

Dehmer, Matthias ; Emmert-Streib, Frank ; Mowshowitz, Abbe ; Ilić, Aleksandar ; Chen, Zengqiang ; Yu, Guihai ; Feng, Lihua ; Ghorbani, Modjtaba ; Varmuza, Kurt ; Tao, Jin. / **Relations and bounds for the zeros of graph polynomials using vertex orbits**. Julkaisussa: Applied Mathematics and Computation. 2020 ; Vuosikerta 380.

Petrov, Vitaly ; Moltchanov, Dmitri ; Koucheryavy, Yevgeni ; Jornet, Josep M. / **Capacity and Outage of Terahertz Communications with User Micro-Mobility and Beam Misalignment**. Julkaisussa: IEEE Transactions on Vehicular Technology. 2020 ; Vuosikerta 69, Nro 6. Sivut 6822-6827.

Samuylov, Andrey ; Moltchanov, Dmitri ; Kovalchukov, Roman ; Pirmagomedov, Rustam ; Gaidamaka, Yuliya ; Andreev, Sergey ; Koucheryavy, Yevgeni ; Samouylov, Konstantin. / **Characterizing Resource Allocation Trade-Offs in 5G NR Serving Multicast and Unicast Traffic**. Julkaisussa: IEEE Transactions on Wireless Communications. 2020 ; Vuosikerta 19, Nro 5. Sivut 3421-3434.

Solomitskii, Dmitrii ; Koucheryavy, Yevgeni ; Semkin, Vasili ; Karttunen, Aki ; Petrov, Vitaly ; Nguyen, Sinh Le Hong ; Nikopour, Hosein ; Haneda, Katsuyuki ; Andreev, Sergey ; Talwar, Shilpa. / **Characterizing Radio Wave Propagation in Urban Street Canyon with Vehicular Blockage at 28 GHz**. Julkaisussa: IEEE Transactions on Vehicular Technology. 2020 ; Vuosikerta 69, Nro 2. Sivut 1227-1236.

Wang, Yicheng ; Zhao, Yongguang ; Pan, Zhongben ; Suomalainen, Soile ; Härkönen, Antti ; Guina, Mircea ; Griebner, Uwe ; Wang, Li ; Loiko, Pavel ; Mateos, Xavier ; Chen, Weidong ; Petrov, Valentin. / **73-fs SESAM mode-locked Tm,Ho:CNGG laser at 2061 nm**. Solid State Lasers XXIX: Technology and Devices. Toimittaja / W. Andrew Clarkson ; Ramesh K. Shori. SPIE, 2020. (Proceedings of SPIE - The International Society for Optical Engineering).

Kanellis, Georgios ; Oksanen, Antti ; Konttinen, Jukka. / **Adjoint-based optimization in the development of low-emission industrial boilers**. Julkaisussa: Engineering Optimization. 2020.

Phung, Hoy My ; Kahle, Hermann ; Penttinen, Jussi-Pekka ; Rajala, Patrik ; Ranta, Sanna ; Guina, Mircea. / **A membrane external-cavity surface-emitting laser (MECSEL) with emission around 825 nm**. Vertical External Cavity Surface Emitting Lasers (VECSELs) X. Toimittaja / Jennifer E. Hastie. SPIE, 2020. (Proceedings of SPIE - The International Society for Optical Engineering).

Yin, Qian ; Wang, Zhishuang ; Xia, Chengyi ; Dehmer, Matthias ; Emmert-Streib, Frank ; Jin, Zhen. / **A novel epidemic model considering demographics and intercity commuting on complex dynamical networks**. Julkaisussa: Applied Mathematics and Computation. 2020 ; Vuosikerta 386.

Majidi, Mahdi ; Mohammadi, Abbas ; Abdipour, Abdolali ; Valkama, Mikko. / **Characterization and Performance Improvement of Cooperative Wireless Networks with Nonlinear Power Amplifier at Relay**. Julkaisussa: IEEE Transactions on Vehicular Technology. 2020 ; Vuosikerta 69, Nro 3. Sivut 3244-3255.

Kulya, Maksim S. ; Katkovnik, Vladimir ; Egiazarian, Karen ; Petrov, Nikolay V. / **Complex-domain sparse imaging in terahertz pulse time-domain holography with balance detection**. Terahertz, RF, Millimeter, and Submillimeter-Wave Technology and Applications XIII. Toimittaja / Laurence P. Sadwick ; Tianxin Yang. SPIE, 2020. (Proceedings of SPIE).

Vainio, Markku. / **Continuous-wave optical parametric oscillators for mid-infrared spectroscopy**. Nonlinear Frequency Generation and Conversion: Materials and Devices XIX. Toimittaja / Peter G. Schunemann ; Kenneth L. Schepler. SPIE, 2020. (Proceedings of SPIE - The International Society for Optical Engineering).

Nejadsattari, F. ; Zhang, Y. ; Jayakody, M. N. ; Bouchard, F. ; Larocque, H. ; Sit, A. ; Fickler, R. ; Cohen, E. ; Karimi, E. / **Cyclic quantum walks : Photonic realization and decoherence analysis**. Advanced Optical Techniques for Quantum Information, Sensing, and Metrology. Toimittaja / Philip R. Hemmer ; Alan L. Migdall ; Zameer Ul Hasan. SPIE, 2020. (Proceedings of SPIE - The International Society for Optical Engineering).

Nanni, Loris ; Maguolo, Gianluca ; Paci, Michelangelo. / **Data augmentation approaches for improving animal audio classification**. Julkaisussa: Ecological Informatics. 2020 ; Vuosikerta 57.

Magron, Paul ; Virtanen, Tuomas. / **Online Spectrogram Inversion for Low-Latency Audio Source Separation**. Julkaisussa: IEEE Signal Processing Letters. 2020 ; Vuosikerta 27. Sivut 306-310.

Khodamoradi, Aram ; Liu, Guangyuan ; Mattavelli, Paolo ; Messo, Tuomas ; Abedini, Hossein. / **PRBS-based loop gain identification and output impedance shaping in DC microgrid power converters**. Julkaisussa: Mathematics and Computers in Simulation. 2020.

Kulya, Maksim S. ; Sokolenko, Bogdan ; Gorodetsky, Andrei ; Petrov, Nikolay V. / **Propagation dynamics of ultrabroadband terahertz beams with orbital angular momentum for wireless data transfer**. Broadband Access Communication Technologies XIV. Toimittaja / Benjamin B. Dingel ; Katsutoshi Tsukamoto ; Spiros Mikroulis. SPIE, 2020. (Proceedings of SPIE - The International Society for Optical Engineering).

Gao, Yuan ; Bregovic, Robert ; Gotchev, Atanas. / **Self-Supervised Light Field Reconstruction Using Shearlet Transform and Cycle Consistency**. Julkaisussa: IEEE Signal Processing Letters. 2020 ; Vuosikerta 27. Sivut 1425-1429.

Ghorbani, Modjtaba ; Dehmer, Matthias ; Maimani, Hamidreza ; Maddah, Sheyda ; Roozbayani, Maryam ; Emmert-Streib, Frank. / **The watching system as a generalization of identifying code**. Julkaisussa: Applied Mathematics and Computation. 2020 ; Vuosikerta 380.

Wan, Pengfei ; Tu, Jianhua ; Dehmer, Matthias ; Zhang, Shenggui ; Emmert-Streib, Frank. / **Graph entropy based on the number of spanning forests of c-cyclic graphs**. Julkaisussa: Applied Mathematics and Computation. 2019 ; Vuosikerta 363.

Dehmer, Matthias ; Chen, Zengqiang ; Shi, Yongtang ; Zhang, Y. ; Tripathi, Shailesh ; Ghorbani, Modjtaba ; Mowshowitz, Abbe ; Emmert-Streib, F. / **On efficient network similarity measures**. Julkaisussa: Applied Mathematics and Computation. 2019 ; Vuosikerta 362.

Eriksson, Sirkka-Liisa ; Orelma, Heikki. / **Hyperbolic Function Theory in the Skew-Field of Quaternions**. Julkaisussa: Advances in Applied Clifford Algebras. 2019 ; Vuosikerta 29, Nro 5.

Ferranti, Luca ; Boutellier, Jani. / **Towards Algebraic Modeling of GPU Memory Access for Bank Conflict Mitigation**. 2019 IEEE International Workshop on Signal Processing Systems, SiPS 2019. IEEE, 2019. Sivut 103-108

Adán, Alí Guzmán ; Orelma, Heikki ; Sommen, Frank. / **Hypermonogenic Plane Wave Solutions of the Dirac Equation in Superspace**. Julkaisussa: Advances in Applied Clifford Algebras. 2019 ; Vuosikerta 29, Nro 4.

Gokceli, Selahattin ; Levanen, Toni ; Riihonen, Taneli ; Renfors, Markku ; Valkama, Mikko. / **Frequency-selective PAPR reduction for OFDM**. Julkaisussa: IEEE Transactions on Vehicular Technology. 2019 ; Vuosikerta 68, Nro 6. Sivut 6167-6171.

