

**The effect of lake bottom sediment layers on radionuclide transport from bedrock to biosphere and doses to humans. /**

Pohjola, Jari; Turunen, Jari; Lipping, Tarmo.

2017. 439-440 Paper presented at 4th International Conference on Radioecology & Environmental Radioactivity, Berlin, Germany.

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

**Biomechanical performance of cranial implants with different thicknesses and material properties : A finite element study. /**

Marcián, Petr; Narra, Nathaniel; Borák, Libor; Chamrad, Jakub; Wolff, Jan.

In: Computers in Biology and Medicine, Vol. 109, 01.06.2019, p. 43-52.

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

**Conformal mapping of the human scapula to generate dense landmark features. / Narra, Nathaniel; Fouefack, Jean**

Rassaire; Douglas, Tania; Mutsvangwa, Tinashe.

2018 3rd Biennial South African Biomedical Engineering Conference, SAIBMEC 2018. Institute of Electrical and Electronics Engineers Inc., 2018. p. 1-4 (2018 3rd Biennial South African Biomedical Engineering Conference, SAIBMEC 2018).

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

**Tuberculosis transmission : Modelled impact of air-tightness in dwellings in the UK. / Taylor, Jonathon; Altamirano-Medina,**

Hector; Shrubsole, Clive; Das, Payel; Biddulph, Phillip; Davies, Michael; Mavrogianni, Anna; Oikonomou, Eleni.

2014. 60-67 Paper presented at 13th International Conference on Indoor Air Quality and Climate, Indoor Air 2014, Hong Kong, Hong Kong.

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

**Using probabilistic sampling-based sensitivity analyses for indoor air quality modelling. / Das, Payel; Chalabi, Zaid;**

Davies, Michael; Hamilton, Ian; Jones, Benjamin; Mavrogianni, Anna; Shrubsole, Clive; Taylor, Jonathon.

2014. 553-555 Paper presented at 13th International Conference on Indoor Air Quality and Climate, Indoor Air 2014, Hong Kong, Hong Kong.

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

**Statistical short-term network planning of distribution system and distributed generation. / Repo, Sami; Laaksonen, Hannu**

; Järventausta, Pertti.

2005. Paper presented at 15th Power Systems Computation Conference, PSCC 2005, Liege, Belgium.

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

**Condition monitoring of storage batteries in telecom power systems-crisp vs. soft computing methodology. / Suntio, T.;**

Waltari, P.; Gadoura, I.

SMCia 1999 - Proceedings of the 1999 IEEE Midnight-Sun Workshop on Soft Computing Methods in Industrial Applications. ed. / Jarno Martikainen. IEEE, 1999. p. 97-102 (SMCia 1999 - Proceedings of the 1999 IEEE Midnight-Sun Workshop on Soft Computing Methods in Industrial Applications).

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

**Soft computing-based controller design for a telecom rectifier. / Gadoura, Idris; Suntio, Teuvo; Zenger, Kai; Vallittu, Petri.**

SMCia 1999 - Proceedings of the 1999 IEEE Midnight-Sun Workshop on Soft Computing Methods in Industrial Applications. ed. / Jarno Martikainen. Institute of Electrical and Electronics Engineers Inc., 1999. p. 80-85 782712 (SMCia 1999 - Proceedings of the 1999 IEEE Midnight-Sun Workshop on Soft Computing Methods in Industrial Applications).

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

**Internet of Things and Sensor Networks. / Andreev, Sergey; Dobre, Ciprian; Misra, Prasant.**

In: IEEE Communications Magazine, Vol. 58, No. 2, 2020, p. 34-34.

Research output: Contribution to journal › Editorial › Scientific

**The Internet of Things and Sensor Networks. / Andreev, Sergey; Dobre, Ciprian.**

In: IEEE Communications Magazine, Vol. 57, No. 9, 01.09.2019, p. 70-70.

Research output: Contribution to journal › Editorial › Scientific

**Guest Editorial Special Issue on Multimedia Big Data in Internet of Things.** / Ma, Huadong; Yu, Shui; Gabbouj, Moncef; Mueller, Peter.

In: IEEE Internet of Things Journal, Vol. 5, No. 5, 8534720, 10.2018, p. 3405-3407.

Research output: Contribution to journal › Editorial › Scientific

**Preface : Special Issue on 'New Hydraulic Components for Tough Robots'.** / Suzumori, Koichi; Hyon, Sang Ho; Semini, Claudio; Mattila, Jouni; Kanda, Takefumi.

In: Advanced Robotics, Vol. 32, No. 9, 03.05.2018.

Research output: Contribution to journal › Editorial › Scientific

**Guest editorial introduction to the focused section on design and control of hydraulic robots.** / Mattila, J.; Semini, C.; Moon, H.; Buchli, J.; Hyon, S.; Li, P. Y.; Yao, B.

In: IEEE - ASME Transactions on Mechatronics, Vol. 22, No. 2, 01.04.2017, p. 585-588.

Research output: Contribution to journal › Editorial › Scientific

**Guest editorial special issue on the internet of nano things.** / Balasubramaniam, Sasitharan; Jornet, Josep Miquel; Pierobon, Massimiliano; Koucheryavy, Yevgeni.

In: IEEE Internet of Things Journal, Vol. 3, No. 1, 01.02.2016, p. 1-3.

Research output: Contribution to journal › Article › Scientific

**Flow-bounded trajectory-scaling algorithm for hydraulic robotic manipulators.** / Lampinen, Santeri; Niemi, Jouni; Mattila, Jouni.

2020 IEEE/ASME International Conference on Advanced Intelligent Mechatronics, AIM 2020. IEEE, 2020. p. 619-624 (IEEE/ASME International Conference on Advanced Intelligent Mechatronics, AIM).

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

**Serverless : What it Is, What to Do and What Not to Do.** / Nupponen, Jussi; Taibi, Davide.

2020 IEEE International Conference on Software Architecture Companion, ICSCA-C 2020. IEEE, 2020. p. 49-50.

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

**ICface : Interpretable and controllable face reenactment using GANs.** / Tripathy, Soumya; Kannala, Juho; Rahtu, Esa.

2020 IEEE Winter Conference on Applications of Computer Vision, WACV 2020. IEEE, 2020. p. 3374-3383 (IEEE Winter Conference on Applications of Computer Vision).

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

**Propagation dynamics of ultrabroadband terahertz beams with orbital angular momentum for wireless data transfer.** /

Kulya, Maksim S.; Sokolenko, Bogdan; Gorodetsky, Andrei; Petrov, Nikolay V.

Broadband Access Communication Technologies XIV. ed. / Benjamin B. Dingel; Katsutoshi Tsukamoto; Spiros Mikroulis. SPIE, 2020. 113070J (Proceedings of SPIE - The International Society for Optical Engineering; Vol. 11307).

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

**A membrane external-cavity surface-emitting laser (MECSEL) with emission around 825 nm.** / Phung, Hoy My; Kahle, Hermann; Penttinen, Jussi-Pekka; Rajala, Patrik; Ranta, Sanna; Guina, Mircea.

Vertical External Cavity Surface Emitting Lasers (VECSELs) X. ed. / Jennifer E. Hastie. SPIE, 2020. 112630H (Proceedings of SPIE - The International Society for Optical Engineering; Vol. 11263).

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

**Complex-domain sparse imaging in terahertz pulse time-domain holography with balance detection.** / Kulya, Maksim S.; Katkovnik, Vladimir; Egiuzarian, Karen; Petrov, Nikolay V.

Terahertz, RF, Millimeter, and Submillimeter-Wave Technology and Applications XIII. ed. / Laurence P. Sadwick; Tianxin Yang. SPIE, 2020. 1127921 (Proceedings of SPIE; Vol. 11279).

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

**73-fs SESAM mode-locked Tm,Ho:CNCG laser at 2061 nm.** / Wang, Yicheng; Zhao, Yongguang; Pan, Zhongben; Suomalainen, Soile; Härkönen, Antti; Guina, Mircea; Griebner, Uwe; Wang, Li; Loiko, Pavel; Mateos, Xavier; Chen, Weidong; Petrov, Valentin.

Solid State Lasers XXIX: Technology and Devices. ed. / W. Andrew Clarkson; Ramesh K. Shori. SPIE, 2020. 1125929 (Proceedings of SPIE - The International Society for Optical Engineering; Vol. 11259).

**Continuous-wave optical parametric oscillators for mid-infrared spectroscopy.** / Vainio, Markku.

Nonlinear Frequency Generation and Conversion: Materials and Devices XIX. ed. / Peter G. Schunemann; Kenneth L. Schepler. SPIE, 2020. 1126419 (Proceedings of SPIE - The International Society for Optical Engineering; Vol. 11264).

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

**Cyclic quantum walks : Photonic realization and decoherence analysis.** / Nejadsattari, F.; Zhang, Y.; Jayakody, M. N.; Bouchard, F.; Larocque, H.; Sit, A.; Fickler, R.; Cohen, E.; Karimi, E.

Advanced Optical Techniques for Quantum Information, Sensing, and Metrology. ed. / Philip R. Hemmer; Alan L. Migdall; Zameer Ul Hasan. SPIE, 2020. 1129503 (Proceedings of SPIE - The International Society for Optical Engineering; Vol. 11295).

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

**Patterns for serverless functions (Function-as-a-Service) : A multivocal literature review.** / Taibi, Davide; El Ioini, Nabil; Pahl, Claus; Niederkofler, Jan Raphael Schmid.

