

ABRY, P., et al. Sparse learning for Intrapartum fetal heart rate analysis. *Biomedical Physics & Engineering Express.* 2018, **4**(3), ISSN 2057-1976. DOI [10.1088/2057-1976/aabc64](https://doi.org/10.1088/2057-1976/aabc64)

AHMAD, A. and Z. HANZÁLEK. An Energy Efficient Schedule for IEEE 802.15.4/ZigBee Cluster Tree WSN with Multiple Collision Domains and Period Crossing Constraint. *IEEE TRANSACTIONS ON INDUSTRIAL INFORMATICS.* 2018, **14**(1), 12-23. ISSN 1551-3203. DOI [10.1109/TII.2017.2725907](https://doi.org/10.1109/TII.2017.2725907)

ALAYRAC, J., et al. Learning from Narrated Instruction Videos. *IEEE Transactions on Pattern Analysis and Machine Intelligence.* 2018, **40**(9), 2194-2208. ISSN 0162-8828. DOI [10.1109/TPAMI.2017.2749223](https://doi.org/10.1109/TPAMI.2017.2749223)

ALIBEKOV, E., J. KUBALÍK, and R. BABUŠKA. Policy derivation methods for critic-only reinforcement learning in continuous spaces. *Engineering Applications of Artificial Intelligence.* 2018, **69** 178-187. ISSN 0952-1976. DOI [10.1016/j.engappai.2017.12.004](https://doi.org/10.1016/j.engappai.2017.12.004)

ARANDJELOVIĆ, R., et al. NetVLAD: CNN Architecture for Weakly Supervised Place Recognition. *IEEE Transactions on Pattern Analysis and Machine Intelligence.* 2018, **40**(6), 1437-1451. ISSN 0162-8828. DOI [10.1109/TPAMI.2017.2711011](https://doi.org/10.1109/TPAMI.2017.2711011)

BOUCEK, T., et al. Brain perfusion evaluated by regional tissue oxygenation as a possible quality indicator of ongoing cardiopulmonary resuscitation. An experimental porcine cardiac arrest study. *PERFUSION-UK.* 2018, **33**((1_suppl)), 65-70. ISSN 0267-6591. DOI [10.1177/0267659118766282](https://doi.org/10.1177/0267659118766282)

BROZ, J., et al. Prediabetes, diabetes and unemployment. *Primary Care Diabetes Europe.* 2018, **12**(1), 92. ISSN 1751-9918. DOI [10.1016/j.pcd.2017.07.006](https://doi.org/10.1016/j.pcd.2017.07.006)

BROZ, J., et al. Current Level of Glycemic Control and Clinical Inertia in Subjects Using Insulin for the Treatment of Type 1 and Type 2 Diabetes in the Czech Republic and the Slovak Republic: Results of a Multinational, Multicenter, Observational Survey (DIAINFORM). *Diabetes therapy : research, treatment and education of diabetes and related disorders.* 2018, **9**(5), 1897-1906. ISSN 1869-6953. DOI [10.1007/s13300-018-0485-2](https://doi.org/10.1007/s13300-018-0485-2)

CHARVÁTOVÁ, H., A. PROCHÁZKA, and M. ZÁLEŠÁK. Computer Simulation of Temperature Distribution during Cooling of the Thermally Insulated Room. *ENERGIES.* 2018, **11**(11), ISSN 1996-1073. DOI [10.3390/en11113205](https://doi.org/10.3390/en11113205)

CIMBALNIK, J., et al. Physiological and pathological high frequency oscillations in focal epilepsy. *Annals of Clinical and Translational Neurology.* 2018, **5**(9), 1062-1076. ISSN 2328-9503. DOI [10.1002/acn3.618](https://doi.org/10.1002/acn3.618)

DURR, Ch., et al. The triangle scheduling problem. *Journal of Scheduling.* 2018, **21**(3), 305-312. ISSN 1094-6136. DOI [10.1007/s10951-017-0533-1](https://doi.org/10.1007/s10951-017-0533-1)

ERIS, O., B. ALIKOC, and A.F. ERGENC. A new delayed resonator design approach for extended operable frequency range. *The Journal of Vibration and Acoustics.* 2018, **140**(4), ISSN 1048-9002. DOI [10.1115/1.4038941](https://doi.org/10.1115/1.4038941)