Paunonen, Lassi ; Seifert, David. / **Asymptotics for periodic systems**. Julkaisussa: Journal of Differential Equations. 2019 ; Vuosikerta 266, Nro 11. Sivut 7152-7172.

De Biasi, Marzio ; Lauri, Juho. / **On the complexity of restoring corrupted colorings**. Julkaisussa: Journal of Combinatorial Optimization. 2019 ; Vuosikerta 37, Nro 4. Sivut 1150-1169.

Gerasimenko, Mikhail ; Moltchanov, Dmitri ; Gapeyenko, Margarita ; Andreev, Sergey ; Koucheryavy, Yevgeni. / **Capacity of Multiconnectivity mmWave Systems with Dynamic Blockage and Directional Antennas**. Julkaisussa: IEEE Transactions on Vehicular Technology. 2019 ; Vuosikerta 68, Nro 4. Sivut 3534-3549.

Koivumäki, Janne ; Zhu, Wen Hong ; Mattila, Jouni. / **Energy-efficient and high-precision control of hydraulic robots**. Julkaisussa: Control Engineering Practice. 2019 ; Vuosikerta 85. Sivut 176-193.

Guzmán Adán, Alí ; Orelma, Heikki ; Sommen, Franciscus. / **Hypermonogenic solutions and plane waves of the Dirac operator in $R^p \times R^q$** . Julkaisussa: Applied Mathematics and Computation. 2019 ; Vuosikerta 346. Sivut 1-14.

Liimatainen, Kaisa ; Kananen, Lauri ; Latonen, Leena ; Ruusuvuori, Pekka. / **Iterative unsupervised domain adaptation for generalized cell detection from brightfield z-stacks**. Julkaisussa: BMC Bioinformatics. 2019 ; Vuosikerta 20, Nro 1.

Gapeyenko, Margarita ; Petrov, Vitaly ; Moltchanov, Dmitri ; Akdeniz, Mustafa Riza ; Andreev, Sergey ; Himayat, Nageen ; Koucheryavy, Yevgeni. / **On the Degree of Multi-Connectivity in 5G Millimeter-Wave Cellular Urban Deployments**. Julkaisussa: IEEE Transactions on Vehicular Technology. 2019 ; Vuosikerta 68, Nro 2. Sivut 1973-1978.

Viherialä, Jukka ; Tuorila, Heidi ; Zia, Nouman ; Cherchi, Matteo ; Aalto, Timo ; Guina, Mircea. / **1.3 μ m U-bend traveling wave SOA devices for high efficiency coupling to silicon photonics**. Silicon Photonics XIV. Toimittaja / Graham T. Reed ; Andrew P. Knights. SPIE, IEEE, 2019. (Proceedings of SPIE - The International Society for Optical Engineering).

Mereuta, Alexandru ; Nechay, Kostiantyn ; Caliman, Andrei ; Suruceanu, Grigore ; Gallo, Pascal ; Guina, Mircea ; Kapon, Eli. / **1.55- μ m wavelength wafer-fused OP-VECSELs in flip-chip configuration**. Vertical External Cavity Surface Emitting Lasers (VECSELs) IX. Toimittaja / Ursula Keller. SPIE, IEEE, 2019. (Proceedings of SPIE - The International Society for Optical Engineering).

Yadav, Amit ; Chichkov, Nikolay B. ; Gumenyuk, Regina ; Zhrebtssov, Evgeny ; Melkumov, Mikhail A. ; Yashkov, Mikhail V. ; Dianov, Evgeny M. ; Rafailov, Edik U. / **405-nm pumped Ce^{3+} -doped silica fiber for broadband fluorescence from cyan to red**. Optical Components and Materials XVI. Toimittaja / Michel J. F. Digonnet ; Shibin Jiang. SPIE, IEEE, 2019. (Proceedings of SPIE - The International Society for Optical Engineering).

Georgiev, Georgi Yordanov ; Aho, Tommi ; Kesseli, Juha ; Yli-Harja, Olli ; Kauffman, Stuart A. / **Action and power efficiency in self-organization : The case for growth efficiency as a cellular objective in escherichia coli**. Evolution, Development and Complexity - Multiscale Evolutionary Models of Complex Adaptive Systems. Toimittaja / Claudio L. Flores Martinez ; Georgi Yordanov Georgiev ; John M. Smart ; Michael E. Price. Springer, 2019. Sivut 229-244 (Springer Proceedings in Complexity).

Zakeri, Faezeh Sadat ; Bätz, Michel ; Jaschke, Tobias ; Keinert, Joachim ; Chuchvara, Alexandra. / **Benchmarking of several disparity estimation algorithms for light field processing**. Fourteenth International Conference on Quality Control by Artificial Vision. Toimittaja / Stephane Bazeille ; Nicolas Verrier ; Christophe Cudel. SPIE, IEEE, 2019. (Proceedings of SPIE - The International Society for Optical Engineering).

Orelma, H. / **Continuum approach to high-cycle fatigue. The finite life-time case with stochastic stress history**. Julkaisussa: Vestnik Samarskogo Gosudarstvennogo Tekhnicheskogo Universiteta, Seriya Fiziko-Matematicheskie Nauki. 2019 ; Vuosikerta 23, Nro 3. Sivut 452-463.

Woldemariam, Endashaw Tesfaye ; Coatanéa, Eric ; Wang, G. Gary ; Lemu, Hirpa G. ; Wu, Di. / **Customized dimensional analysis conceptual modelling framework for design optimization—a case study on the cross-flow micro turbine model**. Julkaisussa: Engineering Optimization. 2019 ; Vuosikerta 51, Nro 7. Sivut 1168-1184.

Kahle, Hermann ; Penttinen, Jussi Pekka ; Phung, Hoy My ; Rajala, Patrik ; Tukiainen, Antti ; Ranta, Sanna ; Guina, Mircea. / **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**. Vertical External Cavity Surface Emitting Lasers (VECSELs) IX. Toimittaja / Ursula Keller. SPIE, IEEE, 2019. (Proceedings of SPIE - The International Society for Optical Engineering).

Radevici, Ivan ; Sadi, Toufik ; Tripurari, Tripathi ; Tiira, Jonna ; Ranta, Sanna ; Tukiainen, Antti ; Guina, Mircea ; Oksanen, Jani. / **Observation of local electroluminescent cooling and identifying the remaining challenges**. Photonic Heat Engines: Science and Applications. Toimittaja / Denis V. Seletskiy ; Richard I. Epstein ; Mansoor Sheik-Bahae. SPIE, IEEE, 2019. (Proceedings of SPIE - The International Society for Optical Engineering).

Batty, Charles ; Paunonen, Lassi ; Seifert, David. / **Optimal energy decay for the wave-heat system on a rectangular domain**. Julkaisussa: SIAM JOURNAL ON MATHEMATICAL ANALYSIS. 2019 ; Vuosikerta 51, Nro 2. Sivut 808-819.

Saleh, Abba ; Ryczkowski, Piotr ; Genty, Goery ; Toivonen, Juha. / **Short-range supercontinuum based lidar for combustion diagnostics**. SPIE Future Sensing Technologies. Toimittaja / Masafumi Kimata ; Christopher R. Valenta. SPIE, IEEE, 2019. (Proceedings of SPIE).

Kocsis, Péter ; Shevkunov, Igor ; Katkovnik, Vladimir ; Egiazarian, Karen. / **Single exposure lensless subpixel phase imaging**. Digital Optical Technologies 2019. Toimittaja / Bernard C. Kress ; Peter Schelkens. SPIE, IEEE, 2019. (Proceedings of SPIE - The International Society for Optical Engineering).

Xu, Lei ; Saerens, Grégoire ; Timofeeva, Maria ; Miroshnichenko, Andrey E. ; Camacho-Morales, Rocio ; Volkovskaya, Irina ; Smirnova, Daria A. ; Lysevych, Mykhaylo ; Huang, Lujun ; Cai, Marcus ; Karouta, Fouad ; Hoe Tan, H. ; Kauranen, Martti ; Jagadish, Chennupati ; Grange, Rachel ; Neshev, Dragomir N. ; Rahmani, Mohsen. / **Switchable unidirectional second-harmonic emission through GaAs nanoantennas**. AOS Australian Conference on Optical Fibre Technology, ACOFT 2019 and Australian Conference on Optics, Lasers, and Spectroscopy, ACOLS 2019. Toimittaja / Arnan Mitchell ; Halina Rubinsztein-Dunlop. SPIE, 2019. (Proceedings of SPIE - The International Society for Optical Engineering).

