

- Dehmer, Matthias et al. "Relations and bounds for the zeros of graph polynomials using vertex orbits". *Applied Mathematics and Computation*. 2020. 380. <https://doi.org/10.1016/j.amc.2020.125239>
- Petrov, Vitaly et al. "Capacity and Outage of Terahertz Communications with User Micro-Mobility and Beam Misalignment". *IEEE Transactions on Vehicular Technology*. 2020, 69(6). 6822-6827. <https://doi.org/10.1109/TVT.2020.2988600>
- Samuylov, Andrey et al. "Characterizing Resource Allocation Trade-Offs in 5G NR Serving Multicast and Unicast Traffic". *IEEE Transactions on Wireless Communications*. 2020, 19(5). 3421-3434. <https://doi.org/10.1109/TWC.2020.2973375>
- Solomitchii, Dmitrii et al. "Characterizing Radio Wave Propagation in Urban Street Canyon with Vehicular Blockage at 28 GHz". *IEEE Transactions on Vehicular Technology*. 2020, 69(2). 1227-1236. <https://doi.org/10.1109/TVT.2019.2959127>
- Wang, Yicheng et al. "73-fs SESAM mode-locked Tm,Ho:CNGG laser at 2061 nm". ja Clarkson, W. Andrew Shori, Ramesh K. (toimittaneet). *Solid State Lasers XXIX: Technology and Devices*. Proceedings of SPIE - The International Society for Optical Engineering. SPIE. 2020. <https://doi.org/10.1117/12.2548180>
- Kanellis, Georgios, Antti Oksanen, ja Jukka Konttinen. "Adjoint-based optimization in the development of low-emission industrial boilers". *Engineering Optimization*. 2020. <https://doi.org/10.1080/0305215X.2020.1781842>
- Phung, Hoy My et al. "A membrane external-cavity surface-emitting laser (MECSEL) with emission around 825 nm". Hastie, Jennifer E. (toim.). *Vertical External Cavity Surface Emitting Lasers (VECSELs) X*. Proceedings of SPIE - The International Society for Optical Engineering. SPIE. 2020. <https://doi.org/10.1117/12.2545980>
- Yin, Qian et al. "A novel epidemic model considering demographics and intercity commuting on complex dynamical networks". *Applied Mathematics and Computation*. 2020. 386. <https://doi.org/10.1016/j.amc.2020.125517>
- Majidi, Mahdi et al. "Characterization and Performance Improvement of Cooperative Wireless Networks with Nonlinear Power Amplifier at Relay". *IEEE Transactions on Vehicular Technology*. 2020, 69(3). 3244-3255. <https://doi.org/10.1109/TVT.2020.2964628>
- Kulya, Maksim S. et al. "Complex-domain sparse imaging in terahertz pulse time-domain holography with balance detection". ja Sadwick, Laurence P. Yang, Tianxin (toimittaneet). *Terahertz, RF, Millimeter, and Submillimeter-Wave Technology and Applications XIII*. Proceedings of SPIE. SPIE. 2020. <https://doi.org/10.1117/12.2549001>
- Vainio, Markku "Continuous-wave optical parametric oscillators for mid-infrared spectroscopy". ja Schunemann, Peter G. Schepler, Kenneth L. (toimittaneet). *Nonlinear Frequency Generation and Conversion: Materials and Devices XIX*. Proceedings of SPIE - The International Society for Optical Engineering. SPIE. 2020. <https://doi.org/10.1117/12.2548711>
- Nejadsattari, F. et al. "Cyclic quantum walks: Photonic realization and decoherence analysis"., Hemmer, Philip R. Migdall, Alan L. Hasan, Zameer UI (toimittaneet). *Advanced Optical Techniques for Quantum Information, Sensing, and Metrology*. Proceedings of SPIE - The International Society for Optical Engineering. SPIE. 2020. <https://doi.org/10.1117/12.2546566>
- Nanni, Loris, Gianluca Maguolo ja Michelangelo Paci. "Data augmentation approaches for improving animal audio classification". *Ecological Informatics*. 2020. 57. <https://doi.org/10.1016/j.ecoinf.2020.101084>
- Magron, Paul ja Tuomas Virtanen. "Online Spectrogram Inversion for Low-Latency Audio Source Separation". *IEEE Signal Processing Letters*. 2020, 27. 306-310. <https://doi.org/10.1109/LSP.2020.2970310>
- Khodamoradi, Aram et al. "PRBS-based loop gain identification and output impedance shaping in DC microgrid power converters". *Mathematics and Computers in Simulation*. 2020. <https://doi.org/10.1016/j.matcom.2020.04.017>
- Kulya, Maksim S. et al. "Propagation dynamics of ultrabroadband terahertz beams with orbital angular momentum for wireless data transfer"., Dingel, Benjamin B. Tsukamoto, Katsutoshi Mikroulis, Spiros (toimittaneet). *Broadband Access Communication Technologies XIV*. Proceedings of SPIE - The International Society for Optical Engineering. SPIE. 2020.

<https://doi.org/10.1117/12.2547695>

Gao, Yuan, Robert Bregovic, ja Atanas Gotchev. "Self-Supervised Light Field Reconstruction Using Shearlet Transform and Cycle Consistency". *IEEE Signal Processing Letters*. 2020, 27. 1425-1429. <https://doi.org/10.1109/LSP.2020.3008082>

Ghorbani, Modjtaba et al. "The watching system as a generalization of identifying code". *Applied Mathematics and Computation*. 2020. 380. <https://doi.org/10.1016/j.amc.2020.125302>

Wan, Pengfei et al. "Graph entropy based on the number of spanning forests of c-cyclic graphs". *Applied Mathematics and Computation*. 2019. 363. <https://doi.org/10.1016/j.amc.2019.124616>

Dehmer, Matthias et al. "On efficient network similarity measures". *Applied Mathematics and Computation*. 2019. 362. <https://doi.org/10.1016/j.amc.2019.06.035>

Eriksson, Sirkka-Liisa ja Heikki Orelma. "Hyperbolic Function Theory in the Skew-Field of Quaternions". *Advances in Applied Clifford Algebras*. 2019. 29(5). <https://doi.org/10.1007/s00006-019-1017-5>

Ferranti, Luca ja Jani Boutellier "Towards Algebraic Modeling of GPU Memory Access for Bank Conflict Mitigation". *2019 IEEE International Workshop on Signal Processing Systems, SiPS 2019*. IEEE. 2019, 103-108. <https://doi.org/10.1109/SiPS47522.2019.9020385>

Adán, Alí Guzmán, Heikki Orelma ja Frank Sommen. "Hypermonogenic Plane Wave Solutions of the Dirac Equation in Superspace". *Advances in Applied Clifford Algebras*. 2019. 29(4). <https://doi.org/10.1007/s00006-019-0981-0>

Gokceli, Selahattin et al. "Frequency-selective PAPR reduction for OFDM". *IEEE Transactions on Vehicular Technology*. 2019, 68(6). 6167-6171. <https://doi.org/10.1109/TVT.2019.2909643>

Paunonen, Lassi ja David Seifert. "Asymptotics for periodic systems". *Journal of Differential Equations*. 2019, 266(11). 7152-7172. <https://doi.org/10.1016/j.jde.2018.11.028>

De Biasi, Marzio ja Juho Lauri. "On the complexity of restoring corrupted colorings". *Journal of Combinatorial Optimization*. 2019, 37(4). 1150-1169. <https://doi.org/10.1007/s10878-018-0342-2>