GOERTZEL, Z., J. JAKUBŮV, and J. URBAN. ProofWatch Meets ENIGMA: First Experiments. *Kalpa Publications in Computing.* 2018, **1**(9), 15-22. ISSN 2515-1762. DOI [10.29007/z7qx](https://doi.org/10.29007/z7qx)

GURAGAIN, H., et al. Spatial variation in high-frequency oscillation rates and amplitudes in intracranial EEG. *Neurology*. 2018, **90**(8), E639-E646. ISSN 1526-632X. DOI [10.1212/WNL.0000000000004998](https://doi.org/10.1212/WNL.0000000000004998)

HLOSTA, M., Z. ZDRÁHAL, and J. ZENDULKA. Are we meeting a deadline? classification goal achievement in time in the presence of imbalanced data. *Knowledge-Based Systems*. 2018, **160**(15), 278-295. ISSN 0950-7051. DOI [10.1016/j.knosys.2018.07.021](https://doi.org/10.1016/j.knosys.2018.07.021)

HUNOVA, I., et al. Revisiting fog as an important constituent of the atmosphere. *The Science of the Total Environment*. 2018, **636** 1490-1499. ISSN 0048-9697. DOI [10.1016/j.scitotenv.2018.04.322](https://doi.org/10.1016/j.scitotenv.2018.04.322)

JAKUBŮV, J. and J. URBAN. Hierarchical invention of theorem proving strategies. *AI Communications*. 2018, **31**(3), 237-250. ISSN 0921-7126.

JANOTA, M. and M. SUDA. Towards Smarter MACE-style Model Finders. *EPiC Series in Computing*. 2018, **8** (57), 454-470. ISSN 2398-7340. DOI [10.29007/w42s](https://doi.org/10.29007/w42s)

JIRKOVSKÝ, V., et al. Toward Plug&Play Cyber-Physical System Components. *IEEE TRANSACTIONS ON INDUSTRIAL INFORMATICS*. 2018, **14**(PP), 2803-2811. ISSN 1551-3203. DOI [10.1109/TII.2018.2794982](https://doi.org/10.1109/TII.2018.2794982)

KAŠPAROVÁ, M., et al. Intra-Oral 3D Scanning for the Digital Evaluation of Dental Arch Parameters. *Applied Sciences*. 2018, **10**(8), ISSN 2076-3417. DOI [10.3390/app8101838](https://doi.org/10.3390/app8101838)

KILEEL, J., et al. Distortion Varieties. *Foundations of Computational Mathematics*. 2018, **18**(4), 1043-1071. ISSN 1615-3375. DOI [10.1007/s10208-017-9361-0](https://doi.org/10.1007/s10208-017-9361-0)

KITTNAR, O., et al. Outcome of Resynchronization Therapy on Superficial and Endocardial Electrophysiological Findings. *Physiological Research*. 2018, **67**(Suppl. 4), S601-S610. ISSN 0862-8408.

KŘEMEN, V., et al. Integrating Brain Implants With Local and Distributed Computing Devices: A Next Generation Epilepsy Management System. *IEEE Journal of Translational Engineering in Health and Medicine*. 2018, **6** ISSN 2168-2372. DOI [10.1109/JTEHM.2018.2869398](https://doi.org/10.1109/JTEHM.2018.2869398)

KUCEWICZ, M.T., et al. Electrical Stimulation Modulates High Gamma Activity and Human Memory Performance. *eNeuro*. 2018, **5**(1), ISSN 2373-2822. DOI [10.1523/ENEURO.0369-17.2018](https://doi.org/10.1523/ENEURO.0369-17.2018)

KUCEWICZ, M.T., et al. Evidence for verbal memory enhancement with electrical brain stimulation in the lateral temporal cortex. *Brain*. 2018, **141**(1), 971-978. ISSN 0006-8950. DOI [10.1093/brain/awx373](https://doi.org/10.1093/brain/awx373)

KUCEWICZ, M.T., et al. Pupil size reflects successful encoding and recall of memory in humans. *Scientific Reports*. 2018, **8** ISSN 2045-2322. DOI [10.1038/s41598-018-23197-6](https://doi.org/10.1038/s41598-018-23197-6)

LEOTTAU, D., J. RUIZ-DEL-SOLAR, and R. BABUŠKA. Decentralized Reinforcement Learning of Robot Behaviors. *Artificial Intelligence*. 2018, **256** 130-159. ISSN 0004-3702. DOI [10.1016/j.artint.2017.12.001](https://doi.org/10.1016/j.artint.2017.12.001)

MAMULA, O. and D. HRYCEJ. Decentralizovaná energetika, cesta ke svobodě nebo závislosti. *All for Power*. 2018, 58-62. ISSN 1802-8535.