Sautter, J. ; Xu, L. ; Miroshnichenko, A. ; Lysevych, M. ; Volkovskaya, I. ; Smirnova, D. ; Camacho Morales, M. ; Zangeneh Kamali, K. ; Karouta, F. ; Vora, K. ; Tan, H. H. ; Kauranen, M. ; Staude, I. ; Jagadish, C. ; Neshev, D. N. ; Rahmani, M. / **Tailoring directional scattering of second-harmonic generation from (111)-GaAs nanoantennas**. AOS Australian Conference on Optical Fibre Technology, ACOFT 2019 and Australian Conference on Optics, Lasers, and Spectroscopy, ACOLS 2019. Toimittaja / Arnan Mitchell ; Halina Rubinsztein-Dunlop. SPIE, 2019. (Proceedings of SPIE - The International Society for Optical Engineering).

Sofotasios, P. C. ; Brychkov, Yu A. / **On derivatives of hypergeometric functions and classical polynomials with respect to parameters**. Julkaisussa: Integral Transforms and Special Functions. 2018 ; Vuosikerta 29, Nro 11. Sivut 852-865.

Cerejeiras, Paula ; Hartmann, Stefan ; Orelma, Heikki. / **Structural Results for Quaternionic Gabor Frames**. Julkaisussa: Advances in Applied Clifford Algebras. 2018 ; Vuosikerta 28, Nro 5.

Ponomarenko, Mykola ; Egiazarian, Karen ; Lukin, Vladimir ; Abramova, Victoriya. / **Structural Similarity Index with Predictability of Image Blocks**. 2018 IEEE 17th International Conference on Mathematical Methods in Electromagnetic Theory, MMET 2018 - Proceedings. Vuosikerta 2018-July IEEE COMPUTER SOCIETY PRESS, 2018. Sivut 115-118

Cruz, Cristovao ; Foi, Alessandro ; Katkovnik, Vladimir ; Egiazarian, Karen. / **Nonlocality-Reinforced Convolutional Neural Networks for Image Denoising**. Julkaisussa: IEEE Signal Processing Letters. 2018 ; Vuosikerta 25, Nro 8. Sivut 1216-1220.

Urama, Jani ; Gerasimenko, Mikhail ; Stusek, Martin ; Masek, Pavel ; Andreev, Sergey ; Hosek, Jiri ; Koucheryavy, Yevgeni. / **A multi-purpose automated vehicular platform with multi-radio connectivity capabilities**. 2018 IEEE 87th Vehicular Technology Conference, VTC Spring 2018. IEEE, 2018. Sivut 1-7

Sofotasios, Paschalis C. ; Yoo, Seong Ki ; Muhaidat, Sami ; Cotton, Simon L. ; Matthaiou, Michail ; Valkama, Mikko ; Karagiannidis, George K. / **Ergodic Capacity Analysis of Wireless Transmission over Generalized Multipath/Shadowing Channels**. 2018 IEEE 87th Vehicular Technology Conference. IEEE, 2018. Sivut 1-5

Marshoud, Hanaa ; Muhaidat, Sami ; Sofotasios, Paschalis C. ; Imran, Muhammad ; Sharif, Bayan S. ; Karagiannidis, George K. / **Optical Asymmetric Modulation for VLC Systems - Invited Paper**. 2018 IEEE 87th Vehicular Technology Conference, VTC Spring 2018. IEEE, 2018. Sivut 1-5

Selim, Bassant ; Muhaidat, Sami ; Sofotasios, Paschalis C. ; Sharif, Bayan S. ; Stouraitis, Thanos ; Karagiannidis, George K. ; Al-Dhahir, Naofal. / **Performance Analysis of Single Carrier Coherent and Noncoherent Modulation under I/Q Imbalance**. 2018 IEEE 87th Vehicular Technology Conference, VTC Spring 2018. IEEE, 2018. Sivut 1-5

Sheikh, Muhammad Usman ; Biswas, Ritayan ; Lempiäinen, Jukka. / **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. Sivut 1-6

Solomitchii, Dmitrii ; Petrov, Vitaly ; Nikopour, Hosein ; Akdeniz, Mustafa ; Orhan, Oner ; Himayat, Nageen ; Talwar, Shilpa ; Andreev, Sergey ; Koucheryavy, Yevgeni. / **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. Sivut 1-7

Ugalde-Loo, Carlos E. ; Acha, Enrique ; Licéaga-Castro, Eduardo. / **Analysis of the damping characteristics of two power electronics-based devices using 'individual channel analysis and design'**. Julkaisussa: Applied Mathematical Modelling. 2018 ; Vuosikerta 59. Sivut 527-545.

Dehmer, Matthias ; Chen, Zengqiang ; Emmert-Streib, Frank ; Shi, Yongtang ; Tripathi, Shailesh ; Musa, Aliyu ; Mowshowitz, Abbe. / **Properties of graph distance measures by means of discrete inequalities**. Julkaisussa: Applied Mathematical Modelling. 2018 ; Vuosikerta 59. Sivut 739-749.

Phan, Duy ; Rodrigues, Sérgio S. / **Stabilization to trajectories for parabolic equations**. Julkaisussa: Mathematics of Control, Signals, and Systems. 2018 ; Vuosikerta 30, Nro 2.

Mokrov, Evgeny ; Ponomarenko-Timofeev, Aleksei ; Gudkova, Irina ; Masek, Pavel ; Hosek, Jiri ; Andreev, Sergey ; Koucheryavy, Yevgeni ; Gaidamaka, Yuliya. / **Modeling Transmit Power Reduction for a Typical Cell with Licensed Shared Access Capabilities**. Julkaisussa: IEEE Transactions on Vehicular Technology. 2018 ; Vuosikerta 67, Nro 6. Sivut 5505-5509.

Petrov, Vitaly ; Kokkonen, Joonas ; Moltchanov, Dmitri ; Lehtomaki, Janne ; Juntti, Markku ; Koucheryavy, Yevgeni. / **The Impact of Interference from the Side Lanes on mmWave/THz Band V2V Communication Systems with Directional Antennas**. Julkaisussa: IEEE Transactions on Vehicular Technology. 2018 ; Vuosikerta 67, Nro 6. Sivut 5028-5041.

Borges, Lucas R. ; Azzari, Lucio ; Bakic, Predrag R. ; Maidment, Andrew D.A. ; Vieira, Marcelo A.C. ; Foi, Alessandro. / **Restoration of low-dose digital breast tomosynthesis**. Julkaisussa: Measurement Science and Technology. 2018 ; Vuosikerta 29, Nro 6.

Krogerus, Tomi ; Hyvönen, Mika ; Huhtala, Kalevi. / **Analysis of common rail pressure signal of dual-fuel large industrial engine for identification of injection duration of pilot diesel injectors**. Julkaisussa: Fuel. 2018 ; Vuosikerta 216. Sivut 1-9.

Katkovnik, Vladimir ; Shevkunov, Igor ; Petrov, Nikolay V. ; Eguiazarian, Karen. / **Multiwavelength surface contouring from phase-coded diffraction patterns**. Unconventional Optical Imaging 2018. Strasbourg, France. SPIE, 2018. (Proceedings of SPIE - The International Society for Optical Engineering).

Noronen, Teppo ; Fedotov, Andrei ; Rissanen, Joona ; Gumenyuk, Regina ; Butov, Oleg ; Chamorovskii, Yuri ; Golant, Konstantin ; Odnoblyudov, Maxim ; Filippov, Valery. / **Ultra-large mode area single frequency anisotropic MOPA with double clad Yb-doped tapered fiber**. Fiber Lasers XV: Technology and Systems. SPIE, IEEE, 2018. (Proceedings of SPIE).

Voronin, V. ; Pismenskova, M. ; Zelensky, A. ; Cen, Yigang ; Nadykto, A. ; Eguiazarian, K. / **Action recognition using the 3D dense microblock difference**. Counterterrorism, Crime Fighting, Forensics, and Surveillance Technologies II. SPIE, 2018. (Proceedings of SPIE).

Kauhanen, Janne ; Orelma, Heikki. / **Cauchy–Riemann Operators in Octonionic Analysis**. Julkaisussa: Advances in Applied Clifford Algebras. 2018 ; Vuosikerta 28, Nro 1.

Raitoharju, Matti ; Svensson, Lennart ; Garcia-Fernandez, Angel Froilan ; Piche, Robert. / **Damped Posterior Linearization Filter**. Julkaisussa: IEEE Signal Processing Letters. 2018 ; Vuosikerta 25, Nro 4.

Iscar Vergara, Jorge ; Guvenc, Ismail ; Dikmese, Sener ; Rupasinghe, Nadisanka. / **Efficient Noise Variance Estimation under Pilot Contamination for Large-Scale MIMO Systems**. Julkaisussa: IEEE Transactions on Vehicular Technology. 2018 ; Vuosikerta 67, Nro 4. Sivut 2982-2996.

Mateos, Xavier ; Loiko, Pavel ; Lamrini, Samir ; Scholle, Karsten ; Fuhrberg, Peter ; Suomalainen, Soile ; Härkönen, Antti ; Guina, Mircea ; Vatnik, Sergei ; Vedin, Ivan ; Aguiló, Magdalena ; Diáz, Francesc ; Wang, Yicheng ; Griebner, Uwe ; Petrov, Valentin. / **Highly-efficient Ho:KY(WO4)2 thin-disk lasers at 2.06 μm** . Pacific-Rim Laser Damage 2018: Optical Materials for High-Power Lasers. SPIE, IEEE, 2018. (Proceedings of SPIE).