Gerasimenko, Mikhail et al. "Capacity of Multiconnectivity mmWave Systems with Dynamic Blockage and Directional Antennas". *IEEE Transactions on Vehicular Technology*. 2019, 68(4). 3534-3549. <https://doi.org/10.1109/TVT.2019.2896565>

Koivumäki, Janne, Wen Hong Zhu, ja Jouni Mattila. "Energy-efficient and high-precision control of hydraulic robots". *Control Engineering Practice*. 2019, 85. 176-193. <https://doi.org/10.1016/j.conengprac.2018.12.013>

Guzmán Adán, Alí, Heikki Orelma ja Franciscus Sommen. "Hypermonogenic solutions and plane waves of the Dirac operator in  $\mathbb{R}^p \times \mathbb{R}^q$ ". *Applied Mathematics and Computation*. 2019, 346. 1-14. <https://doi.org/10.1016/j.amc.2018.09.058>

Liimatainen, Kaisa et al. "Iterative unsupervised domain adaptation for generalized cell detection from brightfield z-stacks". *BMC Bioinformatics*. 2019. 20(1). <https://doi.org/10.1186/s12859-019-2605-z>

Gapeyenko, Margarita et al. "On the Degree of Multi-Connectivity in 5G Millimeter-Wave Cellular Urban Deployments". *IEEE Transactions on Vehicular Technology*. 2019, 68(2). 1973-1978. <https://doi.org/10.1109/TVT.2018.2887343>

Viherialä, Jukka et al. "1.3 $\mu$ m U-bend traveling wave SOA devices for high efficiency coupling to silicon photonics". ja Reed, Graham T. Knights, Andrew P. (toimittaneet). *Silicon Photonics XIV*. Proceedings of SPIE - The International Society for Optical Engineering. SPIE, IEEE. 2019. <https://doi.org/10.1117/12.2505935>

Mereuta, Alexandru et al. "1.55- $\mu\text{m}$  wavelength wafer-fused OP-VECSELs in flip-chip configuration". Keller, Ursula (toim.). *Vertical External Cavity Surface Emitting Lasers (VECSELs) IX*. Proceedings of SPIE - The International Society for Optical Engineering. SPIE, IEEE. 2019. <https://doi.org/10.1117/12.2508342>

Yadav, Amit et al. "405-nm pumped  $\text{Ce}^{3+}$ -doped silica fiber for broadband fluorescence from cyan to red". ja Dignonnet, Michel J. F. Jiang, Shibin (toimittaneet). *Optical Components and Materials XVI*. Proceedings of SPIE - The International Society for Optical Engineering. SPIE, IEEE. 2019. <https://doi.org/10.1117/12.2509599>

Georgiev, Georgi Yordanov et al. "Action and power efficiency in self-organization: The case for growth efficiency as a cellular objective in escherichia coli"., Flores Martinez, Claudio L. ja Georgiev, Georgi Yordanov Smart, John M. Price, Michael E. (toimittaneet). *Evolution, Development and Complexity - Multiscale Evolutionary Models of Complex Adaptive Systems*. Springer Proceedings in Complexity. Springer. 2019, 229-244. [https://doi.org/10.1007/978-3-030-00075-2\\_8](https://doi.org/10.1007/978-3-030-00075-2_8)

Zakeri, Faezeh Sadat et al. "Benchmarking of several disparity estimation algorithms for light field processing"., Bazeille, Stephane Verrier, Nicolas Cudel, Christophe (toimittaneet). *Fourteenth International Conference on Quality Control by Artificial Vision*. Proceedings of SPIE - The International Society for Optical Engineering. SPIE, IEEE. 2019. <https://doi.org/10.1117/12.2521747>

Orelma, H. "Continuum approach to high-cycle fatigue. The finite life-time case with stochastic stress history". *Vestnik Samarskogo Gosudarstvennogo Tehnicheskogo Universiteta, Seriya Fiziko-Matematicheskie Nauki*. 2019, 23(3). 452-463. <https://doi.org/10.14498/vsgtu1705>

Woldemariam, Endashaw Tesfaye et al. "Customized dimensional analysis conceptual modelling framework for design optimization—a case study on the cross-flow micro turbine model". *Engineering Optimization*. 2019, 51(7). 1168-1184. <https://doi.org/10.1080/0305215X.2018.1519556>

Kahle, Hermann et al. "MECSELs with direct emission in the 760 nm to 810 nm spectral range: A single- and double-side pumping comparison and high-power continuous-wave operation". Keller, Ursula (toim.). *Vertical External Cavity Surface Emitting Lasers (VECSELs) IX*. Proceedings of SPIE - The International Society for Optical Engineering. SPIE, IEEE. 2019. <https://doi.org/10.1117/12.2512111>

Radevici, Ivan et al. "Observation of local electroluminescent cooling and identifying the remaining challenges"., Seletskiy, Denis V. Epstein, Richard I. Sheik-Bahae, Mansoor (toimittaneet). *Photonic Heat Engines: Science and Applications*. Proceedings of SPIE - The International Society for Optical Engineering. SPIE, IEEE. 2019. <https://doi.org/10.1117/12.2505814>

Batty, Charles, Lassi Paunonen ja David Seifert. "Optimal energy decay for the wave-heat system on a rectangular domain". *SIAM JOURNAL ON MATHEMATICAL ANALYSIS*. 2019, 51(2). 808-819. <https://doi.org/10.1137/18M1195796>

Saleh, Abba et al. "Short-range supercontinuum based lidar for combustion diagnostics". ja Kimata, Masafumi Valenta, Christopher R. (toimittaneet). *SPIE Future Sensing Technologies*. Proceedings of SPIE. SPIE, IEEE. 2019. <https://doi.org/10.1117/12.2542720>

Kocsis, Péter et al. "Single exposure lensless subpixel phase imaging". ja Kress, Bernard C. Schelkens, Peter (toimittaneet). *Digital Optical Technologies 2019*. Proceedings of SPIE - The International Society for Optical Engineering. SPIE, IEEE. 2019. <https://doi.org/10.1117/12.2525679>

Xu, Lei et al. "Switchable unidirectional second-harmonic emission through GaAs nanoantennas". ja Mitchell, Arnan Rubinsztein-Dunlop, Halina (toimittaneet). *AOS Australian Conference on Optical Fibre Technology, ACOFT 2019 and Australian Conference on Optics, Lasers, and Spectroscopy, ACOLS 2019*. Proceedings of SPIE - The International Society for Optical Engineering. SPIE. 2019. <https://doi.org/10.1117/12.2539887>

Sautter, J. et al. "Tailoring directional scattering of second-harmonic generation from (111)-GaAs nanoantennas". ja Mitchell, Arnan Rubinsztein-Dunlop, Halina (toimittaneet). *AOS Australian Conference on Optical Fibre Technology, ACOFT 2019 and Australian Conference on Optics, Lasers, and Spectroscopy, ACOLS 2019*. Proceedings of SPIE - The

International Society for Optical Engineering. SPIE. 2019. <https://doi.org/10.1117/12.2539086>

Sofotasios, P. C. ja Yu A. Brychkov. "On derivatives of hypergeometric functions and classical polynomials with respect to parameters". *Integral Transforms and Special Functions*. 2018, 29(11). 852-865. <https://doi.org/10.1080/10652469.2018.1504042>

Cerejeiras, Paula, Stefan Hartmann, ja Heikki Orelma. "Structural Results for Quaternionic Gabor Frames". *Advances in Applied Clifford Algebras*. 2018. 28(5). <https://doi.org/10.1007/s00006-018-0901-8>