MARIA CIRUGEDA-ROLDAN, E., et al. Sample Entropy Analysis of Noisy Atrial Electrograms during Atrial Fibrillation. *Computational and Mathematical Methods in Medicine*. 2018, **2018** ISSN 1748-6718. DOI [10.1155/2018/1874651](https://doi.org/10.1155/2018/1874651)

MINAEVA, A., et al. Time-Triggered Co-Scheduling of Computation and Communication with Jitter Requirements. *IEEE Transactions on Computers*. 2018, **67**(11), 115-129. ISSN 0018-9340. DOI [10.1109/TC.2017.2722443](https://doi.org/10.1109/TC.2017.2722443)

NEJEDLY, P., et al. Intracerebral EEG Artifact Identification Using Convolutional Neural Networks. *Neuroinformatics Journal*. 2018, ISSN 1539-2791. DOI [10.1007/s12021-018-9397-6](https://doi.org/10.1007/s12021-018-9397-6)

PAULESCU, M., V. BADESCU, and M. BRABEC. Retrieval of effective cloud field parameters from radiometric data. *Theoretical and Applied Climatology Theoretical and Applied Climatology*. 2018, **133**(1-2), 437-446. ISSN 0177-798X. DOI [10.1007/s00704-017-2192-8](https://doi.org/10.1007/s00704-017-2192-8)

PECKA, M., et al. Data-driven Policy Transfer with Imprecise Perception Simulation. *IEEE Robotics and Automation Letters*. 2018, **3**(4), 3916-3921. ISSN 2377-3766. DOI [10.1109/LRA.2018.2857927](https://doi.org/10.1109/LRA.2018.2857927)

PILBAUER, D., et al. Control design and experimental validation for flexible multi-body systems pre-compensated by inverse shapers. *Systems & Control Letters*. 2018, **113** 93-100. ISSN 0167-6911. DOI [10.1016/j.sysconle.2018.01.002](https://doi.org/10.1016/j.sysconle.2018.01.002)

POSTRÁNECKÝ, M., M. SVÍTEK, and E.C. ZAMBRANO. SynopCity© Virtual HUB-A Testbed for Smart Cities. *IEEE Intelligent Transportation Systems Magazine*. 2018, **10**(2), 50-57. ISSN 1939-1390. DOI [10.1109/MITS.2018.2806642](https://doi.org/10.1109/MITS.2018.2806642)

PROCHÁZKA, A., et al. Machine Learning in Rehabilitation Assessment for Thermal and Heart Rate Data Processing. *IEEE Transactions on Neural Systems and Rehabilitation Engineering*. 2018, **26**(6), 1209-1214. ISSN 1534-4320. DOI [10.1109/TNSRE.2018.2831444](https://doi.org/10.1109/TNSRE.2018.2831444)

PROCHÁZKA, A., et al. Multi-Class Sleep Stage Analysis and Adaptive Pattern Recognition. *Applied Sciences*. 2018, **8**(5), ISSN 2076-3417. DOI [10.3390/app8050697](https://doi.org/10.3390/app8050697)

PROCHÁZKA, A., et al. Sleep scoring using polysomnography data features. *Signal, Image and Video Processing*. 2018, **12**(6), 1043-1051. ISSN 1863-1703. DOI [10.1007/s11760-018-1252-6](https://doi.org/10.1007/s11760-018-1252-6)

REBOLA-PARDO, A. and M. SUDA. A Theory of Satisfiability-Preserving Proofs in SAT Solving. *EPiC Series in Computing*. 2018, **8**(57), 583-603. ISSN 2398-7340. DOI [10.29007/tc7q](https://doi.org/10.29007/tc7q)

RŮŽEK, M. Homeostatic learning rule for artificial neural networks. *Neural Network World*. 2018, **28** 179-189. ISSN 1210-0552. DOI [10.14311/NNW.2018.28.011](https://doi.org/10.14311/NNW.2018.28.011)