Eriksson, S. L. ; Orelma, H. ; Vieira, N. / **Hypermonogenic Functions of Two Vector Variables**. Julkaisussa: Complex Analysis and Operator Theory. 2018 ; Vuosikerta 12, Nro 2. Sivut 555–570.

Karioja, Pentti ; Alajoki, Teemu ; Cherchi, Matteo ; Ollila, Jyrki ; Harjanne, Mikko ; Heinilehto, Noora ; Suomalainen, Soile ; Zia, Nouman ; Tuorila, Heidi ; Viheriälä, Jukka ; Guina, Mircea ; Buczynski, Ryszard ; Kasztelanic, Rafa ; Salo, Tomi ; Virtanen, Sami ; Kluczynski, Pawel ; Borgen, Lars ; Ratajczyk, Marcin ; Kalinowski, Przemyslaw. / **Integrated multi-wavelength mid-IR light source for gas sensing**. Next-Generation Spectroscopic Technologies XI. SPIE, IEEE, 2018. (SPIE Conference Proceedings).

Chaudhari, Sachin ; Kosunen, Marko ; Mäkinen, Semu ; Chandrasekaran, Ramanathan ; Oksanen, Jan ; Laatta, Markus ; Ryyänänen, Jussi ; Koivunen, Visa ; Valkama, Mikko. / **Spatial Interpolation of Cyclostationary Test Statistics in Cognitive Radio Networks : Methods and Field Measurements**. Julkaisussa: IEEE Transactions on Vehicular Technology. 2018 ; Vuosikerta 67, Nro 2. Sivut 1113-1129.

Korpi, Dani ; Riihonen, Taneli ; Sabharwal, Ashutosh ; Valkama, Mikko. / **Transmit Power Optimization and Feasibility Analysis of Self-backhauling Full-Duplex Radio Access Systems**. Julkaisussa: IEEE Transactions on Wireless Communications. 2018 ; Vuosikerta 17, Nro 6. Sivut 4219-4236.

Wu, Jiahao ; Blattner, Timothy ; Keyrouz, Walid ; Bhattacharyya, Shuvra S. / **Model-based dynamic scheduling for multicore implementation of image processing systems**. 2017 IEEE International Workshop on Signal Processing Systems, SiPS 2017. IEEE, 2017.

Sofotasios, Paschalis C. ; Bagheri, Alireza ; Tsiftsis, Theodoros A. ; Freear, Steven ; Shahzadi, Ali ; Valkama, Mikko. / **A Comprehensive Framework for Spectrum Sensing in Non-Linear and Generalized Fading Conditions**. Julkaisussa: IEEE Transactions on Vehicular Technology. 2017 ; Vuosikerta 66, Nro 10. Sivut 8615-8631.

Marshoud, Hanaa ; Sofotasios, Paschalis C. ; Muhaidat, Sami ; Karagiannidis, George K. ; Sharif, Bayan S. / **On the Performance of Visible Light Communication Systems with Non-Orthogonal Multiple Access**. Julkaisussa: IEEE Transactions on Wireless Communications. 2017 ; Vuosikerta 16, Nro 10. Sivut 6350-6364.

Carrera, Diego ; Boracchi, Giacomo ; Foi, Alessandro ; Wohlberg, Brendt. / **Sparse Overcomplete Denoising : Aggregation Versus Global Optimization**. Julkaisussa: IEEE Signal Processing Letters. 2017 ; Vuosikerta 24, Nro 10. Sivut 1468-1472.

Cui, Qimei ; Zhang, Yuhao ; Ni, Wei ; Valkama, Mikko ; Jantti, Riku. / **Energy Efficiency Maximization of Full-Duplex Two-Way Relay with Non-Ideal Power Amplifiers and Non-Negligible Circuit Power**. Julkaisussa: IEEE Transactions on Wireless Communications. 2017 ; Vuosikerta 16, Nro 9. Sivut 6264-6278.

Korpela, Timo ; Kumpulainen, Pekka ; Majanne, Yrjö ; Häyrinen, Anna ; Lautala, Pentti. / **Indirect NO_x emission monitoring in natural gas fired boilers**. Julkaisussa: Control Engineering Practice. 2017 ; Vuosikerta 65. Sivut 11-25.

Tripathi, Shailesh ; Lloyd-Price, Jason ; Ribeiro, Andre ; Yli-Harja, Olli ; Dehmer, Matthias ; Emmert-Streib, Frank. / **sgnesR : An R package for simulating gene expression data from an underlying real gene network structure considering delay parameters**. Julkaisussa: BMC Bioinformatics. 2017 ; Vuosikerta 18, Nro 1.

Semkin, Vasilii ; Solomitckii, Dmitrii ; Naderpour, Reza ; Andreev, Sergey ; Koucheryavy, Yevgeni ; Räisänen, Antti V. / **Characterization of Radio Links at 60 GHz Using Simple Geometrical and Highly Accurate 3-D Models**. Julkaisussa: IEEE Transactions on Vehicular Technology. 2017 ; Vuosikerta 66, Nro 6. Sivut 4647-4656.

Lauri, Mikko ; Ropponen, Aino ; Ritala, Risto. / **Meeting a deadline : shortest paths on stochastic directed acyclic graphs with information gathering**. Julkaisussa: Annals of Mathematics and Artificial Intelligence. 2017 ; Vuosikerta 79, Nro 4. Sivut 337–370.

Petrov, Vitaly ; Komarov, Mikhail ; Moltchanov, Dmitri ; Jornet, Josep Miquel ; Koucheryavy, Yevgeni. / **Interference and SINR in Millimeter Wave and Terahertz Communication Systems With Blocking and Directional Antennas**. Julkaisussa: IEEE Transactions on Wireless Communications. 2017 ; Vuosikerta 16, Nro 3. Sivut 1791-1808.

Rahmatallah, Yasir ; Zybailov, Boris ; Emmert-Streib, Frank ; Glazko, Galina. / **GSAR : Bioconductor package for Gene Set analysis in R**. Julkaisussa: BMC Bioinformatics. 2017 ; Vuosikerta 18, Nro 1.

Rui, Rafael ; Ardeshiri, Tohid ; Nurminen, Henri ; Bazanella, Alexandre ; Gustafsson, Fredrik. / **State Estimation for a Class of Piecewise Affine State-Space Models**. Julkaisussa: IEEE Signal Processing Letters. 2017 ; Vuosikerta 24, Nro 1. Sivut 61-65.

Paunonen, Lassi ; Seifert, David. / **Asymptotics for infinite systems of differential equations**. Julkaisussa: SIAM Journal on Control and Optimization. 2017 ; Vuosikerta 55, Nro 2. Sivut 1153-1178.

Katkovnik, Vladimir ; Shevkunov, Igor ; Petrov, Nikolay V. ; Egiazarian, Karen. / **Computational wavelength resolution for in-line lensless holography : Phase-coded diffraction patterns and wavefront group-sparsity**. Digital Optical Technologies 2017. SPIE, 2017. (Proceedings of SPIE).

Stoykova, Elena ; Nazarova, Dimana ; Berberova, Nataliya ; Gotchev, Atanas ; Ivanov, Branimir ; Mateev, Georgy. / **Dynamic laser speckle metrology with binarization of speckle patterns**. 19th International Conference and School on Quantum Electronics: Laser Physics and Applications. SPIE, 2017. (Proceedings of SPIE).

Berrocal, Javier ; Garcia-Alonso, Jose ; Vicente-Chicote, Cristina ; Hernández, Juan ; Mikkonen, Tommi ; Canal, Carlos ; Murillo, Juan M. / **Early analysis of resource consumption patterns in mobile applications**. Julkaisussa: Pervasive and Mobile Computing. 2017 ; Vuosikerta 35. Sivut 32–50.

Orelma, H. ; Vieira, N. / **Homogeneous (α, k) -Polynomial Solutions of the Fractional Riesz System in Hyperbolic Space**. Julkaisussa: Complex Analysis and Operator Theory. 2017 ; Vuosikerta 11, Nro 5. Sivut 1253–1267.

Humaloja, Jukka-Pekka ; Ali-Löytty, Simo ; Pohjolainen, Seppo ; Hämäläinen, Timo. / **Independent Loops Search in Flow Networks Aiming for Well-Conditioned System of Equations**. Progress in Industrial Mathematics at ECMI 2016. Toimittaja / Peregrina Quintela ; Patricia Barral ; Dolores Gómez ; Francisco J. Pena ; Jerónimo Rodríguez ; Pilar Salgado ; Miguel E. Vázquez-Mendéz. Springer International Publishing, 2017. (Mathematics in industry).