CLOSER 2020 - Proceedings of the 10th International Conference on Cloud Computing and Services Science. ed. / Donald Ferguson; Markus Helfert; Claus Pahl. Vol. 1 SCITEPRESS, 2020. p. 181-192.

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

**Redundancy-based visual tool center point pose estimation for long-reach manipulators.** / Mäkinen, Petri; Mustalahti, Pauli; Launis, Sirpa; Mattila, Jouni.

2020 IEEE/ASME International Conference on Advanced Intelligent Mechatronics, AIM 2020. IEEE, 2020. p. 1387-1393 (IEEE/ASME International Conference on Advanced Intelligent Mechatronics).

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

**Safety at chimney-roof penetration : A numerical investigation.** / Neri, Manuela; Perttu, Leppänen; Alanen, Mika; Luscietti, Davide; Pilotelli, Mariagrazia.

Building Simulation Applications, BSA 2019 - 4th IBPSA-Italy Conference. ed. / Giovanni Pernigotto; Francesco Patuzzi; Alessandro Prada; Vincenzo Corrado; Andrea Gasparella. Free University of Bozen Bolzano, 2020. p. 123-130 (Building Simulation Applications; Vol. 2020-June).

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

**Position Estimation for Drones based on Visual SLAM and IMU in GPS-denied Environment.** / Motlagh, Hamid Didari Khamseh; Lotfi, Faraz; Taghirad, Hamid D.; Germi, Saeed Bakhshi.

ICRoM 2019 - 7th International Conference on Robotics and Mechatronics. IEEE, 2019. p. 120-124.

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

**Red Alert : Break-Glass Protocol to Access Encrypted Medical Records in the Cloud.** / De Oliveira, Marcela Tuler; Michalas, Antonis; Groot, Adrien E.D.; Marquering, Henk A.; Olabarraga, Silvia Delgado.

2019 IEEE International Conference on E-Health Networking, Application and Services, HealthCom 2019. IEEE, 2019. 9009598.

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

**Visibility-Aware Part Coding for Vehicle Viewing Angle Estimation.** / Yang, Dan; Qian, Yanlin; Cai, Dingding; Yan, Song; Kämäräinen, Joni-Kristian; Chen, Ke.

9th International Conference on Information Science and Technology, ICIST 2019. IEEE, 2019. p. 65-70.

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

**Portrait instance segmentation for mobile devices.** / Zhu, Lingyu; Wang, Tinghuai; Aksu, Emre; Kämäräinen, Joni-Kristian.

2019 IEEE International Conference on Multimedia and Expo, ICME 2019. IEEE, 2019. p. 1630-1635.

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

**MAST: Mask-accelerated shearlet transform for densely-sampled light field reconstruction.** / Gao, Yuan; Bregovic, Robert; Gotchev, Atanas; Koch, Reinhard.

2019 IEEE International Conference on Multimedia and Expo, ICME 2019. IEEE, 2019. p. 187-192.

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

**Modeling mmWave Channels in High-Fidelity Simulations of Unmanned Aerial Systems.** / Godbole, Tanmay Ram; Calvo-Fullana, Miguel; Pyattaev, Alexander; Mox, Daniel; Andreev, Sergey; Ribeiro, Alejandro; Valkama, Mikko.  
2019 IEEE 20th International Workshop on Signal Processing Advances in Wireless Communications, SPAWC 2019. IEEE, 2019. ( IEEE International Workshop on Signal Processing Advances in Wireless Communications).  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**KPI-ML based integration of industrial information systems.** / Tahir, Muhammad Ashhal; Mahmoodpour, Mehdi; Lobov, Andrei.  
2019 IEEE 17th International Conference on Industrial Informatics, INDIN 2019. IEEE, 2019. p. 93-99 (IEEE International Conference on Industrial Informatics (INDIN); Vol. 2019-July).  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**Hand gesture-based on-line programming of industrial robot manipulators.** / Sylari, Antonios; Ferrer, Borja Ramis; Lastra, Jose L.Martinez.  
2019 IEEE 17th International Conference on Industrial Informatics, INDIN 2019. IEEE, 2019. p. 827-834 (IEEE International Conference on Industrial Informatics (INDIN)).  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**Acceptance and perceptions of interactive location-tracking displays.** / Mäkelä, Ville; Linna, Juhani; Keskinen, Tuuli; Hakulinen, Jaakko; Turunen, Markku.  
Pervasive Displays 2019 - 8th ACM International Symposium on Pervasive Displays, PerDis 2019. ed. / Vito Gentile; Jessica R. Cauchard. ACM, 2019. a17.  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**Face verification and recognition for digital forensics and information security.** / Amato, Giuseppe; Falchi, Fabrizio; Gennaro, Claudio; Massoli, Fabio Valerio; Passalis, Nikolaos; Tefas, Anastasios; Trivilini, Alessandro; Vairo, Claudio.  
7th International Symposium on Digital Forensics and Security, ISDFS 2019. ed. / Asaf Varol; Murat Karabatak; Cihan Varol; Sevginur Teke. IEEE, 2019.  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**Linearization of BJTs with logarithmic predistortion.** / Lunden, Olli-Pekka; Paldanius, Timo.  
2019 IEEE Radio and Wireless Symposium, RWS 2019. IEEE, 2019. (IEEE Radio and Wireless Symposium, RWS).  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**OFDM radar with LTE waveform : Processing and performance.** / Barneto, Carlos Baquero; Anttila, Lauri; Fleischer, Marko ; Valkama, Mikko.  
2019 IEEE Radio and Wireless Symposium, RWS 2019. IEEE COMPUTER SOCIETY PRESS, 2019. 8714410 (IEEE Radio and Wireless Symposium, RWS).  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**Asterism : Decentralized file sharing application for mobile devices.** / Heinisuo, Olli-Pekka; Lenarduzzi, Valentina; Taibi, Davide.  
2019 7th IEEE International Conference on Mobile Cloud Computing, Services, and Engineering, MobileCloud 2019. IEEE, 2019. p. 38-47.  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**Error analysis of NOMA-based user cooperation with SWIPT.** / Li, Suyue; Bariah, Lina; Muhaidat, Sami; Sofotasios, Paschalis; Liang, Jie; Wang, Anhong.  
Proceedings - 15th Annual International Conference on Distributed Computing in Sensor Systems, DCOSS 2019. IEEE, 2019. p. 507-513.  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**Digging deeper into egocentric gaze prediction.** / Tavakoli, Hamed R.; Rahtu, Esa; Kannala, Juho; Borji, Ali.  
2019 IEEE Winter Conference on Applications of Computer Vision, WACV 2019. IEEE, 2019. p. 273-282 (IEEE Winter Conference on Applications of Computer Vision).  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**How do academics experience use of recorded audio feedback in higher education? A thematic analysis.** / Heimbirger, Anneli; Isomottonen, Ville; Nieminen, Paavo; Keto, Harri.  
Frontiers in Education: Fostering Innovation Through Diversity, FIE 2018 - Conference Proceedings. IEEE, 2019. 8658635 (Proceedings - Frontiers in Education Conference).

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

**DGC-Net : Dense geometric correspondence network.** / Melekhov, Iaroslav; Tiulpin, Aleksei; Sattler, Torsten; Pollefeys, Marc; Rahtu, Esa; Kannala, Juho.  
2019 IEEE Winter Conference on Applications of Computer Vision, WACV 2019. IEEE, 2019. p. 1034-1042 (IEEE Winter Conference on Applications of Computer Vision).

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

**Towards sustainable manufacturing by extending Manufacturing Execution System functions.** / Lobov, Andrei; Haapala, Karl R.  
2019 IEEE International Conference on Industrial Technology, ICIT 2019. IEEE, 2019. p. 1329-1335.

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

**Thin form-factor super multiview head-up display system.** / Akpınar, Ugur; Sahin, Erdem; Suominen, Olli; Gotchev, Atanas.  
Stereoscopic Displays and Applications XXX . 2019. ( IS&T International Symposium on Electronic Imaging).

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

**Additional lossless compression of JPEG images based on BPG.** / Ponomarenko, Mykola; Miroshnichenko, Oleksandr; Lukin, Vladimir; Egiazarian, Karen.

Image Processing: Algorithms and Systems XVII. 2019. (IS and T International Symposium on Electronic Imaging Science and Technology).

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

**Phase masks optimization for broadband diffractive imaging.** / Ponomarenko, Mykola; Katkovnik, Vladimir; Egiazarian, Karen.

Image Processing: Algorithms and Systems XVII. 2019. (IS and T International Symposium on Electronic Imaging Science and Technology).

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

**Combined no-reference IQA metric and its performance analysis.** / Ieremeiev, Oleg; Lukin, Vladimir; Ponomarenko, Nikolay; Egiazarian, Karen.

Image Processing: Algorithms and Systems XVII. 2019. (IS and T International Symposium on Electronic Imaging Science and Technology).

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

**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.** / Kahle, Hermann; Penttinen, Jussi Pekka; Phung, Hoy My; Rajala, Patrik; Tukiainen, Antti; Ranta, Sanna; Guina, Mircea.

Vertical External Cavity Surface Emitting Lasers (VECSELs) IX. ed. / Ursula Keller. SPIE, IEEE, 2019. 109010D (Proceedings of SPIE - The International Society for Optical Engineering; Vol. 10901).