Ponomarenko, Mykola et al. "Structural Similarity Index with Predictability of Image Blocks". *2018 IEEE 17th International Conference on Mathematical Methods in Electromagnetic Theory, MMET 2018 - Proceedings*. IEEE COMPUTER SOCIETY PRESS. 2018, 115-118. <https://doi.org/10.1109/MMET.2018.8460285>

Cruz, Cristovao et al. "Nonlocality-Reinforced Convolutional Neural Networks for Image Denoising". *IEEE Signal Processing Letters*. 2018, 25(8). 1216-1220. <https://doi.org/10.1109/LSP.2018.2850222>

Urama, Jani et al. "A multi-purpose automated vehicular platform with multi-radio connectivity capabilities". *2018 IEEE 87th Vehicular Technology Conference, VTC Spring 2018*. IEEE. 2018, 1-7. <https://doi.org/10.1109/VTCSpring.2018.8417708>

Sofotasios, Paschalis C. et al. "Ergodic Capacity Analysis of Wireless Transmission over Generalized Multipath/Shadowing Channels". *2018 IEEE 87th Vehicular Technology Conference*. IEEE. 2018, 1-5. <https://doi.org/10.1109/VTCSpring.2018.8417509>

Marshoud, Hanaa et al. "Optical Asymmetric Modulation for VLC Systems - Invited Paper". *2018 IEEE 87th Vehicular Technology Conference, VTC Spring 2018*. IEEE. 2018, 1-5. <https://doi.org/10.1109/VTCSpring.2018.8417541>

Selim, Bassant et al. "Performance Analysis of Single Carrier Coherent and Noncoherent Modulation under I/Q Imbalance". *2018 IEEE 87th Vehicular Technology Conference, VTC Spring 2018*. IEEE. 2018, 1-5. <https://doi.org/10.1109/VTCSpring.2018.8417514>

Sheikh, Muhammad Usman, Ritayan Biswas, ja Jukka Lempiäinen "Performance Evaluation of Coordinated Multipoint Transmission at 28 GHz Frequency Using 3D Ray Tracing". *2018 IEEE 87th Vehicular Technology Conference, VTC Spring 2018 - Proceedings*. IEEE. 2018, 1-6. <https://doi.org/10.1109/VTCSpring.2018.8417593>

Solomitskii, Dmitrii et al. "Ray-based evaluation of dual-polarized MIMO in (Ultra-)dense millimeter-wave urban deployments". *2018 IEEE 87th Vehicular Technology Conference, VTC Spring 2018 - Proceedings*. IEEE. 2018, 1-7. <https://doi.org/10.1109/VTCSpring.2018.8417788>

Ugalde-Loo, Carlos E., Enrique Acha ja Eduardo Licéaga-Castro. "Analysis of the damping characteristics of two power electronics-based devices using 'individual channel analysis and design'". *Applied Mathematical Modelling*. 2018, 59. 527-545. <https://doi.org/10.1016/j.apm.2018.02.008>

Dehmer, Matthias et al. "Properties of graph distance measures by means of discrete inequalities". *Applied Mathematical Modelling*. 2018, 59. 739-749. <https://doi.org/10.1016/j.apm.2018.01.027>

Phan, Duy ja Sérgio S. Rodrigues. "Stabilization to trajectories for parabolic equations". *Mathematics of Control, Signals, and Systems*. 2018. 30(2). <https://doi.org/10.1007/s00498-018-0218-0>

Mokrov, Evgeny et al. "Modeling Transmit Power Reduction for a Typical Cell with Licensed Shared Access Capabilities". *IEEE Transactions on Vehicular Technology*. 2018, 67(6). 5505-5509. <https://doi.org/10.1109/TVT.2018.2799141>

Petrov, Vitaly et al. "The Impact of Interference from the Side Lanes on mmWave/THz Band V2V Communication Systems with Directional Antennas". *IEEE Transactions on Vehicular Technology*. 2018, 67(6). 5028-5041. <https://doi.org/10.1109/TVT.2018.2799564>

Borges, Lucas R. et al. "Restoration of low-dose digital breast tomosynthesis". *Measurement Science and Technology*. 2018. 29(6). <https://doi.org/10.1088/1361-6501/aab2f6>

Krogerus, Tomi, Mika Hyvönen, ja Kalevi Huhtala. "Analysis of common rail pressure signal of dual-fuel large industrial engine for identification of injection duration of pilot diesel injectors". *Fuel*. 2018, 216. 1-9. <https://doi.org/10.1016/j.fuel.2017.11.152>

Katkovnik, Vladimir et al. "Multiwavelength surface contouring from phase-coded diffraction patterns". *Unconventional Optical Imaging 2018. Strasbourg, France*. Proceedings of SPIE - The International Society for Optical Engineering. SPIE. 2018. <https://doi.org/10.1117/12.2306127>

Noronen, Teppo et al. "Ultra-large mode area single frequency anisotropic MOPA with double clad Yb-doped tapered fiber". *Fiber Lasers XV: Technology and Systems*. Proceedings of SPIE. SPIE, IEEE. 2018. <https://doi.org/10.1117/12.2288942>

Voronin, V. et al. "Action recognition using the 3D dense microblock difference". *Counterterrorism, Crime Fighting, Forensics, and Surveillance Technologies II*. Proceedings of SPIE. SPIE. 2018. <https://doi.org/10.1117/12.2326801>

Kauhanen, Janne ja Heikki Orelma. "Cauchy–Riemann Operators in Octonionic Analysis". *Advances in Applied Clifford Algebras*. 2018. 28(1). <https://doi.org/10.1007/s00006-018-0826-2>

Raitoharju, Matti et al. "Damped Posterior Linearization Filter". *IEEE Signal Processing Letters*. 2018. 25(4). <https://doi.org/10.1109/LSP.2018.2806304>

Iscar Vergara, Jorge et al. "Efficient Noise Variance Estimation under Pilot Contamination for Large-Scale MIMO Systems". *IEEE Transactions on Vehicular Technology*. 2018, 67(4). 2982-2996. <https://doi.org/10.1109/TVT.2017.2766226>

Mateos, Xavier et al. "Highly-efficient Ho:KY(WO<sub>4</sub>)<sub>2</sub> thin-disk lasers at 2.06 μm". *Pacific-Rim Laser Damage 2018: Optical Materials for High-Power Lasers*. Proceedings of SPIE. SPIE, IEEE. 2018. <https://doi.org/10.1117/12.2316822>

Eriksson, S. L., H. Orelma ja N. Vieira. "Hypermonogenic Functions of Two Vector Variables". *Complex Analysis and Operator Theory*. 2018, 12(2). 555–570. <https://doi.org/10.1007/s11785-017-0728-7>

Karioja, Pentti et al. "Integrated multi-wavelength mid-IR light source for gas sensing". *Next-Generation Spectroscopic Technologies XI*. SPIE Conference Proceedings. SPIE, IEEE. 2018. <https://doi.org/10.1117/12.2305712>

Chaudhari, Sachin et al. "Spatial Interpolation of Cyclostationary Test Statistics in Cognitive Radio Networks: Methods and Field Measurements". *IEEE Transactions on Vehicular Technology*. 2018, 67(2). 1113-1129. <https://doi.org/10.1109/TVT.2017.2717379>

Korpi, Dani et al. "Transmit Power Optimization and Feasibility Analysis of Self-backhauling Full-Duplex Radio Access Systems". *IEEE Transactions on Wireless Communications*. 2018, 17(6). 4219-4236. <https://doi.org/10.1109/TWC.2018.2821682>

