., Kallioniemi, A., Klettner, A. & Skottman, H., 2015, In : *Investigative Ophthalmology and Visual Science*. 56, 11, p. 6265-6274 10 p.

Research output: Contribution to journal > Article > Scientific > peer-review

**Effects of exogenous alpha-synuclein on stimulated dopamine overflow in dorsal striatum**

Pelkonen, A., Kallunki, P. & Yavich, L., 25 Oct 2013, In : *Neuroscience Letters*. 554, p. 141-145 5 p.

Research output: Contribution to journal > Article > Scientific > peer-review

**Effects of local structure of neuronal networks on spiking activity in silico**

Mäki-Marttunen, T. M., Acimovic, J., Ruohonen, K. P. & Linne, M-L., 18 Jul 2011, *Twentieth Annual Computational Neuroscience Meeting: CNS\*2011*. Fellous, J-M. & Prinz, A. (eds.). Stockholm: BioMed Central, Vol. 12 (Suppl 1). p. P202 1 p.

Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

### **Effects of structure on spontaneous activity in simulated neuronal networks**

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Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

### **Elevated levels of soluble CD26 and CD30 in multiple sclerosis**

Basnyat, P., Natarajan, R., Vistbakka, J., Lehtikangas, M., Airas, L., Matinlauri, I., Elovaara, I. & Hagman, S., 1 Nov 2015, In : *Clinical and Experimental Neuroimmunology*. 6, 4, p. 419-425 7 p.

Research output: Contribution to journal > Article > Scientific > peer-review

### **Emergence of global and local structural features during development of neuronal networks**

Acimovic, J., 6 Jun 2011, *Proceedings of the Eighth International Workshop on Computational Systems Biology, WCSB 2011, June 6-8, 2011, Zürich, Switzerland*. Tampere: TICSP, (TICSP Series ; vol. 57).

Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

### **Epileptiform and periodic EEG activities induced by rapid sevoflurane anaesthesia induction**

Sonkajärvi, E., Rytty, S., Alahuhta, S., Suominen, K., Kumpulainen, T., Ohtonen, P., Karvonen, E. & Jäntti, V., 1 Mar 2018, In : *Clinical Neurophysiology*. 129, 3, p. 638-645 8 p.

Research output: Contribution to journal > Article > Scientific > peer-review

### **Erratum: Extracting the dynamics of perceptual switching from 'noisy' behaviour: An application of hidden Markov modelling to pecking data from pigeons (Journal of Physiology Paris (2000) 94:5-6 (555-567) PII: S0928425700010950)**

Otterpohl, J. R., Haynes, J. D., Emmert-Streib, F., Vetter, G. & Pawelzik, K., 2001, In : *Journal of Physiology: Paris*. 95, 1-6, p. 497 1 p.

Research output: Contribution to journal > Article > Scientific > peer-review

### **Eustachian tube mucosal inflammation scale validation based on digital video images**

Kivekäs, I., Pöyhönen, L., Aarnisalo, A., Rautiainen, M. & Poe, D., 1 Dec 2015, In : *OTOLOGY AND NEUROTOLOGY*. 36, 10, p. 1748-1752 5 p.

Research output: Contribution to journal > Article > Scientific > peer-review

### **Evaluation of the different sleep-disordered breathing patterns of the compressed tracheal sound**

Tenhunen, M., Huupponen, E., Hasan, J., Heino, O. & Himanen, S. L., 1 Aug 2015, In : *Clinical Neurophysiology*. 126, 8, p. 1557-1563 7 p.

Research output: Contribution to journal > Article > Scientific > peer-review

### **Experiments of the sonification of the sleep electroencephalogram**

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Research output: Contribution to journal > Article > Scientific > peer-review

### **Extensive white matter changes predict stroke recurrence up to 5 years after a first-ever ischemic stroke**

Melkas, S., Sibolt, G., Oksala, N. K. J., Putaala, J., Pohjasvaara, T., Kaste, M., Karhunen, P. J. & Erkinjuntti, T., Oct 2012, In : *CEREBROVASCULAR DISEASES*. 34, 3, p. 191-198 8 p.

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### **Extracting the dynamics of perceptual switching from 'noisy' behaviour: An application of hidden Markov modelling to pecking data from pigeons**

Otterpohl, J. R., Haynes, J. D., Emmert-Streib, F., Vetter, G. & Pawelzik, K., 2000, In : *Journal of Physiology: Paris*. 94, 5-6, p. 555-567 13 p.

Research output: Contribution to journal > Article > Scientific > peer-review

### **Extreme learning machine based supervised subspace learning**

Iosifidis, A., 2015, In : *Neurocomputing*. 167, p. 158-164 7 p.

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### **Fault tolerant machine learning for nanoscale cognitive radio**

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Research output: Contribution to journal › Article › Scientific › peer-review

### **Fluorescent probes as a tool for cell population tracking in spontaneously active neural networks derived from human pluripotent stem cells**

Mäkinen, M., Joki, T., Ylä-Outinen, L., Skottman, H., Narkilahti, S. & Äänismaa, R., Apr 2013, In : *Journal of Neuroscience Methods*. 215, 1, p. 88-96 9 p.