Vuojamo, Vesa ; Eriksson, Sirkka-Liisa. / **Integral kernels for k-hypermonogenic functions**. Julkaisussa: Complex Variables and Elliptic Equations. 2017 ; Vuosikerta 62, Nro 9. Sivut 1-12.

Lindroos, Matti ; Laukkanen, Anssi ; Cailletaud, Georges ; Kuokkala, Veli-Tapani. / **On the effect of deformation twinning and microstructure to strain hardening of high manganese austenitic steel 3D microstructure aggregates at large strains**. Julkaisussa: International Journal of Solids and Structures. 2017 ; Vuosikerta 125. Sivut 68-76.

Gapeyenko, Margarita ; Samuylov, Andrey ; Gerasimenko, Mikhail ; Moltchanov, Dmitri ; Singh, Sarabjot ; Akdeniz, Mustafa Riza ; Aryafar, Ehsan ; Himayat, Nageen ; Andreev, Sergey ; Koucheryavy, Yevgeni. / **On the Temporal Effects of Mobile Blockers in Urban Millimeter-Wave Cellular Scenarios**. Julkaisussa: IEEE Transactions on Vehicular Technology. 2017 ; Vuosikerta 66, Nro 11. Sivut 10124-10138.

Filippov, Valery ; Vorotynskii, Andrei ; Noronen, Teppo ; Gumenyuk, Regina ; Chamorovskii, Yuri ; Golant, Konstantin. / **Picosecond MOPA with ytterbium doped tapered double clad fiber**. Fiber Lasers XIV: Technology and Systems. Vuosikerta 10083 SPIE, 2017. (Proceedings of SPIE; 10083).

Paunonen, Lassi. / **Robust controllers for regular linear systems with infinite-dimensional exosystems**. Julkaisussa: SIAM Journal on Control and Optimization. 2017 ; Vuosikerta 55, Nro 3. Sivut 1567-1597.

Eriksson, Sirkka-Liisa ; Orelma, Heikki ; Vieira, Nelson. / **Two-Sided Hypergenic Functions**. Julkaisussa: Advances in Applied Clifford Algebras. 2017 ; Vuosikerta 27, Nro 1. Sivut 111–123.

Pelcat, Maxime ; Desnos, Karol ; Maggiani, Luca ; Liu, Yanzhou ; Heulot, Julien ; Nezan, Jean François ; Bhattacharyya, Shuvra S. / **Models of architecture : Reproducible efficiency evaluation for signal processing systems**. IEEE International Workshop on Signal Processing Systems, SiPS 2016. IEEE, 2016. Sivut 121-126 (IEEE International Workshop on Signal Processing Systems).

Azzari, Lucio ; Foi, Alessandro. / **Variance Stabilization for Noisy+Estimate Combination in Iterative Poisson Denoising**. Julkaisussa: IEEE Signal Processing Letters. 2016 ; Vuosikerta 23, Nro 8. Sivut 1086-1090.

Korpela, Timo ; Suominen, Olli ; Majanne, Yrjö ; Laukkanen, Ville ; Lautala, Pentti. / **Robust data reconciliation of combustion variables in multi-fuel fired industrial boilers**. Julkaisussa: Control Engineering Practice. 2016 ; Vuosikerta 55. Sivut 101-115.

Pyattaev, Alexander ; Johnsson, Kerstin ; Andreev, Sergey ; Koucheryavy, Yevgeni. / **A novel stochastic channel modeling approach for mmWave systems with beamforming**. 2016 IEEE 83rd Vehicular Technology Conference (VTC Spring) . IEEE, 2016.

Xing, Hongnian ; Renfors, Markku. / **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.

Dikmese, Sener ; Ilyas, Zobia ; Sofotasios, Paschalis ; Renfors, Markku ; Valkama, Mikko. / **Novel frequency domain cyclic prefix autocorrelation based compressive spectrum sensing for cognitive radio**. 2016 IEEE 83rd Vehicular Technology Conference (VTC Spring) . IEEE, 2016.

Pohjolainen, Seppo ; Suutala, Antti. / **Acoustic Modelling**. Mathematical Modelling. Toimittaja / Seppo Pohjolainen. Switzerland : Springer, 2016. Sivut 185-205

Mehta, Rakesh ; Egiazarian, Karen. / **Rotation Invariant Texture Description Using Symmetric Dense Microblock Difference**. Julkaisussa: IEEE Signal Processing Letters. 2016 ; Vuosikerta 23, Nro 6. Sivut 833-837.

Anufrieva, Olga ; Sala, Adrien ; Yli-Harja, Olli ; Kandhavelu, Meenakshisundaram. / **Real-time observation of bacterial gene expression noise**. Julkaisussa: Nano Communication Networks. 2016 ; Vuosikerta 8. Sivut 68-75.

Poutala, Arto ; Tarhasaari, Timo ; Kettunen, Lauri. / **Geometric solution strategy of Laplace problems with free boundary**. Julkaisussa: International Journal for Numerical Methods in Engineering. 2016 ; Vuosikerta 105, Nro 10. Sivut 723-746.

Van Mellaert, R. ; Mela, K. ; Tiainen, T. ; Heinisuo, M. ; Lombaert, G. ; Schevenels, M. / **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. Vuosikerta 2 National Technical University of Athens, 2016. Sivut 3395-3408

Laakkonen, Alpo ; Paunonen, Lassi. / **A Simple Controller with a Reduced Order Internal Model in the Frequency Domain**. Proceedings of European Control Conference 2016. IEEE, 2016. Sivut 1988-1992

- Isotalo, Tero J. ; Niemi, Tapio. / **Dots-on-the-fly electron beam lithography**. SPIE Proceedings: Alternative Lithographic Technologies VIII. Toimittaja / Christopher Bencher. Vuosikerta 9777 SPIE, 2016. (Proceedings of SPIE).
- Zia, Nouman ; Viheriälä, Jukka ; Koskinen, Riku ; Koskinen, Mervi ; Suomalainen, Soile ; Guina, Mircea. / **Fabrication and characterization of broadband superluminescent diodes for 2 μm wavelength**. Light-Emitting Diodes: Materials, Devices, and Applications for Solid State Lighting XX. SPIE, 2016. (Proceedings of SPIE).
- Lauri, Juho. / **Further hardness results on rainbow and strong rainbow connectivity**. Julkaisussa: Discrete Applied Mathematics. 2016 ; Vuosikerta 201. Sivut 191-200.
- Viheriälä, Jukka ; Aho, Antti T. ; Mäkelä, Jaakko ; Salmi, Joel ; Virtanen, Heikki ; Leinonen, Tomi ; Dumitrescu, Mihail ; Guina, Mircea. / **High-power 1550 nm tapered DBR lasers fabricated using soft UV-nanoimprint lithography**. High-Power Diode Laser Technology and Applications XIV. SPIE, 2016. (SPIE Conference Proceedings).
- Moirangthem, Monali ; Stumpel, Jelle E. ; Alp, Baran ; Teunissen, Pit ; Bastiaansen, Cees W M ; Schenning, Albertus P H J. / **Hot pen and laser writable photonic polymer films**. Emerging Liquid Crystal Technologies XI. Vuosikerta 9769 SPIE, 2016.
- Aalto, Timo ; Harjanne, Mikko ; Offrein, Bert Jan ; Caër, Charles ; Neumeyr, Christian ; Malacarne, Antonio ; Guina, Mircea ; Sheehan, Robert N. ; Peters, Frank H. ; Melanen, Petri. / **Integrating III-V, Si, and polymer waveguides for optical interconnects : RAPIDO**. Optical Interconnects XVI. SPIE, 2016. (Proceedings of SPIE).
- Dumitrescu, Bogdan ; Şicleru, Bogdan C. ; Avram, Florin. / **Modeling probability densities with sums of exponentials via polynomial approximation**. Julkaisussa: Journal of Computational and Applied Mathematics. 2016 ; Vuosikerta 292. Sivut 513-525.
- Eriksson, Sirkka-Liisa ; Orelma, Heikki. / **On k-Hypermonogenic Functions and Their Mean Value Properties**. Julkaisussa: Complex Analysis and Operator Theory. 2016 ; Vuosikerta 10, Nro 2. Sivut 311-325.
- Fotiadi, Andrei A. ; Korobko, Dmitry A. ; Okhotnikov, Oleg G. ; Zolotovskii, Igor O. / **Optical fiber amplifier with spectral compression elements for high-power laser pulse generation**. Nonlinear Optics and its Applications IV. Vuosikerta 9894 SPIE, 2016. (Proceedings of SPIE).
- Komarov, Mikhail ; Deng, Boya ; Petrov, Vitaly ; Moltchanov, Dmitri. / **Performance analysis of simultaneous communications in bacterial nanonetworks**. Julkaisussa: Nano Communication Networks. 2016 ; Vuosikerta 8. Sivut 55-67.
- Frantc, V. A. ; Makov, S. V. ; Voronin, V. V. ; Marchuk, V. I. ; Semenishchev, E. A. ; Egiazarian, K. O. ; Agaian, S. / **Simultaneous binary hash and features learning for image retrieval**. Mobile Multimedia/Image Processing, Security, and Applications 2016. SPIE, 2016. (SPIE Conference Proceedings).
- Zemliachenko, Alexander ; Lukin, Vladimir ; Ponomarenko, Nikolay ; Egiazarian, Karen ; Astola, Jaakko. / **Still image/video frame lossy compression providing a desired visual quality**. Julkaisussa: Multidimensional Systems and Signal Processing . 2016 ; Vuosikerta 27, Nro 3. Sivut 697-718.
- Hosseini, Seyyed Soheil Sadat ; Jamali, Mohsin M. ; Astola, Jaakko ; Gorsevski, Peter V. / **Target tracking via combination of particle filter and optimisation techniques**. Julkaisussa: International Journal of Mathematical Modelling and Numerical Optimization. 2016 ; Vuosikerta 7, Nro 2. Sivut 212-229.
- Borges, Lucas ; Vieira, Marcelo ; Foi, Alessandro. / **Unbiased Injection of Signal-Dependent Noise in Variance-Stabilized Range**. Julkaisussa: IEEE Signal Processing Letters. 2016 ; Vuosikerta 23, Nro 10. Sivut 1494-1498.