STANSLASKI, S., et al. A Chronically Implantable Neural Coprocessor for Investigating the Treatment of Neurological Disorders. *IEEE Transactions on Biomedical Circuits and Systems*. 2018, **12**(6), 1230-1245. ISSN 1932-4545. DOI [10.1109/TBCAS.2018.2880148](https://doi.org/10.1109/TBCAS.2018.2880148)

ŠVEČEK, M., et al. Development of high thermal conductivity UO₂-Th heterogeneous fuel. *Progress in Nuclear Energy*. 2018, **108** 489-496. ISSN 0149-1970. DOI [10.1016/j.pnucene.2018.06.012](https://doi.org/10.1016/j.pnucene.2018.06.012)

ŠKOVIERA, R., I. BAJLA, and J. ŠKOVIEROVÁ. Object recognition in clutter color images using Hierarchical Temporal Memory combined with salient-region detection. *Neurocomputing*. 2018, **307** 172-183. ISSN 0925-2312. DOI [10.1016/j.neucom.2018.04.030](https://doi.org/10.1016/j.neucom.2018.04.030)

ŠTĚPÁNOVÁ, K., et al. Mapping language to vision in a real-world robotic scenario. *IEEE Transactions on Cognitive and Developmental Systems*. 2018, **10**(3), 784-794. ISSN 2379-8920. DOI [10.1109/TCDS.2018.2819359](https://doi.org/10.1109/TCDS.2018.2819359)

ŠTĚPÁNOVÁ, K. and M. VAVREČKA. Estimating number of components in Gaussian mixture model using combination of greedy and merging algorithm. *Pattern Analysis and Applications*. 2018, **21**(1), 181-192. ISSN 1433-7541. DOI [10.1007/s10044-016-0576-5](https://doi.org/10.1007/s10044-016-0576-5)

TORII, A., et al. 24/7 Place Recognition by View Synthesis. *IEEE Transactions on Pattern Analysis and Machine Intelligence*. 2018, **40**(2), 257-271. ISSN 0162-8828. DOI [10.1109/TPAMI.2017.2667665](https://doi.org/10.1109/TPAMI.2017.2667665)

VÁCLAVÍK, R., et al. Accelerating the Branch-and-Price Algorithm Using Machine Learning. *European Journal of Operational Research*. 2018, **271**(3), 1055-1069. ISSN 0377-2217. DOI [10.1016/j.ejor.2018.05.046](https://doi.org/10.1016/j.ejor.2018.05.046)

VALENTOVÁ, M., L. LÍZAL, and J. KNÁPEK. Designing energy efficiency subsidy programmes: The factors of transaction costs. *Energy Policy*. 2018, **120** 382-391. ISSN 0301-4215. DOI [10.1016/j.enpol.2018.04.055](https://doi.org/10.1016/j.enpol.2018.04.055)

VARATHARAJAH, Y., et al. Integrating artificial intelligence with real-time intracranial EEG monitoring to automate interictal identification of seizure onset zones in focal epilepsy. *Journal of Neural Engineering*. 2018, **15**(4), ISSN 1741-2552. DOI [10.1088/1741-2552/aac960](https://doi.org/10.1088/1741-2552/aac960)

VIMPEL, J., et al. "Full-Core" VVER-440 extended calculation benchmark. *Kerntechnik*. 2018, **83**(4), 282-293. ISSN 0932-3902. DOI [10.3139/124.110901](https://doi.org/10.3139/124.110901)

VÍTEČKOVÁ, S., et al. Empowering lower limbs exoskeletons: State-of-the-art. *Robotica*. 2018, **36**(11), 1743-1756. ISSN 0263-5747. DOI [10.1017/S0263574718000693](https://doi.org/10.1017/S0263574718000693)

VRBA, P., P. KOLÁŘ, and J. SMOLÍK. Nekonvenční materiály v hybridních strukturách obráběcích strojů. *Technický týdeník*. 2018, **66**(12), 10-11. ISSN 0040-1064.

WEISS, S.A., et al. Visually validated semi-automatic high-frequency oscillation detection aides the delineation of epileptogenic regions during intra-operative electrocorticography. *Clinical Neurophysiology*. 2018, **129**(10), 2089-2098. ISSN 1388-2457. DOI [10.1016/j.clinph.2018.06.030](https://doi.org/10.1016/j.clinph.2018.06.030)