Research output: Contribution to journal › Article › Scientific › peer-review

### **From in silico astrocyte cell models to neuron-astrocyte network models: A review**

Oschmann, F., Berry, H., Obermayer, K. & Lenk, K., 2018, In : *BRAIN RESEARCH BULLETIN*. 136, p. 76-84

Research output: Contribution to journal › Review Article › Scientific › peer-review

### **Functional brain segmentation using inter-subject correlation in fMRI**

Kauppi, J.-P., Pajula, J., Niemi, J., Hari, R. & Tohka, J., 1 May 2017, In : *Human Brain Mapping*. 38, 5, p. 2643-2665 23 p.

Research output: Contribution to journal › Article › Scientific › peer-review

### **Gaze gestures or dwell-based interaction?**

Hyrskykari, A., Istance, H. & Vickers, S., 2012, *Proceedings - ETRA 2012: Eye Tracking Research and Applications Symposium*. p. 229-232 4 p.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

### **Haptic feedback to gaze events**

Kangas, J., Rantala, J., Majaranta, P., Isokoski, P. & Raisamo, R., 2014, *Proceedings of the Symposium on Eye Tracking Research and Applications, ETRA 2014*. Association for Computing Machinery, p. 11-18 8 p.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

### **How Many Is Enough? Effect of Sample Size in Inter-Subject Correlation Analysis of fMRI**

Pajula, J. & Tohka, J., 2016, In : *Computational Intelligence and Neuroscience*. 2016, 2094601.

Research output: Contribution to journal › Article › Scientific › peer-review

### **Human anterior thalamic nuclei are involved in emotion-attention interaction**

Sun, L., Peräkylä, J., Polvivaara, M., Öhman, J., Peltola, J., Lehtimäki, K., Huhtala, H. & Hartikainen, K. M., 1 Nov 2015, In : *NEUROPSYCHOLOGIA*. 78, p. 88-94 7 p.

Research output: Contribution to journal › Article › Scientific › peer-review

### **Human-robot interactive learning architecture using ontologies and symbol manipulation**

Angleraud, A., Houbre, Q., Kyrki, V. & Pieters, R., 6 Nov 2018, *RO-MAN 2018 - 27th IEEE International Symposium on Robot and Human Interactive Communication: August 27-31, 2018, Nanjing, China*. IEEE, p. 384-389 6 p. (IEEE RO-MAN).

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

### **Immediate effects of deep brain stimulation of anterior thalamic nuclei on executive functions and emotion-attention interaction in humans**

Hartikainen, K. M., Sun, L., Polvivaara, M., Brause, M., Lehtimäki, K., Haapasalo, J., Möttönen, T., Väyrynen, K., Ogawa, K. H., Öhman, J. & Peltola, J., 28 May 2014, In : *JOURNAL OF CLINICAL AND EXPERIMENTAL NEUROPSYCHOLOGY*. 36, 5, p. 540-550 11 p.

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### **Improved EEG source localization with Bayesian uncertainty modelling of unknown skull conductivity**

Rimpiläinen, V., Koulouri, A., Lucka, F., Kaipio, J. P. & Wolters, C. H., 1 Mar 2019, In : *NeuroImage*. 188, p. 252-260 9 p.

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### **Improvement of computational efficiency of a biochemical plasticity model**

Lehtimäki, M., Paunonen, L. & Linne, M-L., 29 Sep 2018, In : BMC Neuroscience. 19, Suppl 2, p. 66-66 P130.  
Research output: Contribution to journal › Meeting Abstract › Scientific › peer-review

### **Improving efficiency in convolutional neural networks with multilinear filters**

Tran, D. T., Iosifidis, A. & Gabbouj, M., 1 Sep 2018, In : Neural Networks. 105, p. 328-339 12 p.  
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### **Influence of the experimental design of gene expression studies on the inference of gene regulatory networks: Environmental factors**

Emmert-Streib, F., 2013, In : PeerJ. 2013, 1, e10.  
Research output: Contribution to journal › Article › Scientific › peer-review

### **Influence of the neural network topology on the learning dynamics**

Emmert-Streib, F., May 2006, In : Neurocomputing. 69, 10-12, p. 1179-1182 4 p.  
Research output: Contribution to journal › Article › Scientific › peer-review

### **Inhibition of A $\beta$ Amyloid Growth and Toxicity by Silybins: The Crucial Role of Stereochemistry**

Sciacca, M. F. M., Romanucci, V., Zarrelli, A., Monaco, I., Lolicato, F., Spinella, N., Galati, C., Grasso, G., D'Urso, L., Romeo, M., Diomede, L., Salmona, M., Bongiorno, C., Di Fabio, G., La Rosa, C. & Milardi, D., 16 Aug 2017, In : ACS Chemical Neuroscience. 8, 8, p. 1767-1778 12 p.  
Research output: Contribution to journal › Article › Scientific › peer-review