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

**1.55- $\mu$ m wavelength wafer-fused OP-VECSELs in flip-chip configuration.** / Mereuta, Alexandru; Nechay, Kostiantyn; Caliman, Andrei; Suruceanu, Grigore; Gallo, Pascal; Guina, Mircea; Kapon, Eli.

Vertical External Cavity Surface Emitting Lasers (VECSELs) IX. ed. / Ursula Keller. SPIE, IEEE, 2019. 1090103 (Proceedings of SPIE - The International Society for Optical Engineering; Vol. 10901).

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

**Code ABC hackathons : Teachers as tinkerers.** / Niemelä, Pia; Partanen, Tiina; Toivanen, Tero; Toikkanen, Tarmo; Kangas, Vuokko; Översti, Markus.

Digital Turn in Schools - Research, Policy, Practice: Proceedings of ICEM 2018 Conference. Springer International Publishing, 2019. p. 157-169 (Lecture Notes in Educational Technology).

**From monolithic systems to microservices : A decomposition framework based on process mining.** / Taibi, Davide; Systä, Kari.

CLOSER 2019 - Proceedings of the 9th International Conference on Cloud Computing and Services Science. ed. / Donald Ferguson; Victor Mendez Munoz; Markus Helfert; Claus Pahl. SCITEPRESS, 2019. p. 153-164.

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

**405-nm pumped Ce<sup>3+</sup>-doped silica fiber for broadband fluorescence from cyan to red.** / Yadav, Amit; Chichkov, Nikolay B.; Gumenyuk, Regina; Zherebtsov, Evgeny; Melkumov, Mikhail A.; Yashkov, Mikhail V.; Dianov, Evgeny M.; Rafailov, Edik U.

Optical Components and Materials XVI. ed. / Michel J. F. Digonnet; Shubin Jiang. SPIE, IEEE, 2019. 1091406 (Proceedings of SPIE - The International Society for Optical Engineering; Vol. 10914).

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

**Observation of local electroluminescent cooling and identifying the remaining challenges.** / Radevici, Ivan; Sadi, Toufik; Tripurari, Tripathi; Tiira, Jonna; Ranta, Sanna; Tukiainen, Antti; Guina, Mircea; Oksanen, Jani.

Photonic Heat Engines: Science and Applications. ed. / Denis V. Seletskiy; Richard I. Epstein; Mansoor Sheik-Bahae. SPIE, IEEE, 2019. 109360A (Proceedings of SPIE - The International Society for Optical Engineering; Vol. 10936).

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

**1.3µm U-bend traveling wave SOA devices for high efficiency coupling to silicon photonics.** / Viheriälä, Jukka; Tuorila, Heidi; Zia, Nouman; Cherchi, Matteo; Aalto, Timo; Guina, Mircea.

Silicon Photonics XIV. ed. / Graham T. Reed; Andrew P. Knights. SPIE, IEEE, 2019. 109230E (Proceedings of SPIE - The International Society for Optical Engineering; Vol. 10923).

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

**Smartphone teleoperation for self-balancing telepresence robots.** / Ainasoja, Antti E.; Pertuz, Said; Kämäräinen, Joni-Kristian.

VISIGRAPP 2019 - Proceedings of the 14th International Joint Conference on Computer Vision, Imaging and Computer Graphics Theory and Applications. ed. / Andreas Kerren; Christophe Hurter; Jose Braz. SCITEPRESS, 2019. p. 561-568.

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

**Revisiting gray pixel for statistical illumination estimation.** / Qian, Yanlin; Pertuz, Said; Nikkanen, Jarno; Kämäräinen, Joni-Kristian; Matas, Jiri.

VISIGRAPP 2019 - Proceedings of the 14th International Joint Conference on Computer Vision, Imaging and Computer Graphics Theory and Applications. ed. / Andreas Kerren; Christophe Hurter; Jose Braz. SCITEPRESS, 2019. p. 36-46.

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

**Benchmarking of several disparity estimation algorithms for light field processing.** / Zakeri, Faezeh Sadat; Bätz, Michel; Jaschke, Tobias; Keinert, Joachim; Chuchvara, Alexandra.

Fourteenth International Conference on Quality Control by Artificial Vision. ed. / Stephane Bazeille; Nicolas Verrier; Christophe Cudel. SPIE, IEEE, 2019. 111721C (Proceedings of SPIE - The International Society for Optical Engineering; Vol. 11172).

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

**Action and power efficiency in self-organization : The case for growth efficiency as a cellular objective in escherichia coli.** / Georgiev, Georgi Yordanov; Aho, Tommi; Kesseli, Juha; Yli-Harja, Olli; Kauffman, Stuart A.

Evolution, Development and Complexity - Multiscale Evolutionary Models of Complex Adaptive Systems. ed. / Claudio L. Flores Martinez; Georgi Yordanov Georgiev; John M. Smart; Michael E. Price. Springer, 2019. p. 229-244 (Springer Proceedings in Complexity).

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

**Single exposure lensless subpixel phase imaging.** / Kocsis, Péter; Shevkunov, Igor; Katkovnik, Vladimir; Egiazarian, Karen

Digital Optical Technologies 2019. ed. / Bernard C. Kress; Peter Schelkens. SPIE, IEEE, 2019. (Proceedings of SPIE - The International Society for Optical Engineering; Vol. 11062).

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

**Short-range supercontinuum based lidar for combustion diagnostics.** / Saleh, Abba; Ryczkowski, Piotr; Genty, Goery; Toivonen, Juha.

SPIE Future Sensing Technologies. ed. / Masafumi Kimata; Christopher R. Valenta. SPIE, IEEE, 2019. 111970Y (Proceedings of SPIE; Vol. 11197).

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

**Switchable unidirectional second-harmonic emission through GaAs nanoantennas.** / 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.

AOS Australian Conference on Optical Fibre Technology, ACOFT 2019 and Australian Conference on Optics, Lasers, and Spectroscopy, ACOLS 2019. ed. / Arnan Mitchell; Halina Rubinsztein-Dunlop. SPIE, 2019. 112000J (Proceedings of SPIE - The International Society for Optical Engineering; Vol. 11200).

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

**Tailoring directional scattering of second-harmonic generation from (111)-GaAs nanoantennas.** / 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.

AOS Australian Conference on Optical Fibre Technology, ACOFT 2019 and Australian Conference on Optics, Lasers, and Spectroscopy, ACOLS 2019. ed. / Arnan Mitchell; Halina Rubinsztein-Dunlop. SPIE, 2019. 112000H (Proceedings of SPIE - The International Society for Optical Engineering; Vol. 11200).

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

**Color Constancy Convolutional Autoencoder.** / Laakom, Firas; Raitoharju, Jenni; Iosifidis, Alexandros; Nikkanen, Jarno; Gabbouj, Moncef.

2019 IEEE Symposium Series on Computational Intelligence, SSCI 2019. IEEE, 2019. p. 1085-1090 9002684.

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

**On Confidences and Their Use in (Semi-)Automatic Multi-Image Taxa Identification.** / Raitoharju, Jenni; Meissner, Kristian.

2019 IEEE Symposium Series on Computational Intelligence, SSCI 2019. IEEE, 2019. p. 1338-1343 9002975.

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

**Hardware-in-the-loop platform for testing autonomous vehicle control algorithms.** / Heikkinen, Jani Erik; Gafurov, Salimzhan; Kopylov, Sergey; Minav, Tatiana; Grebennikov, Sergey; Kurbanov, Artur.

Proceedings - 12th International Conference on the Developments in eSystems Engineering, DeSE 2019. ed. / Dhiya Al-Jumeily; Jade Hind; Jamila Mustafina; Assem Al-Hajj; Abir Hussain; Evgeni Magid; Hissam Tawfik. IEEE, 2019. p. 906-911 9073320 (International Conference on Developments in eSystems Engineering, DeSE).

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

**Kalman-Type Filters and Smoothers for Pedestrian Dead Reckoning.** / Ivanov, Pavel; Raitoharju, Matti; Piché, Robert.

IPIN 2018 - 9th International Conference on Indoor Positioning and Indoor Navigation. IEEE, 2018.

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

**Olfactory display prototype for presenting and sensing authentic and synthetic odors.** / Salminen, Katri; Rantala, Jussi; Isokoski, Poika; Lehtonen, Marko; Müller, Philipp; Karjalainen, Markus; Väliäho, Jari; Kontunen, Anton; Nieminen, Ville; Leivo, Joni; Telembeci, Anca Andreea; Lekkala, Jukka; Kallio, Pasi; Surakka, Veikko.

ICMI 2018 - Proceedings of the 2018 International Conference on Multimodal Interaction. ACM, 2018. p. 73-77.

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

**Real-time and Robust Collaborative Robot Motion Control with Microsoft Kinect © v2.** / Teke, Burak; Lanz, Minna; Kämäräinen, Joni-Kristian; Hietanen, Antti.

2018 14th IEEE/ASME International Conference on Mechatronic and Embedded Systems and Applications, MESA 2018. IEEE, 2018. 8449156.

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

**Inertial Sensor-Based State Estimation of Flexible Links Subject to Bending and Torsion.** / Mäkinen, Petri; Mononen, Teemu; Mattila, Jouni.  
2018 14th IEEE/ASME International Conference on Mechatronic and Embedded Systems and Applications, MESA 2018. IEEE, 2018. 8449188.