Boutellier, J. ; Nyländen, T. / **Programming graphics processing units in the RVC-CAL dataflow language**. Electronic Proceedings of the 2015 IEEE International Workshop on Signal Processing Systems, SiPS 2015. Vuosikerta 2015-December Institute of Electrical and Electronics Engineers Inc., 2015.

Mäki, A. J. ; Peltokangas, M. ; Kreutzer, J. ; Auvinen, S. ; Kallio, P. / **Modeling carbon dioxide transport in PDMS-based microfluidic cell culture devices**. Julkaisussa: Chemical Engineering Science. 2015 ; Vuosikerta 137. Sivut 515-524.

Diaz, Isael ; Wilhelmsson, Leif R. ; Sofotasios, Paschalis C. ; Miao, Yun ; Tan, Siyu ; Edfors, Ove ; Öwall, Viktor. / **A New Approach to Sign-Bit-Based Parameter Estimation in OFDM Receivers**. Julkaisussa: Circuits, Systems and Signal Processing. 2015 ; Vuosikerta 34, Nro 11. Sivut 3631-3660.

Sofotasios, Paschalis C. ; Muhaidat, Sami ; Valkama, Mikko ; Ghogho, Mounir ; Karagiannidis, George K. / **Entropy and Channel Capacity under Optimum Power and Rate Adaptation over Generalized Fading Conditions**. Julkaisussa: IEEE Signal Processing Letters. 2015 ; Vuosikerta 22, Nro 11. Sivut 2162-2166.

Nurminen, Henri ; Ardeshiri, Tohid ; Piché, Robert ; Gustafsson, Fredrik. / **Robust Inference for State-Space Models with Skewed Measurement Noise**. Julkaisussa: IEEE Signal Processing Letters. 2015 ; Vuosikerta 22, Nro 11. Sivut 1898-1902.

Sofotasios, Paschalis C. ; Muhaidat, Sami ; Karagiannidis, George K. ; Sharif, Bayan S. / **Solutions to integrals involving the marcum Q-function and applications**. Julkaisussa: IEEE Signal Processing Letters. 2015 ; Vuosikerta 22, Nro 10. Sivut 1752-1756.

Martin, Floran ; Singh, Deepak ; Belahcen, Anouar ; Rasilo, Paavo ; Haavisto, Ari ; Arkkio, Antero. / **Analytical model for magnetic anisotropy of non-oriented steel sheets**. Julkaisussa: COMPEL: The International Journal for Computation and Mathematics in Electrical and Electronic Engineering. 2015 ; Vuosikerta 34, Nro 5. Sivut 1475-1488.

Shah, Sahas Bikram ; Rasilo, Paavo ; Belahcen, Anouar ; Arkkio, Antero. / **Estimation of additional losses due to random contacts at the edges of stator of an electrical machine**. Julkaisussa: COMPEL: The International Journal for Computation and Mathematics in Electrical and Electronic Engineering. 2015 ; Vuosikerta 34, Nro 5. Sivut 1501-1510.

Makkonen, J. ; Marsh, L. A. ; Vihonen, J. ; Järvi, A. ; Armitage, D. W. ; Visa, A. ; Peyton, A. J. / **Improving reliability for classification of metallic objects using a WTMD portal**. Julkaisussa: Measurement Science and Technology. 2015 ; Vuosikerta 26, Nro 10.

Sandev, Trifce ; Chechkin, Aleksei ; Kantz, Holger ; Metzler, Ralf. / **Diffusion and Fokker-Planck-Smoluchowski equations with generalized memory kernel**. Julkaisussa: Fractional Calculus and Applied Analysis. 2015 ; Vuosikerta 18, Nro 4. Sivut 1006-1038.

Hu, Jun ; Kannianen, Juho. / **Asymptotic expansion of European options with mean-reverting stochastic volatility dynamics**. Julkaisussa: Finance Research Letters. 2015 ; Vuosikerta 14. Sivut 1-10.

Gerasimenko, Mikhail ; Moltchanov, Dmitri ; Florea, Roman ; Himayat, Nageen ; Andreev, Sergey ; Koucheryavy, Yevgeni. / **Prioritized centrally-controlled resource allocation in integrated multi-RAT HetNets**. IEEE Vehicular Technology Conference. Vuosikerta 2015-July The Institute of Electrical and Electronics Engineers, Inc., 2015.

Huusari, Timo ; Choi, Yang Seok ; Liikkanen, Petteri ; Korpi, Dani ; Talwar, Shilpa ; Valkama, Mikko. / **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.

Dehmer, Matthias ; Emmert-Streib, Frank ; Shi, Yongtang. / **Graph distance measures based on topological indices revisited**. Julkaisussa: Applied Mathematics and Computation. 2015 ; Vuosikerta 266. Sivut 623-633.

Matos Simoes, Ricardo de ; Dalleau, Sabine ; Williamson, Kate E. ; Emmert-Streib, Frank. / **Urothelial cancer gene regulatory networks inferred from large-scale RNAseq, Bead and Oligo gene expression data**. Julkaisussa: BMC Systems Biology. 2015 ; Vuosikerta 9.

Höynälänmaa, Tommi. / **Multiresolution analysis for compactly supported interpolating tensor product wavelets**. Julkaisussa: International Journal of Wavelets Multiresolution and Information Processing. 2015 ; Vuosikerta 13, Nro 2.

Kantola, Emmi ; Leinonen, Tomi ; Ranta, Sanna ; Tavast, Miki ; Penttinen, Jussi-Pekka ; Guina, Mircea. / **1180nm VECSEL with 50 W output power**. Proceedings of SPIE - The International Society for Optical Engineering. Vuosikerta 9349 SPIE, 2015.

Takalo, Reijo ; Hytti, Heli ; Ihalainen, Heimo ; Sohlberg, Antti. / **Adaptive autoregressive model for reduction of noise in SPECT**. Julkaisussa: Computational and Mathematical Methods in Medicine. 2015 ; Vuosikerta 2015.

Foldes, S. ; Horváth, Eszter K. ; Radeleczki, Sándor ; Waldhauser, Tamás. / **A general framework for island systems**. Julkaisussa: Acta Universitatis Szegediensis: Acta Scientiarum Mathematicarum. 2015 ; Vuosikerta 81, Nro 1-2. Sivut 3-24.

Rubel, Aleksey S. ; Lukin, Vladimir V. ; Egiazarian, Karen. / **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. Vuosikerta 9399 SPIE, 2015.

Battisti, F. ; Carli, M. ; Stramacci, A. ; Boev, A. ; Gotchev, A. / **A perceptual quality metric for high-definition stereoscopic 3D video**. Image Processing: Algorithms and Systems XIII. SPIE, 2015. (SPIE Conference Proceedings).

Lukin, Vladimir V. ; Ponomarenko, Nikolay N. ; Ieremeiev, Oleg ; Egiazarian, Karen ; Astola, Jaakko. / **Combining full-reference image visual quality metrics by neural network**. Proceedings of SPIE - The International Society for Optical Engineering. Vuosikerta 9394 SPIE, 2015.

Voronin, V. V. ; Marchuk, V. I. ; Fisunov, A. V. ; Tokareva, S. V. ; Egiazarian, K. O. / **Depth map occlusion filling and scene reconstruction using modified exemplar-based inpainting**. Image Processing: Algorithms and Systems XIII. SPIE, 2015. (SPIE Conference Proceedings).

Björklund, Andreas ; Kaski, Petteri ; Kowalik, Łukasz ; Lauri, Juho. / **Engineering motif search for large graphs**. 2015 Proceedings of the Seventeenth Workshop on Algorithm Engineering and Experiments (ALENEX). 2015. Sivut 104-118 (Workshop on Algorithm Engineering and Experiments).