Wu, Jiahao et al. "Model-based dynamic scheduling for multicore implementation of image processing systems". *2017 IEEE International Workshop on Signal Processing Systems, SiPS 2017*. IEEE. 2017. <https://doi.org/10.1109/SiPS.2017.8110003>

- Sofotasios, Paschalis C. et al. "A Comprehensive Framework for Spectrum Sensing in Non-Linear and Generalized Fading Conditions". *IEEE Transactions on Vehicular Technology*. 2017, 66(10). 8615-8631. <https://doi.org/10.1109/TVT.2017.2692278>
- Marshoud, Hanaa et al. "On the Performance of Visible Light Communication Systems with Non-Orthogonal Multiple Access". *IEEE Transactions on Wireless Communications*. 2017, 16(10). 6350-6364. <https://doi.org/10.1109/TWC.2017.2722441>
- Carrera, Diego et al. "Sparse Overcomplete Denoising: Aggregation Versus Global Optimization". *IEEE Signal Processing Letters*. 2017, 24(10). 1468-1472. <https://doi.org/10.1109/LSP.2017.2734119>
- Cui, Qimei et al. "Energy Efficiency Maximization of Full-Duplex Two-Way Relay with Non-Ideal Power Amplifiers and Non-Negligible Circuit Power". *IEEE Transactions on Wireless Communications*. 2017, 16(9). 6264-6278. <https://doi.org/10.1109/TWC.2017.2721372>
- Korpela, Timo et al. "Indirect NO<sub>x</sub> emission monitoring in natural gas fired boilers". *Control Engineering Practice*. 2017, 65. 11-25. <https://doi.org/10.1016/j.conengprac.2017.04.013>
- Tripathi, Shailesh et al. "sgnesR: An R package for simulating gene expression data from an underlying real gene network structure considering delay parameters". *BMC Bioinformatics*. 2017. 18(1). <https://doi.org/10.1186/s12859-017-1731-8>
- Semkin, Vasiliy et al. "Characterization of Radio Links at 60 GHz Using Simple Geometrical and Highly Accurate 3-D Models". *IEEE Transactions on Vehicular Technology*. 2017, 66(6). 4647-4656. <https://doi.org/10.1109/TVT.2016.2617919>
- Lauri, Mikko, Aino Ropponen, ja Risto Ritala. "Meeting a deadline: shortest paths on stochastic directed acyclic graphs with information gathering". *Annals of Mathematics and Artificial Intelligence*. 2017, 79(4). 337-370. <https://doi.org/10.1007/s10472-016-9527-5>
- Petrov, Vitaly et al. "Interference and SINR in Millimeter Wave and Terahertz Communication Systems With Blocking and Directional Antennas". *IEEE Transactions on Wireless Communications*. 2017, 16(3). 1791-1808. <https://doi.org/10.1109/TWC.2017.2654351>
- Rahmatallah, Yasir et al. "GSAR: Bioconductor package for Gene Set analysis in R". *BMC Bioinformatics*. 2017. 18(1). <https://doi.org/10.1186/s12859-017-1482-6>
- Rui, Rafael et al. "State Estimation for a Class of Piecewise Affine State-Space Models". *IEEE Signal Processing Letters*. 2017, 24(1). 61-65. <https://doi.org/10.1109/LSP.2016.2633624>
- Paunonen, Lassi ja David Seifert. "Asymptotics for infinite systems of differential equations". *SIAM Journal on Control and Optimization*. 2017, 55(2). 1153-1178. <https://doi.org/10.1137/15M1051993>
- Katkovnik, Vladimir et al. "Computational wavelength resolution for in-line lensless holography: Phase-coded diffraction patterns and wavefront group-sparsity". *Digital Optical Technologies 2017*. Proceedings of SPIE. SPIE. 2017. <https://doi.org/10.1117/12.2269327>
- Stoykova, Elena et al. "Dynamic laser speckle metrology with binarization of speckle patterns". *19th International Conference and School on Quantum Electronics: Laser Physics and Applications*. Proceedings of SPIE. SPIE. 2017. <https://doi.org/10.1117/12.2262330>
- Berrocal, Javier et al. "Early analysis of resource consumption patterns in mobile applications". *Pervasive and Mobile Computing*. 2017, 35. 32-50. <https://doi.org/10.1016/j.pmcj.2016.06.011>

- Orelma, H. ja N. Vieira. "Homogeneous  $(\alpha, k)$ -Polynomial Solutions of the Fractional Riesz System in Hyperbolic Space". *Complex Analysis and Operator Theory*. 2017, 11(5). 1253–1267. <https://doi.org/10.1007/s11785-017-0666-4>
- Humaloja, Jukka-Pekka et al. "Independent Loops Search in Flow Networks Aiming for Well-Conditioned System of Equations"., Quintela, Peregrina, Barral, Patricia, Gómez, Dolores Pena, Francisco J. Rodríguez, Jerónimo Salgado, Pilar Vázquez-Mendéz, Miguel E. (toimittaneet). *Progress in Industrial Mathematics at ECMI 2016*. Mathematics in industry. Springer International Publishing. 2017. <https://doi.org/10.1007/978-3-319-63082-3>
- Vuojamo, Vesa ja Sirkka-Liisa Eriksson. "Integral kernels for  $k$ -hypermonogenic functions". *Complex Variables and Elliptic Equations*. 2017, 62(9). 1-12. <https://doi.org/10.1080/17476933.2016.1250402>
- Lindroos, Matti et al. "On the effect of deformation twinning and microstructure to strain hardening of high manganese austenitic steel 3D microstructure aggregates at large strains". *International Journal of Solids and Structures*. 2017, 125. 68-76. <https://doi.org/10.1016/j.ijsolstr.2017.07.015>
- Gapeyenko, Margarita et al. "On the Temporal Effects of Mobile Blockers in Urban Millimeter-Wave Cellular Scenarios". *IEEE Transactions on Vehicular Technology*. 2017, 66(11). 10124-10138. <https://doi.org/10.1109/TVT.2017.2754543>
- Filippov, Valery et al. "Picosecond MOPA with ytterbium doped tapered double clad fiber". *Fiber Lasers XIV: Technology and Systems*. Proceedings of SPIE; 10083. SPIE. 2017. <https://doi.org/10.1117/12.2252006>
- Paunonen, Lassi. "Robust controllers for regular linear systems with infinite-dimensional exosystems". *SIAM Journal on Control and Optimization*. 2017, 55(3). 1567-1597. <https://doi.org/10.1137/16M107181X>
- Eriksson, Sirkka-Liisa, Heikki Orelma ja Nelson Vieira. "Two-Sided Hypergenic Functions". *Advances in Applied Clifford Algebras*. 2017, 27(1). 111–123. <https://doi.org/10.1007/s00006-015-0605-2>
- Pelcat, Maxime et al. "Models of architecture: Reproducible efficiency evaluation for signal processing systems". *IEEE International Workshop on Signal Processing Systems, SiPS 2016*. IEEE International Workshop on Signal Processing Systems. IEEE. 2016, 121-126. <https://doi.org/10.1109/SiPS.2016.29>
- Azzari, Lucio ja Alessandro Foi. "Variance Stabilization for Noisy+Estimate Combination in Iterative Poisson Denoising". *IEEE Signal Processing Letters*. 2016, 23(8). 1086-1090. <https://doi.org/10.1109/LSP.2016.2580600>
- Korpela, Timo et al. "Robust data reconciliation of combustion variables in multi-fuel fired industrial boilers". *Control Engineering Practice*. 2016, 55. 101-115. <https://doi.org/10.1016/j.conengprac.2016.07.002>
- Pyattaev, Alexander et al. "A novel stochastic channel modeling approach for mmWave systems with beamforming". *2016 IEEE 83rd Vehicular Technology Conference (VTC Spring)*. IEEE. 2016. <https://doi.org/10.1109/VTCspring.2016.7504091>
- Xing, Hongnian ja Markku Renfors "Multi-carrier CDMA for network assisted device-to-device communications for an integrated OFDMA cellular system". *2016 IEEE 83rd Vehicular Technology Conference (VTC Spring)*. 2016. <https://doi.org/10.1109/VTCspring.2016.7504354>
- Dikmese, Sener et al. "Novel frequency domain cyclic prefix autocorrelation based compressive spectrum sensing for cognitive radio". *2016 IEEE 83rd Vehicular Technology Conference (VTC Spring)*. IEEE. 2016. <https://doi.org/10.1109/VTCspring.2016.7504368>
- Pohjolainen, Seppo ja Antti Suutala "Acoustic Modelling". Pohjolainen, Seppo (toim.). *Mathematical Modelling*. Switzerland: Springer. 2016, 185-205. [https://doi.org/10.1007/978-3-319-27836-0\\_11](https://doi.org/10.1007/978-3-319-27836-0_11)