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

**Role-based visualization of industrial IoT-based systems.** / Mahmoodpour, Mehdi; Lobov, Andrei; Lanz, Minna; Mäkelä, Petteri; Rundas, Niko.  
2018 14th IEEE/ASME International Conference on Mechatronic and Embedded Systems and Applications, MESA 2018. IEEE, 2018. 8449183.

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

**Dimensional analysis conceptual modeling supporting adaptable reasoning in simulation-based training.** / Coatanea, Eric; Roca, Ric.  
2018 13th System of Systems Engineering Conference, SoSE 2018. IEEE, 2018. p. 245-252.

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

**Performance Evaluation of Coordinated Multipoint Transmission at 28 GHz Frequency Using 3D Ray Tracing.** / Sheikh, Muhammad Usman; Biswas, Ritayan; Lempiäinen, Jukka.  
2018 IEEE 87th Vehicular Technology Conference, VTC Spring 2018 - Proceedings. IEEE, 2018. p. 1-6.

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

**Ray-based evaluation of dual-polarized MIMO in (Ultra-)dense millimeter-wave urban deployments.** / Solomitckii, Dmitrii; Petrov, Vitaly; Nikopour, Hosein; Akdeniz, Mustafa; Orhan, Oner; Himayat, Nageen; Talwar, Shilpa; Andreev, Sergey; Koucheryavy, Yevgeni.

2018 IEEE 87th Vehicular Technology Conference, VTC Spring 2018 - Proceedings. IEEE, 2018. p. 1-7.

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

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

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

**Performance Analysis of Single Carrier Coherent and Noncoherent Modulation under I/Q Imbalance.** / Selim, Bassant; Muhaidat, Sami; Sofotasios, Paschalis C.; Sharif, Bayan S.; Stouraitis, Thanos; Karagiannidis, George K.; Al-Dhahir, Naofal.

2018 IEEE 87th Vehicular Technology Conference, VTC Spring 2018. IEEE, 2018. p. 1-5.

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

**Optical Asymmetric Modulation for VLC Systems - Invited Paper.** / Marshoud, Hanaa; Muhaidat, Sami; Sofotasios, Paschalis C.; Imran, Muhammad; Sharif, Bayan S.; Karagiannidis, George K.

2018 IEEE 87th Vehicular Technology Conference, VTC Spring 2018. IEEE, 2018. p. 1-5.

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

**Ergodic Capacity Analysis of Wireless Transmission over Generalized Multipath/Shadowing Channels.** / Sofotasios, Paschalis C.; Yoo, Seong Ki; Muhaidat, Sami; Cotton, Simon L.; Matthaiou, Michail; Valkama, Mikko; Karagiannidis, George K.

2018 IEEE 87th Vehicular Technology Conference. IEEE, 2018. p. 1-5.

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

**Modeling and cancellation of self-interference in full-duplex radio transceivers : Volterra series-based approach.** / Korpi, Dani; Turunen, Matias; Anttila, Lauri; Valkama, Mikko.

2018 IEEE International Conference on Communications Workshops. IEEE, 2018. p. 1-6.

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

**Effects of blockage in deploying mmWave drone base stations for 5g networks and beyond.** / Gapeyenko, Margarita; Bor-Yaliniz, Irem; Andreev, Sergey; Yanikomeroglu, Halim; Koucheryavy, Yevgeni.



2018 IEEE International Conference on Communications Workshops. IEEE, 2018. p. 1-6.

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

**Optimizing wirelessly powered crowd sensing : Trading energy for data.** / Li, Xiaoyang; You, Changsheng; Andreev, Sergey; Gong, Yi; Huang, Kaibin.

2018 IEEE International Conference on Communications Workshops. IEEE, 2018. p. 1-6.

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

**Secure Firmware Updates for IoT : A Survey.** / Kolehmainen, Antti.

Proceedings - IEEE 2018 International Congress on Cybermatics: 2018 IEEE Conferences on Internet of Things, Green Computing and Communications, Cyber, Physical and Social Computing, Smart Data, Blockchain, Computer and Information Technology, iThings/GreenCom/CPSCoM/SmartData/Blockchain/CIT 2018. IEEE, 2018. p. 112-117.

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

**Cybersecurity Attacks and Defences for Unmanned Smart Ships.** / Silverajan, Bilhanan; Ocak, Mert; Nagel, Benjamin.

Proceedings - IEEE 2018 International Congress on Cybermatics: 2018 IEEE Conferences on Internet of Things, Green Computing and Communications, Cyber, Physical and Social Computing, Smart Data, Blockchain, Computer and Information Technology, iThings/GreenCom/CPSCoM/SmartData/Blockchain/CIT 2018. IEEE, 2018. p. 15-20.

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

**Activation game for older adults - Development and initial user experiences.** / Merilampi, Sari; Koivisto, Antti; Virkki, Johanna.

2018 IEEE 6th International Conference on Serious Games and Applications for Health, SeGAH 2018. IEEE, 2018. p. 1-5.

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

**PIVO : Probabilistic inertial-visual odometry for occlusion-robust navigation.** / Solin, Arno; Cortés, Santiago; Rahtu, Esa; Kannala, Juho.

Proceedings - 2018 IEEE Winter Conference on Applications of Computer Vision, WACV 2018. IEEE, 2018. p. 616-625.

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

**Photovoltaic plant cloud shadowing and energy drops in Northern Europe.** / Petrone, G.; Romanelli, S.; Spagnuolo, G.; Valkealahti, S.

2018 IEEE International Conference on Industrial Technology (ICIT). IEEE, 2018. p. 1055-1060.

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

**Towards secure cloud orchestration for multi-cloud deployments.** / Paladi, Nicolae; Michalac, Antonios; Dang, Hai Van.

CrossCloud 2018 - 5th Workshop on CrossCloud Infrastructures and Platforms, colocated with EuroSys 2018. ACM, 2018. a4.

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

**Detection of beat-to-beat intervals from wrist photoplethysmography in patients with sinus rhythm and atrial fibrillation after surgery.** / Tarniceriu, Adrian; Harju, Jarkko; Vehkaoja, Antti; Parak, Jakob; Delgado-Gonzalo, Ricard; Renevey, Philippe; Yli-Hankala, Arvi; Korhonen, Ilkka.

2018 IEEE EMBS International Conference on Biomedical and Health Informatics, BHI 2018. IEEE, 2018. p. 133-136.

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

**Exploiting suppliers' potential in construction innovations.** / Sariola, Rami.

2017 International Conference on Engineering, Technology and Innovation: Engineering, Technology and Innovation Management Beyond 2020: New Challenges, New Approaches, ICE/ITMC 2017 - Proceedings. IEEE, 2018. p. 678-684.

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

**Configuring and visualizing the data resources in a cloud-based data collection framework.** / Mohammed, Wael M.; Ferrer, Borja Ramis; Jose, L.; Lastra, Martinez; Aleixo, David; Agostinho, Carlos.

2017 International Conference on Engineering, Technology and Innovation: Engineering, Technology and Innovation Management Beyond 2020: New Challenges, New Approaches, ICE/ITMC 2017 - Proceedings. IEEE, 2018. p. 1201-1208.

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

**A multi-agent approach for processing industrial enterprise data.** / Mohammed, Wael M.; Ferrer, Borja Ramis; Martinez, Jose L.; Sanchis, Raquel; Andres, Beatriz; Agostinho, Carlos.

2017 International Conference on Engineering, Technology and Innovation: Engineering, Technology and Innovation Management Beyond 2020: New Challenges, New Approaches, ICE/ITMC 2017 - Proceedings. IEEE, 2018. p. 1209-1215.

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

**An approach to production scheduling optimization a case of an oil lubrication and hydraulic systems manufacturer.** / Katasonov, Artem; Lastusilta, Toni; Korvola, Timo; Saari, Leila; Bendas, Dan; Mohammed, Wael M.; Lee, Angelica Nieto.

2017 International Conference on Engineering, Technology and Innovation: Engineering, Technology and Innovation Management Beyond 2020: New Challenges, New Approaches, ICE/ITMC 2017 - Proceedings. IEEE, 2018. p. 1123-1130.

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

**Detailed Interference Analysis in Dense mmWave Systems Employing Dual-Polarized Antennas.** / Solomitckii, Dmitrii; Petrov, Vitaly; Nikopour, Hosein; Akdeniz, Mustafa; Orhan, Oner; Himayat, Nageen; Talwar, Shilpa; Andreev, Sergey; Koucheryavy, Yevgeni.

2017 IEEE Globecom Workshops. IEEE, 2018. p. 1-6.

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

**Analyzing Effects of Directional Deafness on mmWave Channel Access in Unlicensed Bands.** / Galinina, Olga; Pyattaev, Alexander; Johnsson, Kerstin; Andreev, Sergey; Koucheryavy, Yevgeni.

2017 IEEE Globecom Workshops, GC Wkshps 2017 - Proceedings. IEEE, 2018. p. 1-7.

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

**Image-Based Localization Using Hourglass Networks.** / Melekhov, Iaroslav; Ylioinas, Juha; Kannala, Juho; Rahtu, Esa.

2017 IEEE International Conference on Computer Vision Workshops, ICCVW 2017. IEEE, 2018. p. 870-877.

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

**Dual Structured Convolutional Neural Network with Feature Augmentation for Quantitative Characterization of Tissue Histology.** / Valkonen, Mira; Kartasalo, Kimmo; Liimatainen, Kaisa; Nykter, Matti; Latonen, Leena; Ruusuvoori, Pekka.