Laakkonen, Petteri ; Pohjolainen, Seppo. / **Frequency domain robust regulation of signals generated by an infinite-dimensional exosystem**. Julkaisussa: SIAM Journal on Control and Optimization. 2015 ; Vuosikerta 53, Nro 1. Sivut 139-166.

Ledentsov, N. N. ; Shchukin, V. A. ; Lyytikäinen, J. ; Okhotnikov, O. ; Cherkashin, N. A. ; Shernyakov, Yu M. ; Payusov, A. S. ; Gordeev, N. Y. ; Maximov, M. V. ; Schlichting, S. ; Nippert, F. ; Hoffmann, A. / **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. Vuosikerta 9383 SPIE, 2015.

Leinonen, Tomi ; Penttinen, Jussi Pekka ; Korpijärvi, Ville Markus ; Kantola, Emmi ; Guina, Mircea. / **>8W GaInNAs VECSEL emitting at 615 nm**. Proceedings of SPIE: Vertical External Cavity Surface Emitting Lasers (VECSELs) V. Vuosikerta 9349 SPIE, 2015.

Frosio, Iuri ; Egiazarian, Karen ; Pulli, Kari. / **Machine learning for adaptive bilateral filtering**. Image Processing: Algorithms and Systems XIII. Vuosikerta 9399 SPIE, 2015. (Proceedings of SPIE - The International Society for Optical Engineering).

Ye, Changgeng ; Koponen, Joonas ; Aallos, Ville ; Kokki, Teemu ; Petit, Laetitia ; Kimmelma, Ossi. / **Measuring bend losses in large-mode-area fibers**. Fiber Lasers XII: Technology, Systems, and Applications. Vuosikerta 9344 SPIE, 2015.

Korpijärvi, Ville-Markus ; Kantola, Emmi L. ; Leinonen, Tomi ; Guina, Mircea. / **Monolithic GaInNAsSb/GaAs VECSEL emitting at 1550 nm**. SPIE conference proceedings. Vuosikerta 9349 SPIE, 2015.

Voronin, V. V. ; Frantc, V. A. ; Marchuk, V. I. ; Sherstobitov, A. I. ; Egiazarian, K. / **No-reference visual quality assessment for image inpainting**. Image Processing: Algorithms and Systems XIII. SPIE, 2015. (SPIE Conference Proceedings).

Heikkinen, Juuso ; Gumenyuk, Regina ; Rantamäki, Antti ; Lyytikäinen, Jari ; Leinonen, Tomi ; Zolotovskii, Igor ; Melkumov, Mikhail ; Dianov, Evgeny M. ; Okhotnikov, Oleg G. / **Power and wavelength scaling using semiconductor disk laser - bismuth fiber MOPA systems**. Vertical External Cavity Surface Emitting Lasers (VECSELs) V. Toimittaja / M Guina. BELLINGHAM : SPIE, 2015. (Proceedings of SPIE).

Suominen, Olli ; Gotchev, Atanas. / **Preserving natural scene lighting by strobe-lit video**. Image Processing: Algorithms and Systems XIII. SPIE, 2015. (SPIE Conference Proceedings).

Smirnov, Sergey ; Gotchev, Atanas. / **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, 2015. (SPIE Conference Proceedings).

Laakkonen, Petteri ; Quadrat, Alban. / **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. Sivut 311-318

Belahcen, Anouar ; Rasilo, Paavo ; Nguyen, Thu Trang ; Clénet, Stephane. / **Uncertainty propagation of iron loss from characterization measurements to computation of electrical machines**. Julkaisussa: COMPEL: The International Journal for Computation and Mathematics in Electrical and Electronic Engineering. 2015 ; Vuosikerta 34, Nro 3. Sivut 624-636.

Rahmatallah, Yasir ; Emmert-Streib, Frank ; Glazko, Galina. / **Comparative evaluation of gene set analysis approaches for RNA-Seq data**. Julkaisussa: BMC Bioinformatics. 2014 ; Vuosikerta 15, Nro 1.

Chen, Zengqiang ; Dehmer, Matthias ; Emmert-Streib, Frank ; Shi, Yongtang. / **Entropy bounds for dendrimers**. Julkaisussa: Applied Mathematics and Computation. 2014 ; Vuosikerta 242. Sivut 462-472.

Sand, Antti ; Rakkolainen, Ismo. / **A hand-held immaterial volumetric display**. Proceedings of SPIE-IS and T Electronic Imaging - Stereoscopic Displays and Applications XXV. Vuosikerta 9011 SPIE, 2014.

Cho, Chunhee ; Yi, Xiaohua ; Wang, Yang ; Tentzeris, Manos M. ; Leon, Roberto T. / **Compressive strain measurement using RFID patch antenna sensors**. Sensors and Smart Structures Technologies for Civil, Mechanical, and Aerospace Systems 2014. Vuosikerta 9061 SPIE, 2014.

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

Emmert-Streib, Frank ; de Matos Simoes, Ricardo ; Glazko, Galina ; McDade, Simon ; Haibe-Kains, Benjamin ; Holzinger, Andreas ; Dehmer, Matthias ; Campbell, Frederick. / **Functional and genetic analysis of the colon cancer network**. Julkaisussa: BMC Bioinformatics. 2014 ; Vuosikerta 15, Nro Suppl 6.

Ye, Changgeng ; Koponen, Joonas ; Aallos, Ville ; Petit, Laetitia ; Kimmelma, Ossi ; Kokki, Teemu. / **Mode coupling in few-mode large-mode-area fibers**. Fiber Lasers XI: Technology, Systems, and Applications. Vuosikerta 8961 SPIE, 2014.

Stumpel, Jelle E. ; Broer, Dirk J. ; Bastiaansen, Cees W M ; Schenning, Albert P H J. / **Optical and topographic changes in water-responsive patterned cholesteric liquid crystalline polymer coatings**. Proceedings of SPIE: Organic Photonics VI. Vuosikerta 9137 SPIE, 2014. (Proceedings of SPIE: the International Society for Optical Engineering).

Kantola, Emmi ; Leinonen, Tomi ; Ranta, Sanna ; Tavast, Miki ; Guina, Mircea. / **Pulsed high-power yellow-orange VECSEL**. Photonics Europe 2014, Semiconductor Lasers and Laser Dynamics VI, April 14-17, 2014, Brussels, Belgium. Proceedings of SPIE. Vuosikerta 9134 SPIE, 2014. (SPIE Conference Proceedings).

Dehmer, Matthias ; Grabner, Martin ; Mowshowitz, Abbe ; Emmert-Streib, Frank. / **An efficient heuristic approach to detecting graph isomorphism based on combinations of highly discriminating invariants**. Julkaisussa: Advances in Computational Mathematics. 2013 ; Vuosikerta 39, Nro 2. Sivut 311-325.

Tzamkiozis, T. ; Ntziachristos, L. ; Amanatidis, S. ; Niemelä, V. ; Ukkonen, A. ; Samaras, Z. / **Development of a constant dilution sampling system for particulate and gaseous pollutant measurements**. Julkaisussa: Measurement Science and Technology. 2013 ; Vuosikerta 24, Nro 8.

Rodrigues, Paulo C. ; de Carvalho, Miguel. / **Spectral modeling of time series with missing data**. Julkaisussa: Applied Mathematical Modelling. 2013 ; Vuosikerta 37, Nro 7. Sivut 4676-4684.

Carroll, Raymond ; Balasubramaniam, Sasitharan ; Suzuki, Junichi ; Lee, Chonho ; Donnelly, William ; Botvich, Dmitri. / **Bio-inspired service management framework : Green data-centres case study**. Julkaisussa: International Journal of Grid and Utility Computing. 2013 ; Vuosikerta 4, Nro 4. Sivut 278-292.

Yi, Xiaohua ; Cho, Chunhee ; Cook, Benjamin ; Wang, Yang ; Tentzeris, Manos M. ; Leon, Roberto T. / **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. Vuosikerta 8694 2013.

Boutellier, J. ; Ghazi, A. ; Silvén, O. ; Ersfolk, J. / **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. Sivut 360-365

Belahcen, Anouar ; Fonteyn, Katarzyna ; Kouhia, Reijo ; Rasilo, Paavo ; Arkkio, Antero. / **Magnetomechanical coupled FE simulations of rotating electrical machines**. Julkaisussa: COMPEL: The International Journal for Computation and Mathematics in Electrical and Electronic Engineering. 2013 ; Vuosikerta 32, Nro 5. Sivut 1484-1499.

Wang, Lai Huei ; Shen, Chung Ching ; Bhattacharyya, Shuvra S. / **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. Sivut 1-6

Ghazi, Amanullah ; Boutellier, Jani ; Hannuksela, Jari ; Shahabuddin, Shahriar ; Silvén, Olli. / **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. Sivut 231-236

Emmert-Streib, Frank ; Tripathi, Shailesh ; Matos Simoes, Ricardo D. / **Harnessing the complexity of gene expression data from cancer : From single gene to structural pathway methods**. Julkaisussa: Biology Direct. 2012 ; Vuosikerta 7.