- Mehta, Rakesh ja Karen Egiazarian. "Rotation Invariant Texture Description Using Symmetric Dense Microblock Difference". *IEEE Signal Processing Letters*. 2016, 23(6). 833-837. <https://doi.org/10.1109/LSP.2016.2561311>
- Anufrieva, Olga et al. "Real-time observation of bacterial gene expression noise". *Nano Communication Networks*. 2016, 8. 68-75. <https://doi.org/10.1016/j.nancom.2016.03.001>
- Poutala, Arto, Timo Tarhasaari ja Lauri Kettunen. "Geometric solution strategy of Laplace problems with free boundary". *International Journal for Numerical Methods in Engineering*. 2016, 105(10). 723-746. <https://doi.org/10.1002/nme.4988>
- Van Mellaert, R. et al. "A mixed-integer linear programming approach for global discrete size optimization of frame structures". *ECCOMAS Congress 2016 - Proceedings of the 7th European Congress on Computational Methods in Applied Sciences and Engineering: Crete; Greece; 5 June 2016 through 10 June 2016*. National Technical University of Athens. 2016, 3395-3408.
- Laakkonen, Alpo ja Lassi Paunonen "A Simple Controller with a Reduced Order Internal Model in the Frequency Domain". *Proceedings of European Control Conference 2016*. IEEE. 2016, 1988-1992. <https://doi.org/10.1109/ECC.2016.7810583>
- Isotalo, Tero J. ja Tapio Niemi "Dots-on-the-fly electron beam lithography". Bencher, Christopher (toim.). *SPIE Proceedings: Alternative Lithographic Technologies VIII*. Proceedings of SPIE. SPIE. 2016. <https://doi.org/10.1117/12.2219136>
- Zia, Nouman et al. "Fabrication and characterization of broadband superluminescent diodes for 2  $\mu\text{m}$  wavelength". *Light-Emitting Diodes: Materials, Devices, and Applications for Solid State Lighting XX*. Proceedings of SPIE. SPIE. 2016. <https://doi.org/10.1117/12.2209720>
- Lauri, Juho. "Further hardness results on rainbow and strong rainbow connectivity". *Discrete Applied Mathematics*. 2016, 201. 191-200. <https://doi.org/10.1016/j.dam.2015.07.041>
- Viheriälä, Jukka et al. "High-power 1550 nm tapered DBR lasers fabricated using soft UV-nanoimprint lithography". *High-Power Diode Laser Technology and Applications XIV*. SPIE Conference Proceedings. SPIE. 2016. <https://doi.org/10.1117/12.2207423>
- Moirangthem, Monali et al. "Hot pen and laser writable photonic polymer films". *Emerging Liquid Crystal Technologies XI*. SPIE. 2016. <https://doi.org/10.1117/12.2209065>
- Aalto, Timo et al. "Integrating III-V, Si, and polymer waveguides for optical interconnects: RAPIDO". *Optical Interconnects XVI*. Proceedings of SPIE. SPIE. 2016. <https://doi.org/10.1117/12.2214786>
- Dumitrescu, Bogdan, Bogdan C. Şicleru ja Florin Avram. "Modeling probability densities with sums of exponentials via polynomial approximation". *Journal of Computational and Applied Mathematics*. 2016, 292. 513-525. <https://doi.org/10.1016/j.cam.2015.07.032>
- Eriksson, Sirkka-Liisa ja Heikki Orelma. "On k-Hypermonogenic Functions and Their Mean Value Properties". *Complex Analysis and Operator Theory*. 2016, 10(2). 311-325. <https://doi.org/10.1007/s11785-015-0445-z>
- Fotiadi, Andrei A. et al. "Optical fiber amplifier with spectral compression elements for high-power laser pulse generation". *Nonlinear Optics and its Applications IV*. Proceedings of SPIE. SPIE. 2016. <https://doi.org/10.1117/12.2223637>
- Komarov, Mikhail et al. "Performance analysis of simultaneous communications in bacterial nanonetworks". *Nano Communication Networks*. 2016, 8. 55-67. <https://doi.org/10.1016/j.nancom.2016.02.002>
- Frantc, V. A. et al. "Simultaneous binary hash and features learning for image retrieval". *Mobile Multimedia/Image Processing, Security, and Applications 2016*. SPIE Conference Proceedings. SPIE. 2016. <https://doi.org/10.1117/12.2223605>