2017 IEEE International Conference on Computer Vision Workshops, ICCVW 2017. IEEE, 2018. p. 27-35.

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

**Ultra-large mode area single frequency anisotropic MOPA with double clad Yb-doped tapered fiber.** / Noronen, Teppo; Fedotov, Andrei; Rissanen, Joona; Gumenyuk, Regina; Butov, Oleg; Chamorovskii, Yuri; Golant, Konstantin; Odnoblyudov, Maxim; Filippov, Valery.

Fiber Lasers XV: Technology and Systems. SPIE, IEEE, 2018. 105121T (Proceedings of SPIE; Vol. 10512).

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

**Multiwavelength surface contouring from phase-coded diffraction patterns.** / Katkovnik, Vladimir; Shevkunov, Igor; Petrov, Nikolay V.; Eguiazarian, Karen.

Unconventional Optical Imaging 2018. Strasbourg, France. SPIE, 2018. 106771B (Proceedings of SPIE - The International Society for Optical Engineering; Vol. 10677).

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

**Elementary math to close the digital skills gap.** / Niemelä, Pia; Valmari, Antti.

CSEDU 2018 - Proceedings of the 10th International Conference on Computer Supported Education. Vol. 2 SCITEPRESS, 2018. p. 154-165.

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

**Making the cloud work for software producers : Linking architecture, operating cost and revenue.** / Rosati, Pierangelo; Fowley, Frank; Pahl, Claus; Taibi, Davide; Lynn, Theo.

CLOSER 2018 - Proceedings of the 8th International Conference on Cloud Computing and Services Science. SCITEPRESS, 2018. p. 364-375.

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

**Integrated multi-wavelength mid-IR light source for gas sensing.** / Karioja, Pentti; Alajoki, Teemu; Cherchi, Matteo; Ollila, Jyrki; Harjanne, Mikko; Heinilehto, Noora; Suomalainen, Soile; Zia, Nouman; Tuorila, Heidi; Viheriälä, Jukka; Guina, Mircea; Buczynski, Ryszard; Kasztelanica, Rafa; Salo, Tomi; Virtanen, Sami; Kluczynski, Pawel; Borgen, Lars; Ratajczyk, Marcin; Kalinowski, Przemyslaw.

Next-Generation Spectroscopic Technologies XI. SPIE, IEEE, 2018. 106570A (SPIE Conference Proceedings; Vol. 10657).

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

**Highly-efficient Ho:KY(WO<sub>4</sub>)<sub>2</sub> thin-disk lasers at 2.06 μm.** / Mateos, Xavier; Loiko, Pavel; Lamrini, Samir; Scholle, Karsten; Fuhrberg, Peter; Suomalainen, Soile; Härkönen, Antti; Guina, Mircea; Vatnik, Sergei; Vedin, Ivan; Aguiló, Magdalena; Díaz, Francesc; Wang, Yicheng; Griebner, Uwe; Petrov, Valentin.

Pacific-Rim Laser Damage 2018: Optical Materials for High-Power Lasers. SPIE, IEEE, 2018. 107130J (Proceedings of SPIE; Vol. 10713).

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

**Methods and tools for denoising of complex-valued images based on block-matching and high order singular value decomposition.** / Ponomarenko, Mykola; Katkovnik, Vladimir; Egiazarian, Karen.

Electronic Imaging: Image Processing: Algorithms and Systems XVI. Society for Imaging Science and Technology, 2018.

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

**Deep p-Fibonacci scattering networks.** / Battisti, F.; Carli, M.; De Paola, E.; Egiazarian, K.

Electronic Imaging: Image Processing: Algorithms and Systems XVI. Society for Imaging Science and Technology, 2018.

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

**Blind estimation of white Gaussian noise variance in highly textured images.** / Ponomarenko, Mykola; Gapon, Nikolay; Voronin, Viacheslav; Egiazarian, Karen.

Electronic Imaging: Image Processing: Algorithms and Systems XVI. Society for Imaging Science and Technology, 2018.

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

**Robust linearized combined metrics of image visual quality.** / Ieremeiev, Oleg; Lukin, Vladimir; Ponomarenko, Nikolay; Egiazarian, Karen.

Electronic Imaging: Image Processing: Algorithms and Systems XVI. Society for Imaging Science and Technology, 2018.

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

**Combined local and global image enhancement algorithm.** / Voronin, V.; Semenishchev, E.; Ponomarenko, M.; Agaian, S.

Electronic Imaging: Image Processing: Algorithms and Systems XVI. Society for Imaging Science and Technology, 2018.

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

**Compression of signs of DCT coefficients for additional lossless compression of JPEG images.** / Miroshnichenko, Oleksandr; Ponomarenko, Mykola; Lukin, Vladimir; Egiazarian, Karen.

Electronic Imaging: Image Processing: Algorithms and Systems XVI. Society for Imaging Science and Technology, 2018.

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

**Conversion of sparsely-captured light field into alias-free fullparallax multiview content.** / Sahin, Erdem; Vagharshakyan, Suren; Bregovic, Robert; Lee, Gwangsoon; Gotchev, Atanas.

Electronic Imaging: Stereoscopic Displays and Applications XXIX. Society for Imaging Science and Technology, 2018. p. 1441-1445.

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

**Knowledge-based artificial neural network (KB-ANN) in engineering : Associating functional architecture modeling, dimensional analysis and causal graphs to produce optimized topologies for KB-ANNs.** / Coatanéa, Eric; Wu, Di; Tsarkov, Vadim; Gary Wang, G.; Modi, Siddhant; Jafarian, Hesam.

38th Computers and Information in Engineering Conference. Vol. 1B-2018 The American Society of Mechanical Engineers ASME, 2018.

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

**Architectural patterns for microservices : A systematic mapping study.** / Taibi, Davide; Lenarduzzi, Valentina; Pahl, Claus. CLOSER 2018 - Proceedings of the 8th International Conference on Cloud Computing and Services Science. SCITEPRESS, 2018. p. 221-232.

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

**Action recognition using the 3D dense microblock difference.** / Voronin, V.; Pismenskova, M.; Zelensky, A.; Cen, Yigang; Nadykto, A.; Egiazarian, K.

Counterterrorism, Crime Fighting, Forensics, and Surveillance Technologies II. SPIE, 2018. 108020O (Proceedings of SPIE; Vol. 10802).

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

**Predicting academic success based on learning material usage.** / Leppänen, Leo; Leinonen, Juho; Ihantola, Petri; Hellas, Arto.

SIGITE 2017 - Proceedings of the 18th Annual Conference on Information Technology Education. ACM, 2017. p. 13-18.

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

**Comparison of time metrics in programming.** / Leinonen, Juho; Leppänen, Leo; Ihantola, Petri; Hellas, Arto.

ICER 2017 - Proceedings of the 2017 ACM Conference on International Computing Education Research. ACM, 2017. p. 200-208.

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

**Novel D2D-based relaying method for multicast services over 3GPP LTE-A systems.** / Araniti, G.; Orsino, A.; Militano, L.; Putrino, G.; Andreev, S.; Koucheryavy, Y.; Iera, A.

2017 IEEE International Symposium on Broadband Multimedia Systems and Broadcasting, BMSB 2017. IEEE, 2017.

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

**Mobility aware eMBMS management in urban 5G-oriented systems.** / Desogus, C.; Fadda, M.; Murrioni, M.; Araniti, G.; Orsino, A.

2017 IEEE International Symposium on Broadband Multimedia Systems and Broadcasting, BMSB 2017. IEEE, 2017.

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

**Optimal subgroup configuration for multicast services over 5G-satellite systems.** / Orsino, A.; Araniti, G.; Scopelliti, P.; Gudkova, I. A.; Samouylov, K. E.; Iera, A.

2017 IEEE International Symposium on Broadband Multimedia Systems and Broadcasting, BMSB 2017. IEEE, 2017.

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

**Monitoring pH, temperature and humidity in long-term stem cell culture in CO<sub>2</sub> incubator.** / Rajan, Dhanesh Kattiparambil; Verho, Jarmo; Kreutzer, Joose; Valimaki, Hannu; Ihalainen, Heimo; Lekkala, Jukka; Patrikoski, Mimmi; Miettinen, Susanna.

2017 IEEE International Symposium on Medical Measurements and Applications (MeMeA). IEEE, 2017. p. 470-474.

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

**Using and collecting fine-grained usage data to improve online learning materials.** / Leppänen, Leo; Leinonen, Juho; Ihantola, Petri; Hellas, Arto.

Proceedings - 2017 IEEE/ACM 39th International Conference on Software Engineering: Software Engineering and Education Track, ICSE-SEET 2017. IEEE, 2017. p. 4-12.

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

**Towards the Utilization of Crowdsourcing in Traffic Condition Reporting.** / Rantanen, Petri; Sillberg, Pekka; Soini, Jari.

2017 40th International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2017 - Proceedings. IEEE, 2017. p. 985-990.

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

**Preventing keystroke based identification in open data sets.** / Leinonen, Juho; Ihantola, Petri; Hellas, Arto.

L@S 2017 - Proceedings of the 4th (2017) ACM Conference on Learning at Scale. ACM, 2017. p. 101-109.

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

**Towards a conceptual framework for privacy protection in the use of interactive 360° video surveillance.** / Chaudhary, Sunil; Berki, Eleni; Nykänen, Pirkko; Zolotavkin, Yevhen; Helenius, Marko; Kela, Juha.  
2016 22nd International Conference on Virtual System & Multimedia (VSMM). IEEE, 2017.