### **Inhibition of Casein kinase-2 induces p53-dependent cell cycle arrest and sensitizes glioblastoma cells to tumor necrosis factor (TNF $\alpha$ )-induced apoptosis through SIRT1 inhibition**

Dixit, D., Sharma, V., Ghosh, S., Mehta, V. S. & Sen, E., Feb 2012, In : CELL DEATH AND DISEASE. 3, 2, e271.  
Research output: Contribution to journal › Article › Scientific › peer-review

### **In silico study on structure and dynamics in bursting neuronal networks**

Mäki-Marttunen, T. M., Acimovic, J., Ruohonen, K. P. & Linne, M-L., 13 Oct 2012, *Neuroscience 2012; 42nd Annual Meeting, New Orleans, USA, October 14-18, 2012*. Society for Neuroscience (SfN), 1 p. 300.26/DDD70  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

### **Learning sparse representations for view-independent human action recognition based on fuzzy distances**

Iosifidis, A., Tefas, A. & Pitas, I., 9 Dec 2013, In : Neurocomputing. 121, p. 344-353 10 p.  
Research output: Contribution to journal › Article › Scientific › peer-review

### **Look and lean: Accurate head-assisted eye pointing**

Špakov, O., Isokoski, P. & Majaranta, P., 2014, *Proceedings of the Symposium on Eye Tracking Research and Applications, ETRA 2014*. Association for Computing Machinery, p. 35-42 8 p.  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

### **Measures of spike train synchrony for data with multiple time scales**

Satuvuori, E., Mulansky, M., Bozanic, N., Malvestio, I., Zeldenrust, F., Lenk, K. & Kreuz, T., 1 Aug 2017, In : Journal of Neuroscience Methods. 287, p. 25-38 14 p.  
Research output: Contribution to journal › Article › Scientific › peer-review

### **Melatonin pathway genes are associated with progressive subtypes and disability status in multiple sclerosis among Finnish patients**

Natarajan, R., Einarsdottir, E., Riutta, A., Hagman, S., Raunio, M., Mononen, N., Lehtimäki, T. & Elovaara, I., 15 Sep 2012, In : JOURNAL OF NEUROIMMUNOLOGY. 250, 1-2, p. 106-110 5 p.  
Research output: Contribution to journal › Article › Scientific › peer-review

### **Membrane-Dependent Binding and Entry Mechanism of Dopamine into Its Receptor**

Lolicato, F., Juhola, H., Zak, A., Postila, P. A., Saukko, A., Rissanen, S., Enkavi, G., Vattulainen, I., Kepczynski, M. & Róg, T., 2020, In : ACS Chemical Neuroscience. 11, 13, p. 1914-1924 11 p.

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**Mesopic background lights enhance dark-adapted cone ERG flash responses in the intact mouse retina: A possible role for gap junctional decoupling**

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**Neurofunctional plasticity in fraction learning: An fMRI training study**

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**Neuroprotective effect of RO-20-1724-a phosphodiesterase4 inhibitor against intracerebroventricular streptozotocin induced cognitive deficit and oxidative stress in rats**

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Research output: Contribution to journal › Article › Scientific › peer-review

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Mäki-Marttunen, T. M., Acimovic, J., Ruohonen, K. P. & Linne, M-L., 8 Jul 2013, *Twenty Second Annual Computational Neuroscience Meeting: CNS\*2013*. Cymbalyuk, G. & Prinz, A. (eds.), Paris, France: BioMed Central, Vol. Volume 14 Suppl 1. p. P247 1 p.

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**Podocyte apoptosis is prevented by blocking the Toll-like receptor pathway**

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**Post-stroke depression and depression-executive dysfunction syndrome are associated with recurrence of ischaemic stroke**

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**Predicting symptom severity in autism spectrum disorder based on cortical thickness measures in agglomerative data**

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### **Significance of graph theoretic measures in predicting neuronal network activity**

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### **Simple gaze gestures and the closure of the eyes as an interaction technique**

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**The effect of different text presentation formats on eye movement metrics in reading**

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**The effects of neuron morphology on graph theoretic measures of network connectivity: The analysis of a two-level statistical model**

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**The relationship between recognition memory for emotion-laden words and white matter microstructure in normal older individuals**

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**Tidal breathing flow profiles during sleep in wheezing children measured by impedance pneumography**

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**Unique Features of Network Bursts Emerge From the Complex Interplay of Excitatory and Inhibitory Receptors in Rat Neocortical Networks**

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**Viability of Mouse Retinal Explant Cultures Assessed by Preservation of Functionality and Morphology**

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**Whole-cell morphological properties of neurons constrain the nonrandom features of network connectivity**

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**X-ray microtomographic confirmation of the reliability of CBCT in identifying the scalar location of cochlear implant electrode after round window insertion**

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**Zeffiro User Interface for Electromagnetic Brain Imaging: a GPU Accelerated FEM Tool for Forward and Inverse Computations in Matlab**

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