- Zemliachenko, Alexander et al. "Still image/video frame lossy compression providing a desired visual quality". *Multidimensional Systems and Signal Processing*. 2016, 27(3). 697-718. <https://doi.org/10.1007/s11045-015-0333-8>
- Hosseini, Seyyed Soheil Sadat et al. "Target tracking via combination of particle filter and optimisation techniques". *International Journal of Mathematical Modelling and Numerical Optimization*. 2016, 7(2). 212-229. <https://doi.org/10.1504/IJMMNO.2016.077068>
- Borges, Lucas, Marcelo Vieira, ja Alessandro Foi. "Unbiased Injection of Signal-Dependent Noise in Variance-Stabilized Range". *IEEE Signal Processing Letters*. 2016, 23(10). 1494-1498. <https://doi.org/10.1109/LSP.2016.2601689>
- Boutellier, J. ja T. Nyländen "Programming graphics processing units in the RVC-CAL dataflow language". *Electronic Proceedings of the 2015 IEEE International Workshop on Signal Processing Systems, SiPS 2015*. Institute of Electrical and Electronics Engineers Inc. 2015. <https://doi.org/10.1109/SiPS.2015.7344994>
- Mäki, A. J. et al. "Modeling carbon dioxide transport in PDMS-based microfluidic cell culture devices". *Chemical Engineering Science*. 2015, 137. 515-524. <https://doi.org/10.1016/j.ces.2015.06.065>
- Diaz, Isael et al. "A New Approach to Sign-Bit-Based Parameter Estimation in OFDM Receivers". *Circuits, Systems and Signal Processing*. 2015, 34(11). 3631-3660. <https://doi.org/10.1007/s00034-015-0025-5>
- Sofotasios, Paschalis C. et al. "Entropy and Channel Capacity under Optimum Power and Rate Adaptation over Generalized Fading Conditions". *IEEE Signal Processing Letters*. 2015, 22(11). 2162-2166. <https://doi.org/10.1109/LSP.2015.2464221>
- Nurminen, Henri et al. "Robust Inference for State-Space Models with Skewed Measurement Noise". *IEEE Signal Processing Letters*. 2015, 22(11). 1898-1902. <https://doi.org/10.1109/LSP.2015.2437456>
- Sofotasios, Paschalis C. et al. "Solutions to integrals involving the marcum Q-function and applications". *IEEE Signal Processing Letters*. 2015, 22(10). 1752-1756. <https://doi.org/10.1109/LSP.2015.2432064>
- Martin, Floran et al. "Analytical model for magnetic anisotropy of non-oriented steel sheets". *COMPEL: The International Journal for Computation and Mathematics in Electrical and Electronic Engineering*. 2015, 34(5). 1475-1488. <https://doi.org/10.1108/COMPEL-02-2015-0076>
- Shah, Sahas Bikram et al. "Estimation of additional losses due to random contacts at the edges of stator of an electrical machine". *COMPEL: The International Journal for Computation and Mathematics in Electrical and Electronic Engineering*. 2015, 34(5). 1501-1510. <https://doi.org/10.1108/COMPEL-02-2015-0083>
- Makkonen, J. et al. "Improving reliability for classification of metallic objects using a WTMD portal". *Measurement Science and Technology*. 2015. 26(10). <https://doi.org/10.1088/0957-0233/26/10/105103>
- Sandev, Trifce et al. "Diffusion and Fokker-Planck-Smoluchowski equations with generalized memory kernel". *Fractional Calculus and Applied Analysis*. 2015, 18(4). 1006-1038. <https://doi.org/10.1515/fca-2015-0059>
- Hu, Jun ja Juho Kannianen. "Asymptotic expansion of European options with mean-reverting stochastic volatility dynamics". *Finance Research Letters*. 2015, 14. 1-10. <https://doi.org/10.1016/j.frl.2015.07.004>
- Gerasimenko, Mikhail et al. "Prioritized centrally-controlled resource allocation in integrated multi-RAT HetNets". *IEEE Vehicular Technology Conference*. The Institute of Electrical and Electronics Engineers, Inc. 2015. <https://doi.org/10.1109/VTCSpring.2015.7146031>

- Huusari, Timo et al. "Wideband self-adaptive RF cancellation circuit for full-duplex radio: Operating principle and measurements". *2015 IEEE 81st Vehicular Technology Conference (VTC Spring)*. The Institute of Electrical and Electronics Engineers, Inc. 2015. <https://doi.org/10.1109/VTCSpring.2015.7146163>
- Dehmer, Matthias, Frank Emmert-Streib ja Yongtang Shi. "Graph distance measures based on topological indices revisited". *Applied Mathematics and Computation*. 2015, 266. 623-633. <https://doi.org/10.1016/j.amc.2015.05.072>
- Matos Simoes, Ricardo de et al. "Urothelial cancer gene regulatory networks inferred from large-scale RNAseq, Bead and Oligo gene expression data". *BMC Systems Biology*. 2015. 9. <https://doi.org/10.1186/s12918-015-0165-z>
- Höynälänmaa, Tommi. "Multiresolution analysis for compactly supported interpolating tensor product wavelets". *International Journal of Wavelets Multiresolution and Information Processing*. 2015. 13(2). <https://doi.org/10.1142/S0219691315500101>
- Kantola, Emmi et al. "1180nm VECSEL with 50 W output power". *Proceedings of SPIE - The International Society for Optical Engineering*. SPIE. 2015. <https://doi.org/10.1117/12.2079480>
- Takalo, Reijo et al. "Adaptive autoregressive model for reduction of noise in SPECT". *Computational and Mathematical Methods in Medicine*. 2015. 2015. <https://doi.org/10.1155/2015/494691>
- Foldes, S. et al. "A general framework for island systems". *Acta Universitatis Szegediensis: Acta Scientiarum Mathematicarum*. 2015, 81(1-2). 3-24. <https://doi.org/10.14232/actasm-013-279-7>
- Rubel, Aleksey S., Vladimir V. Lukin, ja Karen Egiazarian "A method for predicting DCT-based denoising efficiency for grayscale images corrupted by AWGN and additive spatially correlated noise". *Proceedings of SPIE - The International Society for Optical Engineering*. SPIE. 2015. <https://doi.org/10.1117/12.2082533>
- Battisti, F. et al. "A perceptual quality metric for high-definition stereoscopic 3D video". *Image Processing: Algorithms and Systems XIII*. SPIE Conference Proceedings. SPIE. 2015. <https://doi.org/10.1117/12.2086901>
- Lukin, Vladimir V. et al. "Combining full-reference image visual quality metrics by neural network". *Proceedings of SPIE - The International Society for Optical Engineering*. SPIE. 2015. <https://doi.org/10.1117/12.2085465>
- Voronin, V. V. et al. "Depth map occlusion filling and scene reconstruction using modified exemplar-based inpainting". *Image Processing: Algorithms and Systems XIII*. SPIE Conference Proceedings. SPIE. 2015. <https://doi.org/10.1117/12.2076506>
- Björklund, Andreas et al. "Engineering motif search for large graphs". *2015 Proceedings of the Seventeenth Workshop on Algorithm Engineering and Experiments (ALENEX)*. Workshop on Algorithm Engineering and Experiments. 2015, 104-118. <https://doi.org/10.1137/1.9781611973754.10>
- Laakkonen, Petteri ja Seppo Pohjolainen. "Frequency domain robust regulation of signals generated by an infinite-dimensional exosystem". *SIAM Journal on Control and Optimization*. 2015, 53(1). 139-166. <https://doi.org/10.1137/130950057>
- Ledentsov, N. N. et al. "Green (In,Ga,Al)P-GaP light-emitting diodes grown on high-index GaAs surfaces". *Proceedings of SPIE: Light-Emitting Diodes: Materials, Devices, and Applications for Solid State Lighting XIX*. SPIE. 2015. <https://doi.org/10.1117/12.2083953>
- Leinonen, Tomi et al. ">8W GaInNAs VECSEL emitting at 615 nm". *Proceedings of SPIE: Vertical External Cavity Surface Emitting Lasers (VECSELs) V*. SPIE. 2015. <https://doi.org/10.1117/12.2079162>

Frosio, Iuri, Karen Egiazarian ja Kari Pulli "Machine learning for adaptive bilateral filtering". *Image Processing: Algorithms and Systems XIII*. Proceedings of SPIE - The International Society for Optical Engineering. SPIE. 2015. <https://doi.org/10.1117/12.2077733>

Ye, Changgeng et al. "Measuring bend losses in large-mode-area fibers". *Fiber Lasers XII: Technology, Systems, and Applications*. SPIE. 2015. <https://doi.org/10.1117/12.2076813>

Korpijärvi, Ville-Markus et al. "Monolithic GaInNAsSb/GaAs VECSEL emitting at 1550 nm". *SPIE conference proceedings*. SPIE. 2015. <https://doi.org/10.1117/12.2077517>

Voronin, V. V. et al. "No-reference visual quality assessment for image inpainting". *Image Processing: Algorithms and Systems XIII*. SPIE Conference Proceedings. SPIE. 2015. <https://doi.org/10.1117/12.2076507>

Heikkinen, Juuso et al. "Power and wavelength scaling using semiconductor disk laser - bismuth fiber MOPA systems". Guina, M (toim.). *Vertical External Cavity Surface Emitting Lasers (VECSELs) V*. Proceedings of SPIE. BELLINGHAM: SPIE. 2015. <https://doi.org/10.1117/12.2076805>