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

**Viewport-adaptive encoding and streaming of 360-degree video for virtual reality applications.** / Kammachi-Sreedhar, Kashyap; Aminlou, Alireza; Hannuksela, Miska M.; Gabbouj, Moncef.  
2016 IEEE International Symposium on Multimedia (ISM). IEEE, 2017. p. 583-586.

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

**Standard-compliant multiview video coding and streaming for virtual reality applications.** / Kammachi-Sreedhar, Kashyap; Aminlou, Alireza; Hannuksela, Miska M.; Gabbouj, Moncef.  
2016 IEEE International Symposium on Multimedia (ISM). IEEE, 2017. p. 295-300.

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

**Efficient coding of 360-degree pseudo-cylindrical panoramic video for virtual reality applications.** / Youvalari, Ramin Ghaznavi; Aminlou, Alireza; Hannuksela, Miska M.; Gabbouj, Moncef.  
2016 IEEE International Symposium on Multimedia (ISM). IEEE, 2017. p. 525-528.

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

**Color-distribution similarity by information theoretic divergence for color images.** / Murayama, Mizuki; Oguro, Daisuke; Kikuchi, Hisakazu; Huttunen, Heikki; Ho, Yo Sung; Shin, Jaeho.  
2016 Asia-Pacific Signal and Information Processing Association Annual Summit and Conference, APSIPA 2016. IEEE, 2017.

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

**Dynamic laser speckle metrology with binarization of speckle patterns.** / Stoykova, Elena; Nazarova, Dimana; Berberova, Nataliya; Gotchev, Atanas; Ivanov, Branimir; Mateev, Georgy.  
19th International Conference and School on Quantum Electronics: Laser Physics and Applications. SPIE, 2017. 102260R (Proceedings of SPIE; Vol. 10226).

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

**Picosecond MOPA with ytterbium doped tapered double clad fiber.** / Filippov, Valery; Vorotynskii, Andrei; Noronen, Teppo; Gumenyuk, Regina; Chamorovskii, Yuri; Golant, Konstantin.  
Fiber Lasers XIV: Technology and Systems. Vol. 10083 SPIE, 2017. 100831H (Proceedings of SPIE; No. 10083).

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

**Internet of Things : Opportunities for vocational education and training: Presentation of the pilot project.** / Vihervaara, Juha; Alapaholuoma, Teemu.  
CSEDU 2017 - Proceedings of the 9th International Conference on Computer Supported Education. SCITEPRESS, 2017. p. 476-480.

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

**Computational wavelength resolution for in-line lensless holography : Phase-coded diffraction patterns and wavefront group-sparsity.** / Katkovnik, Vladimir; Shevkunov, Igor; Petrov, Nikolay V.; Egiazarian, Karen.  
Digital Optical Technologies 2017. SPIE, 2017. 1033509 (Proceedings of SPIE; Vol. 10335).

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

**Dimension reduction and decomposition using causal graph and qualitative analysis for aircraft concept design optimization.** / Wu, Di; Coatanea, Eric; Wang, G. Gary.  
43rd Design Automation Conference. The American Society of Mechanical Engineers ASME, 2017.

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

**Complex elevator system DSM-case for a DSM design sprint.** / Niutanen, Valtteri; Hölttä-Otto, Katja; Rahardjo, Andhikaputra; Stowe, Harold Mike; Helo, Petri; Pulkkinen, Antti.  
Understand, Innovate, and Manage your Complex System! - Proceedings of the 19th International DSM Conference. The Design Society, 2017. p. 259-264.

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

**Full-reference metrics multidistortional analysis.** / Ieremeiev, Oleg; Lukin, Vladimir; Ponomarenko, Nikolay; Egiazarian, Karen.

Image Processing: Algorithms and Systems XV. 2017. p. 27-35 (Electronic Imaging).

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

**BM3D-HVS : Content-Adaptive denoising for improved visual quality.** / Egiazarian, Karen; Danielyan, Aram; Ponomarenko, Nikolay; Foia, Alessandro; Ieremeiev, Oleg; Lukin, Vladimir.

Image Processing: Algorithms and Systems XV. 2017. p. 48-55 (Electronic Imaging).

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

**A dynamical quality model to continuously monitor software maintenance.** / Lenarduzzi, Valentina; Stan, Alexandru Cristian; Taibi, Davide; Tosi, Davide; Venters, Gustavs.

Proceedings of the 11th European Conference on Information Systems Management, ECISM 2017. Academic Conferences and Publishing International Limited, 2017. p. 168-178.

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

**Experimenting traditional and modern reliability models in a 3-years european software project.** / Tosi, Davide; Lenarduzzi, Valentina; Morasca, Sandro; Taibi, Davide.

Proceedings of the 11th European Conference on Information Systems Management, ECISM 2017. Academic Conferences and Publishing International Limited, 2017. p. 304-314.

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

**Describing mobile devices as RESTful services for the end-users.** / Ruokonen, Anna; Wu, Zhenli; Lu, Rui.  
2016 IEEE International Conference on Mobile Services (MS). IEEE, 2016. p. 127-134.

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

**Dynamic social trust associations over d2d communications : An implementation perspective.** / Urama, Jani; Olshannikova, Ekaterina; Ometov, Aleksandr; Masek, Pavel; Andreev, Sergey; Olsson, Thomas; Hosek, Jiri; Niutanen, Jussi; Koucheryavy, Yevgeni; Mikkonen, Tommi.

2016 IEEE International Conference on Mobile Services (MS). IEEE, 2016. p. 186-189.

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

**Temporal dimensions of affect in user experience of digital news in the field.** / Jumisko-Pyykkö, Satu; Pesonen, Emilia; Väätäjä, Heli.

AcademicMindtrek 2016 - Proceedings of the 20th International Academic Mindtrek Conference. ACM, 2016. p. 192-197.

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

**Software visualization today - Systematic literature review.** / Mattila, Anna-Liisa; Ihantola, Petri; Kilamo, Terhi; Luoto, Antti; Nurminen, Mikko; Väätäjä, Heli.

AcademicMindtrek 2016 - Proceedings of the 20th International Academic Mindtrek Conference. ACM, 2016. p. 262-271.

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

**Participatory development of user experience design guidelines for a B2B company.** / Hildén, Elina; Väätäjä, Heli; Roto, Virpi; Uusitalo, Kero.

AcademicMindtrek '16 Proceedings of the 20th International Academic Mindtrek Conference . ACM, 2016. p. 49-58.

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

**Focusing on user experience and business models in startups : Investigation of two-dimensional value creation.** / Hokkanen, Laura; Xu, Yueqiang; Väänänen, Kaisa.

AcademicMindtrek 2016 - Proceedings of the 20th International Academic Mindtrek Conference. ACM, 2016. p. 59-67.

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

**Casual immersive viewing with smartphones.** / Rakkolainen, Ismo; Raisamo, Roope; Turk, Matthew; Höllerer, Tobias; Palovuori, Karri.  
AcademicMindtrek 2016 - Proceedings of the 20th International Academic Mindtrek Conference. ACM, 2016. p. 449-452.  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**A coordination-based brokerage architecture for multi-cloud resource markets.** / Aldawood, Sarah; Fowley, Frank; Pahl, Claus; Taibi, Davide; Liu, Xiaodong.  
Proceedings - 2016 4th International Conference on Future Internet of Things and Cloud Workshops, W-FiCloud 2016. Institute of Electrical and Electronics Engineers Inc., 2016. p. 7-14.  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**MVP Explained : A Systematic Mapping Study on the Definitions of Minimal Viable Product.** / Lenarduzzi, Valentina; Taibi, Davide.  
Proceedings - 42nd Euromicro Conference on Software Engineering and Advanced Applications, SEAA 2016. IEEE, 2016. p. 112-119.  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**Challenges and capabilities of conductive polymeric materials for electromechanical stimulation of stem cells : A case study.** / Viehig, Marlitt; Tuukkanen, Sampo; Kallio, Pasi.  
2016 International Conference on Manipulation, Automation and Robotics at Small Scales, MARSS 2016. Institute of Electrical and Electronics Engineers Inc., 2016.  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**Trading exploits online : A preliminary case study.** / Ruohonen, Jukka; Hyrynsalmi, Sami; Leppänen, Ville.  
IEEE RCIS 2016 - IEEE 10th International Conference on Research Challenges in Information Science. IEEE COMPUTER SOCIETY PRESS, 2016.  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**Asymmetric full-duplex with contiguous downlink carrier aggregation.** / Korpi, Dani; Anttila, Lauri; Valkama, Mikko.  
2016 IEEE 17th International Workshop on Signal Processing Advances in Wireless Communications (SPAWC). IEEE, 2016.  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**Utilizing MOOCs in the development of education and training programs.** / Linna, Petri; Mäkinen, Timo; Keto, Harri.  
2016 39th International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2016 - Proceedings. 2016. p. 861-864.  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**Portable sensor system for reliable condition measurement.** / Soini, J.; Sillberg, P.; Rantanen, P.; Nummela, J.  
2016 39th International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2016 - Proceedings. 2016. p. 1190-1195.  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**Multi-carrier CDMA for network assisted device-to-device communications for an integrated OFDMA cellular system.** / Xing, Hongnian; Renfors, Markku.  
2016 IEEE 83rd Vehicular Technology Conference (VTC Spring) . 2016.  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**Novel frequency domain cyclic prefix autocorrelation based compressive spectrum sensing for cognitive radio.** / Dikmese, Sener; Ilyas, Zobia; Sofotasios, Paschalis; Renfors, Markku; Valkama, Mikko.  
2016 IEEE 83rd Vehicular Technology Conference (VTC Spring) . IEEE, 2016.  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**A novel stochastic channel modeling approach for mmWave systems with beamforming.** / Pyattaev, Alexander; Johnsson, Kerstin; Andreev, Sergey; Koucheryavy, Yevgeni.

