

Neurofunctional plasticity in fraction learning: An fMRI training study

Wortha, S. M., Bloechle, J., Ninaus, M., Kiili, K., Lindstedt, A., Bahnmueller, J., Moeller, K. & Klein, E., 1 Dec 2020, In : Trends in Neuroscience and Education. 21, 15 p., 100141.

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., Leikkala, 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

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

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

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

Gracia-Tabuenca, J., Seppä, V-P., Jauhiainen, M., Paassilta, M., Viik, J. & Karjalainen, J., 2020, In : Respiratory Physiology and Neurobiology. 271, 103312.

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

Randomized Multiresolution Scanning in Focal and Fast E/MEG Sensing of Brain Activity with a Variable Depth

Rezaei, A., Koulouri, A. & Pursiainen, S., 2020, In : Brain Topography. 33, 2, p. 161-175 15 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.

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

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

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

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

Alarautalahti, V., Ragauskas, S., Hakkarainen, J. J., Uusitalo-Järvinen, H., Uusitalo, H., Hyttinen, J., Kalesnykas, G. & Nymark, S., 1 May 2019, In : Investigative ophthalmology & visual science. 60, 6, p. 1914-1927 14 p.

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

Reduced level of docosahexaenoic acid shifts GPCR neuroreceptors to less ordered membrane regions

Javanainen, M., Enkavi, G., Guixà-González, R., Kulig, W., Martínez-Seara, H., Levental, I. & Vattulainen, I., 1 May 2019, In : PLoS Computational Biology. 15, 5, e1007033.

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

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.

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

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

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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

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

Teaching semantics and skills for human-robot collaboration

Angleraud, A., Houbre, Q. & Pieters, R., 2019, In : Paladyn. 10, 1, p. 318-329 12 p.

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

Overview of Sources and Characteristics of Nanoparticles in Urban Traffic-Influenced Areas

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

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

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Cognitive load and metacognitive confidence extraction from pupillary response

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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

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

Improving efficiency in convolutional neural networks with multilinear filters

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Negatively Charged Gangliosides Promote Membrane Association of Amphipathic Neurotransmitters

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Research output: Contribution to journal › Article › 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.

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Nonlinear recurrent neural networks for finite-time solution of general time-varying linear matrix equations

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

A Primal Neural Network for Online Equality-Constrained Quadratic Programming

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

Meas a novel metric for measuring the intelligence of a swarm of cooperating agents

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

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

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

Inhibition of A β Amyloid Growth and Toxicity by Silybins: The Crucial Role of Stereochemistry

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

Measures of spike train synchrony for data with multiple time scales

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

Atomistic fingerprint of hyaluronan-CD44 binding

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

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

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CNN-based edge filtering for object proposals

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

Network-wide adaptive burst detection depicts neuronal activity with improved accuracy

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

Functional brain segmentation using inter-subject correlation in fMRI

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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

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

Spinal cord injury induces widespread chronic changes in cerebral white matter

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Advanced boundary electrode modeling for tES and parallel tES/EEG

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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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Morphological Differentiation Towards Neuronal Phenotype of SH-SY5Y Neuroblastoma Cells by Estradiol, Retinoic Acid and Cholesterol

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One-Class Classification based on Extreme Learning and Geometric Class Information

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

Severe cerebral white matter lesions in ischemic stroke patients are associated with less time spent at home and early institutionalization

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Eustachian tube mucosal inflammation scale validation based on digital video images

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Elevated levels of soluble CD26 and CD30 in multiple sclerosis

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

Human anterior thalamic nuclei are involved in emotion-attention interaction

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

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

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

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

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

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Standardized evaluation of algorithms for computer-aided diagnosis of dementia based on structural MRI: The CADDementia challenge

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

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Extreme learning machine based supervised subspace learning

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Patient-specific induced pluripotent stem cell—derived RPE cells: Understanding the pathogenesis of retinopathy in long-chain 3-hydroxyacyl-CoA dehydrogenase deficiency

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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

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Regularized extreme learning machine for multi-view semi-supervised action recognition

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

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

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Origins and functional consequences of somatic mitochondrial DNA mutations in human cancer

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

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Mismatch negativity abnormality in traumatic brain injury without macroscopic lesions on conventional MRI

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

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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

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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

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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

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

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

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

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

Cortical spreading depression in alpha-synuclein knockout mice

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Pathway analysis of expression data: Deciphering functional building blocks of complex diseases

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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

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

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

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

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

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