Suominen, Olli ja Atanas Gotchev "Preserving natural scene lighting by strobe-lit video". *Image Processing: Algorithms and Systems XIII*. SPIE Conference Proceedings. SPIE. 2015. <https://doi.org/10.1117/12.2185013>

Smirnov, Sergey ja Atanas Gotchev "Real-time depth image-based rendering with layered dis-occlusion compensation and aliasing-free composition". *Proceedings of SPIE - The International Society for Optical Engineering*. SPIE Conference Proceedings. SPIE. 2015. <https://doi.org/10.1117/12.2086895>

Laakkonen, Petteri ja Alban Quadrat "Robust Regulation of SISO Systems: The Fractional Ideal Approach". *Proceedings of the SIAM Conference on Control and Its Applications (CT15)*. SIAM, Society for Industrial and Applied Mathematics. 2015, 311-318. <https://doi.org/10.1137/1.9781611974072.43>

Belahcen, Anouar et al. "Uncertainty propagation of iron loss from characterization measurements to computation of electrical machines". *COMPEL: The International Journal for Computation and Mathematics in Electrical and Electronic Engineering*. 2015, 34(3). 624-636. <https://doi.org/10.1108/COMPEL-10-2014-0271>

Rahmatallah, Yasir, Frank Emmert-Streib ja Galina Glazko. "Comparative evaluation of gene set analysis approaches for RNA-Seq data". *BMC Bioinformatics*. 2014. 15(1). <https://doi.org/10.1186/s12859-014-0397-8>

Chen, Zengqiang et al. "Entropy bounds for dendrimers". *Applied Mathematics and Computation*. 2014, 242. 462-472. <https://doi.org/10.1016/j.amc.2014.05.105>

Sand, Antti ja Ismo Rakkolainen "A hand-held immaterial volumetric display". *Proceedings of SPIE-IS and T Electronic Imaging - Stereoscopic Displays and Applications XXV*. SPIE. 2014. <https://doi.org/10.1117/12.2035280>

Cho, Chunhee et al. "Compressive strain measurement using RFID patch antenna sensors". *Sensors and Smart Structures Technologies for Civil, Mechanical, and Aerospace Systems 2014*. SPIE. 2014. <https://doi.org/10.1117/12.2045122>

Iosifidis, Alexandros, Anastasios Tefas ja Ioannis Pitas "Exploiting local class information in extreme learning machine". *NCTA 2014 - Proceedings of the International Conference on Neural Computation Theory and Applications*. INSTICC PRESS. 2014, 49-55.

Emmert-Streib, Frank et al. "Functional and genetic analysis of the colon cancer network.". *BMC Bioinformatics*. 2014. 15(Suppl 6).

- Ye, Changgeng et al. "Mode coupling in few-mode large-mode-area fibers". *Fiber Lasers XI: Technology, Systems, and Applications*. SPIE. 2014. <https://doi.org/10.1117/12.2038575>
- Stumpel, Jelle E. et al. "Optical and topographic changes in water-responsive patterned cholesteric liquid crystalline polymer coatings". *Proceedings of SPIE: Organic Photonics VI*. Proceedings of SPIE: the International Society for Optical Engineering. SPIE. 2014. <https://doi.org/10.1117/12.2052678>
- Kantola, Emmi et al. "Pulsed high-power yellow-orange VECSEL". *Photonics Europe 2014, Semiconductor Lasers and Laser Dynamics VI, April 14-17, 2014, Brussels, Belgium. Proceedings of SPIE*. SPIE Conference Proceedings. SPIE. 2014. <https://doi.org/10.1117/12.2054716>
- Dehmer, Matthias et al. "An efficient heuristic approach to detecting graph isomorphism based on combinations of highly discriminating invariants". *Advances in Computational Mathematics*. 2013, 39(2). 311-325. <https://doi.org/10.1007/s10444-012-9281-0>
- Tzamkiozis, T. et al. "Development of a constant dilution sampling system for particulate and gaseous pollutant measurements". *Measurement Science and Technology*. 2013. 24(8). <https://doi.org/10.1088/0957-0233/24/8/085801>
- Rodrigues, Paulo C. ja Miguel de Carvalho. "Spectral modeling of time series with missing data". *Applied Mathematical Modelling*. 2013, 37(7). 4676-4684. <https://doi.org/10.1016/j.apm.2012.09.040>
- Carroll, Raymond et al. "Bio-inspired service management framework: Green data-centres case study". *International Journal of Grid and Utility Computing*. 2013, 4(4). 278-292. <https://doi.org/10.1504/IJGUC.2013.057115>
- Yi, Xiaohua et al. "Design and simulation of a slotted patch antenna sensor for wireless strain sensing". *Nondestructive Characterization for Composite Materials, Aerospace Engineering, Civil Infrastructure, and Homeland Security 2013*. 2013. <https://doi.org/10.1117/12.2009233>
- Boutellier, J. et al. "High-performance programs by source-level merging of RVC-CAL dataflow actors". *2013 IEEE Workshop on Signal Processing Systems, SiPS 2013*. Institute of Electrical and Electronics Engineers Inc. 2013, 360-365.
- Belahcen, Anouar et al. "Magnetomechanical coupled FE simulations of rotating electrical machines". *COMPEL: The International Journal for Computation and Mathematics in Electrical and Electronic Engineering*. 2013, 32(5). 1484-1499. <https://doi.org/10.1108/COMPEL-04-2013-0109>
- Wang, Lai Huei, Chung Ching Shen ja Shuvra S. Bhattacharyya "Parameterized core functional dataflow graphs and their application to design and implementation of wireless communication systems". *2013 IEEE Workshop on Signal Processing Systems, SiPS 2013*. Institute of Electrical and Electronics Engineers Inc. 2013, 1-6.
- Ghazi, Amanullah et al. "Programmable implementation of zero-crossing demodulator on an application specific processor". *2013 IEEE Workshop on Signal Processing Systems, SiPS 2013*. Institute of Electrical and Electronics Engineers Inc. 2013, 231-236.
- Emmert-Streib, Frank, Shailesh Tripathi ja Ricardo D. Matos Simoes. "Harnessing the complexity of gene expression data from cancer: From single gene to structural pathway methods". *Biology Direct*. 2012. 7. <https://doi.org/10.1186/1745-6150-7-44>
- Emmert-Streib, Frank. "Universal construction mechanism for networks from one-dimensional symbol sequences". *Applied Mathematics and Computation*. 2012, 219(3). 1020-1030. <https://doi.org/10.1016/j.amc.2012.07.006>
- Mäki-Marttunen, Tuomo Mikael et al. "In silico study on structure and dynamics in bursting neuronal networks". *Neuroscience 2012; 42nd Annual Meeting, New Orleans, USA, October 14-18, 2012*. Society for Neuroscience (SfN). 2012.

Kalimeri, Maria et al. "Entropy analysis of word-length series of natural language texts: Effects of text language and genre". *INTERNATIONAL JOURNAL OF BIFURCATION AND CHAOS*. 2012. 22(9).  
<https://doi.org/10.1142/S0218127412502239>

Ivanov, S., D. Botvich ja S. Balasubramaniam. "Enzyme-based circuit design for nano-scale computing". *Nano Communication Networks*. 2012, 3(3). 168-174. <https://doi.org/10.1016/j.nancom.2012.09.002>

de Matos Simoes, Ricardo, Shailesh Tripathi, ja Frank Emmert-Streib. "Organizational structure and the periphery of the gene regulatory network in B-cell lymphoma.". *BMC Systems Biology*. 2012. 6. <https://doi.org/10.1186/1752-0509-6-38>

Lio', Pietro ja Sasitharan Balasubramaniam. "Opportunistic routing through conjugation in bacteria communication nanonetwork". *Nano Communication Networks*. 2012, 3(1). 36-45. <https://doi.org/10.1016/j.nancom.2011.10.003>

Mäki-Marttunen, Tuomo Mikael et al. "Significance of graph theoretic measures in predicting neuronal network activity". *Proceedings of The 9th annual Computational and Systems Neuroscience meeting (COSYNE 2012)*. Salt Lake City. 2012, 55-55.