2016 IEEE 83rd Vehicular Technology Conference (VTC Spring) . IEEE, 2016.

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

**Investigating mid-air gestures and handhelds in motion tracked environments.** / Mäkelä, Ville; Korhonen, Hannu; Ojala, Jarno; Järvi, Antti; Väänänen, Kaisa; Raisamo, Roope; Turunen, Markku.

PerDis 2016 - Proceedings of the 5th ACM International Symposium on Pervasive Displays. ACM, 2016. p. 45-51.

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

**Towards semantic self-description of industrial devices and control system interfaces.** / Hästbacka, David; Zoitl, Alois. 2016 IEEE International Conference on Industrial Technology (ICIT) . Institute of Electrical and Electronics Engineers IEEE, 2016. p. 879-884.

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

**Coordinating proactive social devices in a mobile cloud : Lessons learned and a way forward.** / Mäkitalo, Niko; Aaltonen, Timo; Mikkonen, Tommi.

MOBILESoft '16 Proceedings of the International Conference on Mobile Software Engineering and Systems . ACM, 2016. p. 179-188.

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

**Feasibility characterization of cryptographic primitives for constrained (wearable) IoT devices.** / Ometov, Aleksandr; Masek, Pavel; Malina, Lukas; Florea, Roman; Hosek, Jiri; Andreev, Sergey; Hajny, Jan; Niutanen, Jussi; Koucheryavy, Yevgeni.

IEEE International Conference on Pervasive Computing and Communication Workshops, PerCom Workshops 2016. IEEE, 2016.

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

**Random Value Impulse Noise Removal Based on Most Similar Neighbors.** / Habib, Muhammad; Rasheed, Saqib; Hussain, Ayyaz; Ali, Mubashir.

2015 13th International Conference on Frontiers of Information Technology (FIT) . IEEE, 2016. p. 329-333.

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

**Quantitative + qualitative information for heritage conservation : An open science research for paving 'collaboratively' the way to historical-BIM.** / Garcia-Fernandez, Jorge; Joutsiniemi, Anssi; Ahn, Yushin; Fernandez, Juan Jose.

2015 Digital Heritage International Congress, Digital Heritage 2015. IEEE, 2016. p. 207-208.

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

**Lean manufacturing methods in simulation literature : Review and association analysis.** / Tokola, Henri; Niemi, Esko; Väistö, Ville.

2015 Winter Simulation Conference (WSC). 2016. p. 2239-2248.

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

**Integrating III-V, Si, and polymer waveguides for optical interconnects : RAPIDO.** / Aalto, Timo; Harjanne, Mikko; Offrein, Bert Jan; Caër, Charles; Neumeyr, Christian; Malacarne, Antonio; Guina, Mircea; Sheehan, Robert N.; Peters, Frank H.; Melanen, Petri.

Optical Interconnects XVI. SPIE, 2016. 97530D (Proceedings of SPIE; Vol. 9753).

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

**Fabrication and characterization of broadband superluminescent diodes for 2 μm wavelength.** / Zia, Nouman; Viheriälä, Jukka; Koskinen, Riku; Koskinen, Mervi; Suomalainen, Soile; Guina, Mircea.

Light-Emitting Diodes: Materials, Devices, and Applications for Solid State Lighting XX. SPIE, 2016. 97680Q (Proceedings of SPIE; Vol. 9768).

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

**High-power 1550 nm tapered DBR lasers fabricated using soft UV-nanoimprint lithography.** / Viheriälä, Jukka; Aho, Antti T.; Mäkelä, Jaakko; Salmi, Joel; Virtanen, Heikki; Leinonen, Tomi; Dumitrescu, Mihail; Guina, Mircea.

High-Power Diode Laser Technology and Applications XIV. SPIE, 2016. 97330Q (SPIE Conference Proceedings; Vol. 9733).



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

**Methodology to obtain the security controls in multi-cloud applications.** / Afolaranmi, Samuel Olaiya; Gonzalez Moctezuma, Luis E.; Rak, Massimiliano; Casola, Valentina; Rios, Erkuden; Martinez Lastra, Jose L.

CLOSER 2016 - Proceedings of the 6th International Conference on Cloud Computing and Services Science. Vol. 1 SCITEPRESS, 2016. p. 327-332.

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

**Optical fiber amplifier with spectral compression elements for high-power laser pulse generation.** / Fotiadi, Andrei A.; Korobko, Dmitry A.; Okhotnikov, Oleg G.; Zolotovskii, Igor O.

Nonlinear Optics and its Applications IV. Vol. 9894 SPIE, 2016. 989411 (Proceedings of SPIE; Vol. 9894).

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

**Dots-on-the-fly electron beam lithography.** / Isotalo, Tero J.; Niemi, Tapio.

SPIE Proceedings: Alternative Lithographic Technologies VIII. ed. / Christopher Bencher. Vol. 9777 SPIE, 2016. 97771E (Proceedings of SPIE).

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

**An image generator platform to improve cell tracking algorithms simulation of objects of various morphologies, kinetics and clustering.** / Canelas, Pedro; Martins, Leonardo; Mora, André; S. Ribeiro, Andre; Fonseca, José.

SIMULTECH 2016 - Proceedings of the 6th International Conference on Simulation and Modeling Methodologies, Technologies and Applications. SCITEPRESS, 2016. p. 44-55.

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

**Simultaneous binary hash and features learning for image retrieval.** / Frantc, V. A.; Makov, S. V.; Voronin, V. V.; Marchuk, V. I.; Semenishchev, E. A.; Egiazarian, K. O.; Agaian, S.

Mobile Multimedia/Image Processing, Security, and Applications 2016. SPIE, 2016. 986902 (SPIE Conference Proceedings; Vol. 9869).

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

**Hot pen and laser writable photonic polymer films.** / Moirangthem, Monali; Stumpel, Jelle E.; Alp, Baran; Teunissen, Pit; Bastiaansen, Cees W M; Schenning, Albertus P H J.

Emerging Liquid Crystal Technologies XI. Vol. 9769 SPIE, 2016. 97690Y.

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

**HVS-based local analysis of denoising efficiency for DCT-based filters.** / Rubel, Oleksii; Ponomarenko, Nikolay; Lukin, Vladimir; Astola, Jaakko; Egiazarian, Karen.

2015 2nd International Scientific-Practical Conference Problems of Infocommunications Science and Technology, PIC S and T 2015 - Conference Proceedings. IEEE, 2015. p. 189-192.

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

**Method of data compression for traffic monitoring.** / Kozhemiakina, Nadejda; Lukin, Vladimir; Ponomarenko, Nikolay; Akulynichev, Artem; Astola, Jaakko; Egiazarian, Karen.

2015 2nd International Scientific-Practical Conference Problems of Infocommunications Science and Technology, PIC S and T 2015 - Conference Proceedings. IEEE, 2015. p. 153-156.

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

**Bispectrum-based demodulation technique using triple-channel heterodyning of triplet-signal.** / Naumenko, V.; Solodovnik, V.; Totsky, A.; Zelensky, A.; Astola, J.

2015 Second International Scientific-Practical Conference Problems of Infocommunications Science and Technology (PIC S&T). IEEE, 2015. p. 224-226.

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

**Texture detection in noisy images by combining several local parameters.** / Naumenko, Alexey; Krivenko, Sergey; Ponomarenko, Nikolay; Zelensky, Alexander; Lukin, Vladimir.

2015 2nd International Scientific-Practical Conference Problems of Infocommunications Science and Technology, PIC S and T 2015 - Conference Proceedings. Institute of Electrical and Electronics Engineers Inc., 2015. p. 230-233 7357321.

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

**Urban sensing and smart home energy optimisations : A machine learning approach.** / Shahriar, Md Sumon; Rahman, M. Sabbir.

IoT-App 2015 - Proceedings of the 2015 International Workshop on Internet of Things Towards Applications, co-located with SenSys 2015. ACM, 2015. p. 19-22.

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

**Antroposeeni - A mixed reality game.** / Luhtala, Matti; Karvonen, Tuomo; Pylväs, Jyrki; Ala-Kokko, Aki; Magica, Reina; Takeda, Yuko; Turunen, Markku.

ACADEMICMINDTREK 2015 - Proceedings of the 19th International Academic Mindtrek Conference. Association for Computing Machinery, Inc, 2015. p. 211-213.

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

**OASIS deck of cards - House of colleagues : A playful.** / Nummenmaa, Timo; Kultima, Annakaisa; Kankainen, Ville; Savolainen, Sampo; Syvänen, Antti; Alha, Kati; Mäyrä, Frans.

ACADEMICMINDTREK 2015 - Proceedings of the 19th International Academic Mindtrek Conference. Association for Computing Machinery, Inc, 2015. p. 2-9.

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

**Evaluating a Future Remote Control Environment with an Experience-Driven Science Fiction Prototype.** / Kymäläinen, Tiina; Perala, Piia; Hakulinen, Jaakko; Heimonen, Tomi; James, Jobin; Pera, Juha.