Emmert-Streib, Frank. / **Universal construction mechanism for networks from one-dimensional symbol sequences**. Julkaisussa: Applied Mathematics and Computation. 2012 ; Vuosikerta 219, Nro 3. Sivut 1020-1030.

Mäki-Marttunen, Tuomo Mikael ; Acimovic, Jugoslava ; Ruohonen, Keijo Pellervo ; Linne, Marja-Leena. / **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 ; Constantoudis, Vassilios ; Papadimitriou, Constantinos ; Karamanos, Konstantinos ; Diakonou, Fotis K. ; Papageorgiou, Haris. / **Entropy analysis of word-length series of natural language texts : Effects of text language and genre**. Julkaisussa: INTERNATIONAL JOURNAL OF BIFURCATION AND CHAOS. 2012 ; Vuosikerta 22, Nro 9.

Ivanov, S. ; Botvich, D. ; Balasubramaniam, S. / **Enzyme-based circuit design for nano-scale computing**. Julkaisussa: Nano Communication Networks. 2012 ; Vuosikerta 3, Nro 3. Sivut 168-174.

de Matos Simoes, Ricardo ; Tripathi, Shailesh ; Emmert-Streib, Frank. / **Organizational structure and the periphery of the gene regulatory network in B-cell lymphoma**. Julkaisussa: BMC Systems Biology. 2012 ; Vuosikerta 6.

Lio', Pietro ; Balasubramaniam, Sasitharan. / **Opportunistic routing through conjugation in bacteria communication nanonetwork**. Julkaisussa: Nano Communication Networks. 2012 ; Vuosikerta 3, Nro 1. Sivut 36-45.

Mäki-Marttunen, Tuomo Mikael ; Acimovic, Jugoslava ; Ruohonen, Keijo Pellervo ; Linne, Marja-Leena. / **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. Sivut 55-55

Emmert-Streib, Frank. / **Evolutionary dynamics of the spatial Prisoner's Dilemma with self-inhibition**. Julkaisussa: Applied Mathematics and Computation. 2012 ; Vuosikerta 218, Nro 11. Sivut 6482-6488.

Pereira, Dulce G. ; Rodrigues, Paulo C. ; Mejza, Stanislaw ; Mexia, João T. / **A comparison between joint regression analysis and the AMMI model : A case study with barley**. Julkaisussa: JOURNAL OF STATISTICAL COMPUTATION AND SIMULATION. 2012 ; Vuosikerta 82, Nro 2. Sivut 193-207.

Min, Jin ; Xiang, Zhou ; Zhiming, Zhang ; Tentzeris, Manos M. / **A hybrid optimization grey model based on segmented grey and multi-strategy contest for short-term power load forecasting**. Julkaisussa: JOURNAL OF GREY SYSTEM. 2012 ; Vuosikerta 24, Nro 1. Sivut 15-28.

Wang, Lai Huei ; Shen, Chung Ching ; Seetharaman, Gunasekaran ; Palaniappan, Kannappan ; Bhattacharyya, Shuvra S. / **Multidimensional dataflow graph modeling and mapping for efficient GPU implementation**. Proceedings - 2012 IEEE Workshop on Signal Processing Systems, SiPS 2012. 2012. Sivut 300-305

Yi, Xiaohua ; Vyas, Rushi ; Cho, Chunhee ; Fang, Chia Hung ; Cooper, James ; Wang, Yang ; Leon, Roberto T. ; Tentzeris, Manos M. / **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. Vuosikerta 8345 2012.

Mueller, Laurin A. J. ; Kugler, Karl G. ; Graber, Armin ; Emmert-Streib, Frank ; Dehmer, Matthias. / **Structural Measures for Network Biology Using QuACN**. Julkaisussa: BMC Bioinformatics. 2011 ; Vuosikerta 12, Nro 1.

Altay, Gökmen ; Emmert-Streib, Frank. / **Structural influence of gene networks on their inference : Analysis of C3NET**. Julkaisussa: Biology Direct. 2011 ; Vuosikerta 6.

Balasubramaniam, Sasitharan ; Boyle, Noreen T. ; Della-Chiesa, Andrea ; Walsh, Frank ; Mardinoglu, Adil ; Botvich, Dmitri ; Prina-Mello, Adriele. / **Development of artificial neuronal networks for molecular communication**. Julkaisussa: Nano Communication Networks. 2011 ; Vuosikerta 2, Nro 2-3. Sivut 150-160.

Mäki-Marttunen, Tuomo ; Acimovic, Jugoslava ; Ruohonen, Keijo ; Linne, Marja-Leena. / **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. ; Sorrentino, A. ; Campi, C. ; Piana, M. / **Forward simulation and inverse dipole localization with the lowest order Raviart - Thomas elements for electroencephalography**. Julkaisussa: Inverse Problems. 2011 ; Vuosikerta 27, Nro 4.

Kaski, Samuel ; Peltonen, Jaakko. / **Dimensionality reduction for data visualization**. Julkaisussa: IEEE Signal Processing Magazine. 2011 ; Vuosikerta 28, Nro 2. Sivut 100-104.

Sapaev, U. K. ; Yusupov, D. B. ; Assanto, G. / **Multicolor nonlinear pulse compression by consecutive optical parametric amplification in quasi-phase matched structures**. ICONO 2010: International Conference on Coherent and Nonlinear Optics. Vuosikerta 7993 2011.

Belahcen, A. ; Kouhia, R. ; Fonteyn, K. / **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. Sivut 472-483

Yi, Xiaohua ; Wu, Terence ; Lantz, Gabriel ; Wang, Yang ; Leon, Roberto T. ; Tentzeris, Manos M. / **Thickness variation study of RFID-based folded patch antennas for strain sensing**. Sensors and Smart Structures Technologies for Civil, Mechanical, and Aerospace Systems 2011. Vuosikerta 7981 2011.

Altay, Gökmen ; Emmert-Streib, Frank. / **Inferring the conservative causal core of gene regulatory networks**. Julkaisussa: BMC Systems Biology. 2010 ; Vuosikerta 4.

Emmert-Streib, Frank ; Dehmer, Matthias. / **Hierarchical coordination of periodic genes in the cell cycle of *Saccharomyces cerevisiae***. Julkaisussa: BMC Systems Biology. 2009 ; Vuosikerta 3.

Emmert-Streib, Frank ; Dehmer, Matthias. / **Information processing in the transcriptional regulatory network of yeast : Functional robustness**. Julkaisussa: BMC Systems Biology. 2009 ; Vuosikerta 3.

Caglayan, Humeyra ; Ozbay, Ekmel. / **The magical world of metamaterials**. Photonic Materials, Devices, and Applications III. Vuosikerta 7366 2009. (Proceedings of SPIE).

Dehmer, Matthias ; Emmert-Streib, Frank ; Gesell, Tanja. / **A comparative analysis of multidimensional features of objects resembling sets of graphs**. Julkaisussa: Applied Mathematics and Computation. 2008 ; Vuosikerta 196, Nro 1. Sivut 221-235.

Dehmer, Matthias ; Emmert-Streib, Frank. / **Structural similarity of directed universal hierarchical graphs : A low computational complexity approach**. Julkaisussa: Applied Mathematics and Computation. 2007 ; Vuosikerta 194, Nro 1. Sivut 7-20.

Emmert-Streib, Frank ; Dehmer, Matthias. / **Information theoretic measures of UHG graphs with low computational complexity**. Julkaisussa: Applied Mathematics and Computation. 2007 ; Vuosikerta 190, Nro 2. Sivut 1783-1794.

Emmert-Streib, Frank ; Mushegian, Arcady. / **A topological algorithm for identification of structural domains of proteins**. Julkaisussa: BMC Bioinformatics. 2007 ; Vuosikerta 8.

Dehmer, Matthias ; Emmert-Streib, Frank. / **Comparing large graphs efficiently by margins of feature vectors**. Julkaisussa: Applied Mathematics and Computation. 2007 ; Vuosikerta 188, Nro 2. Sivut 1699-1710.

Emmert-Streib, Frank ; Dehmer, Matthias. / **Topological mappings between graphs, trees and generalized trees**. Julkaisussa: Applied Mathematics and Computation. 2007 ; Vuosikerta 186, Nro 2. Sivut 1326-1333.

Dehmer, Matthias ; Emmert-Streib, Frank ; Kilian, Jürgen. / **A similarity measure for graphs with low computational complexity**. Julkaisussa: Applied Mathematics and Computation. 2006 ; Vuosikerta 182, Nro 1. Sivut 447-459.

Ozbay, Ekmel ; Bulu, Irfan ; Caglayan, Humeyra. / **Labyrinth based left-handed metamaterials and sub-wavelength focusing of electromagnetic waves**. Photonic Crystal Materials and Devices IV. Vuosikerta 6128 2006. (Proceedings of SPIE).

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