Emmert-Streib, Frank. "Evolutionary dynamics of the spatial Prisoner's Dilemma with self-inhibition". *Applied Mathematics and Computation*. 2012, 218(11). 6482-6488. <https://doi.org/10.1016/j.amc.2011.12.018>

Pereira, Dulce G. et al. "A comparison between joint regression analysis and the AMMI model: A case study with barley". *JOURNAL OF STATISTICAL COMPUTATION AND SIMULATION*. 2012, 82(2). 193-207.  
<https://doi.org/10.1080/00949655.2011.615839>

Min, Jin et al. "A hybrid optimization grey model based on segmented gra and multi-strategy contest for short-term power load forecasting". *JOURNAL OF GREY SYSTEM*. 2012, 24(1). 15-28.

Wang, Lai Huei et al. "Multidimensional dataflow graph modeling and mapping for efficient GPU implementation". *Proceedings - 2012 IEEE Workshop on Signal Processing Systems, SiPS 2012*. 2012, 300-305.  
<https://doi.org/10.1109/SiPS.2012.10>

Yi, Xiaohua et al. "Thermal effects on a passive wireless antenna sensor for strain and crack sensing". *Sensors and Smart Structures Technologies for Civil, Mechanical, and Aerospace Systems 2012*. 2012. <https://doi.org/10.1117/12.914833>

Mueller, Laurin A. J. et al. "Structural Measures for Network Biology Using QuACN". *BMC Bioinformatics*. 2011. 12(1).  
<https://doi.org/10.1186/1471-2105-12-492>

Altay, Gökmen ja Frank Emmert-Streib. "Structural influence of gene networks on their inference: Analysis of C3NET". *Biology Direct*. 2011. 6. <https://doi.org/10.1186/1745-6150-6-31>

Balasubramaniam, Sasitharan et al. "Development of artificial neuronal networks for molecular communication". *Nano Communication Networks*. 2011, 2(2-3). 150-160. <https://doi.org/10.1016/j.nancom.2011.05.004>

Mäki-Marttunen, Tuomo et al. "Effects of structure on spontaneous activity in simulated neuronal networks". *Proceedings of Mathematical Neuroscience (ICMS 2011), April 11-13, 2011, Edinburgh, Scotland*. 2011.

Pursiainen, S. et al. "Forward simulation and inverse dipole localization with the lowest order Raviart - Thomas elements for electroencephalography". *Inverse Problems*. 2011. 27(4). <https://doi.org/10.1088/0266-5611/27/4/045003>

Kaski, Samuel ja Jaakko Peltonen. "Dimensionality reduction for data visualization". *IEEE Signal Processing Magazine*. 2011, 28(2). 100-104. <https://doi.org/10.1109/MSP.2010.940003>

Sapaev, U. K., D. B. Yusupov, ja G. Assanto "Multicolor nonlinear pulse compression by consecutive optical parametric amplification in quasi-phase matched structures". *ICONO 2010: International Conference on Coherent and Nonlinear Optics*. 2011. <https://doi.org/10.1117/12.882887>

Belahcen, A., R. Kouhia ja K. Fonteyn "The different levels of magneto-mechanical coupling in energy conversion machines and devices". *Proceedings of the 4th International Conference on Computational Methods for Coupled Problems in Science and Engineering, COUPLED PROBLEMS 2011*. 2011, 472-483.

Yi, Xiaohua et al. "Thickness variation study of RFID-based folded patch antennas for strain sensing". *Sensors and Smart Structures Technologies for Civil, Mechanical, and Aerospace Systems 2011*. 2011. <https://doi.org/10.1117/12.879868>

Altay, Gökmen ja Frank Emmert-Streib. "Inferring the conservative causal core of gene regulatory networks". *BMC Systems Biology*. 2010. 4. <https://doi.org/10.1186/1752-0509-4-132>

Emmert-Streib, Frank ja Matthias Dehmer. "Hierarchical coordination of periodic genes in the cell cycle of *Saccharomyces cerevisiae*". *BMC Systems Biology*. 2009. 3. <https://doi.org/10.1186/1752-0509-3-76>

Emmert-Streib, Frank ja Matthias Dehmer. "Information processing in the transcriptional regulatory network of yeast: Functional robustness". *BMC Systems Biology*. 2009. 3. <https://doi.org/10.1186/1752-0509-3-35>

Caglayan, Humeyra ja Ekmel Ozbay "The magical world of metamaterials". *Photonic Materials, Devices, and Applications III*. Proceedings of SPIE. 2009. <https://doi.org/10.1117/12.821407>

Dehmer, Matthias, Frank Emmert-Streib ja Tanja Gesell. "A comparative analysis of multidimensional features of objects resembling sets of graphs". *Applied Mathematics and Computation*. 2008, 196(1). 221-235. <https://doi.org/10.1016/j.amc.2007.05.058>

Dehmer, Matthias ja Frank Emmert-Streib. "Structural similarity of directed universal hierarchical graphs: A low computational complexity approach". *Applied Mathematics and Computation*. 2007, 194(1). 7-20. <https://doi.org/10.1016/j.amc.2007.04.006>

Emmert-Streib, Frank ja Matthias Dehmer. "Information theoretic measures of UHG graphs with low computational complexity". *Applied Mathematics and Computation*. 2007, 190(2). 1783-1794. <https://doi.org/10.1016/j.amc.2007.02.095>

Emmert-Streib, Frank ja Arcady Mushegian. "A topological algorithm for identification of structural domains of proteins". *BMC Bioinformatics*. 2007. 8. <https://doi.org/10.1186/1471-2105-8-237>

Dehmer, Matthias ja Frank Emmert-Streib. "Comparing large graphs efficiently by margins of feature vectors". *Applied Mathematics and Computation*. 2007, 188(2). 1699-1710. <https://doi.org/10.1016/j.amc.2006.11.185>

Emmert-Streib, Frank ja Matthias Dehmer. "Topological mappings between graphs, trees and generalized trees". *Applied Mathematics and Computation*. 2007, 186(2). 1326-1333. <https://doi.org/10.1016/j.amc.2006.07.162>

Dehmer, Matthias, Frank Emmert-Streib ja Jürgen Kilian. "A similarity measure for graphs with low computational complexity". *Applied Mathematics and Computation*. 2006, 182(1). 447-459. <https://doi.org/10.1016/j.amc.2006.04.006>

Ozbay, Ekmel, Irfan Bulu, ja Humeyra Caglayan "Labyrinth based left-handed metamaterials and sub-wavelength focusing of electromagnetic waves". *Photonic Crystal Materials and Devices IV*. Proceedings of SPIE. 2006. <https://doi.org/10.1117/12.649548>

Korhonen, H. M E, Jussi Heikkilä ja Jon M. Törnwall. "A simulation case study of production planning and control in printed wiring board manufacturing". *Winter Simulation Conference Proceedings*. 2001, 2. 844-847.