Proceedings - 2015 International Conference on Intelligent Environments, IE 2015. Institute of Electrical and Electronics Engineers Inc., 2015. p. 81-88 7194274.

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

**Image interpolation based on non-local geometric similarities.** / Zhu, Shuyuan; Zeng, Bing; Liu, Guanghui; Zeng, Liaoyuan; Fang, Lu; Gabbouj, Moncef.

2015 IEEE International Conference on Multimedia and Expo (ICME). IEEE COMPUTER SOCIETY PRESS, 2015.

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

**Gathering useful programming data; Analysis and insights from real-time collaborative editing.** / Rantala, M.; Soini, J.; Kilamo, T.

2015 38th International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2015 - Proceedings. The Institute of Electrical and Electronics Engineers, Inc., 2015. p. 229-234 7160270.

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

**Wideband self-adaptive RF cancellation circuit for full-duplex radio : Operating principle and measurements.** / Huusari, Timo; Choi, Yang Seok; Liikkanen, Petteri; Korpi, Dani; Talwar, Shilpa; Valkama, Mikko.

2015 IEEE 81st Vehicular Technology Conference (VTC Spring). The Institute of Electrical and Electronics Engineers, Inc., 2015.

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

**Prioritized centrally-controlled resource allocation in integrated multi-RAT HetNets.** / Gerasimenko, Mikhail; Moltchanov, Dmitri; Florea, Roman; Himayat, Nageen; Andreev, Sergey; Koucheryavy, Yevgeni.

IEEE Vehicular Technology Conference. Vol. 2015-July The Institute of Electrical and Electronics Engineers, Inc., 2015.

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

**AvanTomography : A compact module for positron emission mammography.** / Us, D.; Moreno-Galera, A.; Nazari-Farsani, S.; Palovuori, K.; Kosola, H.; Zedda, T.; Ruotsalainen, U.

2015 IEEE International Symposium on Medical Measurements and Applications, MeMeA 2015 - Proceedings. IEEE, 2015. p. 52-57.

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

**Collaborative cloud-based management of home networks.** / Silverajan, Bilhanan; Luoma, Juha-Pekka; Vajaranta, Markku; Itäpuro, Riku.

Proceedings of the 2015 IFIP/IEEE International Symposium on Integrated Network Management, IM 2015. IEEE, 2015. p. 786-789.

**Blind estimation of speckle variance in synthetic aperture radar images.** / Abramova, V. V.; Kozhemiakin, R.; Abramov, S. K.; Lukin, V. V.; Zelensky, A. A.; Egiazarian, K.

2015 International Conference on Antenna Theory and Techniques: Dedicated to 95 Year Jubilee of Prof. Yakov S. Shifrin, ICATT 2015 - Proceedings. The Institute of Electrical and Electronics Engineers, Inc., 2015.

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

**Experimental study of bispectrum-based encoding in radio communication system.** / Naumenko, V. V.; Solodovnik, V. F.; Totsky, A. V.; Zelensky, A. A.; Astola, J. T.

2015 International Conference on Antenna Theory and Techniques: Dedicated to 95 Year Jubilee of Prof. Yakov S. Shifrin, ICATT 2015 - Proceedings. The Institute of Electrical and Electronics Engineers, Inc., 2015.

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

**Variable switching point predictive torque control with extended prediction horizon.** / Alevras, Ilias; Karamanakos, Petros; Manias, Stefanos; Kennel, Ralph.

2015 IEEE International Conference on Industrial Technology, ICIT 2015. June. ed. Institute of Electrical and Electronics Engineers Inc., 2015. p. 2352-2357.

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

**Semantic Labeling of Places based on Phone Usage Features using Supervised Learning.** / Rivero Rodriguez, Alejandro; Leppäkoski, Helena; Piché, Robert.

2014 Ubiquitous Positioning Indoor Navigation and Location Based Service, UPINLBS 2014 - Conference Proceedings. Piscataway, NJ, USA : IEEE, 2015. p. 97-102 7033715.

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

**Video summarization based on Subclass Support Vector Data Description.** / Mygdalis, Vasileios; Iosifidis, Alexandros; Tefas, Anastasios; Pitas, Ioannis.

IEEE SSCI 2014 - 2014 IEEE Symposium Series on Computational Intelligence - CIES 2014: 2014 IEEE Symposium on Computational Intelligence for Engineering Solutions, Proceedings. The Institute of Electrical and Electronics Engineers, Inc., 2015. p. 183-187.

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

**Employing a multi-Objective robust optimisation method for healthy and low-energy dwelling design in Delhi, India.** / Nix, Emily; Das, Payel; Taylor, Jonathon; Davies, Michael.

Proceedings of the 2014 Building Simulation and Optimization Conference. 2015. p. 2093-2100.

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

**2.4 GHz inkjet-printed RF energy harvester on bulk cardboard substrate.** / Khonsari, Zahra; Björninen, Toni; Tentzeris, Manos M.; Sydänheimo, Lauri; Ukkonen, Leena.

2015 IEEE Radio and Wireless Symposium (RWS), 25-28 Jan. 2015, San Diego, CA . IEEE, 2015. p. 153-155.

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

**Power and wavelength scaling using semiconductor disk laser - bismuth fiber MOPA systems.** / Heikkinen, Juuso; Gumenyuk, Regina; Rantamäki, Antti; Lyytikäinen, Jari; Leinonen, Tomi; Zolotovskii, Igor; Melkumov, Mikhail; Dianov, Evgeny M.; Okhotnikov, Oleg G.

Vertical External Cavity Surface Emitting Lasers (VECSELs) V. ed. / M Guina. BELLINGHAM : SPIE, 2015. 93490E (Proceedings of SPIE; Vol. 9349).

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

**Green (In,Ga,Al)P-GaP light-emitting diodes grown on high-index GaAs surfaces.** / 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.

Proceedings of SPIE: Light-Emitting Diodes: Materials, Devices, and Applications for Solid State Lighting XIX. Vol. 9383 SPIE, 2015. 93830E.

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

**Preserving natural scene lighting by strobe-lit video.** / Suominen, Olli; Gotchev, Atanas.

Image Processing: Algorithms and Systems XIII. SPIE, 2015. 939919 (SPIE Conference Proceedings; Vol. 9399).

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

**Machine learning for adaptive bilateral filtering.** / Frosio, Iuri; Egiazarian, Karen; Pulli, Kari.

Image Processing: Algorithms and Systems XIII. Vol. 9399 SPIE, 2015. 939908 (Proceedings of SPIE - The International Society for Optical Engineering).

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

**A perceptual quality metric for high-definition stereoscopic 3D video.** / Battisti, F.; Carli, M.; Stramacci, A.; Boev, A.; Gotchev, A.

Image Processing: Algorithms and Systems XIII. SPIE, 2015. 939916 (SPIE Conference Proceedings; Vol. 9399).

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

**No-reference visual quality assessment for image inpainting.** / Voronin, V. V.; Frantc, V. A.; Marchuk, V. I.; Sherstobitov, A. I.; Egiazarian, K.

Image Processing: Algorithms and Systems XIII. SPIE, 2015. 93990U (SPIE Conference Proceedings; Vol. 9399).

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

**Real-time depth image-based rendering with layered dis-occlusion compensation and aliasing-free composition.** / Smirnov, Sergey; Gotchev, Atanas.

Proceedings of SPIE - The International Society for Optical Engineering. SPIE, 2015. 93990T (SPIE Conference Proceedings; Vol. 9399).

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

**A method for predicting DCT-based denoising efficiency for grayscale images corrupted by AWGN and additive spatially correlated noise.** / Rubel, Aleksey S.; Lukin, Vladimir V.; Egiazarian, Karen.

Proceedings of SPIE - The International Society for Optical Engineering. Vol. 9399 SPIE, 2015. 93990P.

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

**Depth map occlusion filling and scene reconstruction using modified exemplar-based inpainting.** / Voronin, V. V.; Marchuk, V. I.; Fisunov, A. V.; Tokareva, S. V.; Egiazarian, K. O.

Image Processing: Algorithms and Systems XIII. SPIE, 2015. 93990S (SPIE Conference Proceedings; Vol. 9399).

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

**1180nm VECSEL with 50 W output power.** / Kantola, Emmi; Leinonen, Tomi; Ranta, Sanna; Tavast, Miki; Penttinen, Jussi-Pekka; Guina, Mircea.

Proceedings of SPIE - The International Society for Optical Engineering. Vol. 9349 SPIE, 2015. 93490U.

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

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

SPIE conference proceedings. Vol. 9349 SPIE, 2015. 93490D.

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

**>8W GaInNAs VECSEL emitting at 615 nm.** / Leinonen, Tomi; Penttinen, Jussi Pekka; Korpijärvi, Ville Markus; Kantola, Emmi; Guina, Mircea.

Proceedings of SPIE: Vertical External Cavity Surface Emitting Lasers (VECSELs) V. Vol. 9349 SPIE, 2015. 934909.

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

**Combining full-reference image visual quality metrics by neural network.** / Lukin, Vladimir V.; Ponomarenko, Nikolay N.; Ieremeiev, Oleg; Egiazarian, Karen; Astola, Jaakko.

Proceedings of SPIE - The International Society for Optical Engineering. Vol. 9394 SPIE, 2015. 93940K.

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

**Idea-space : A use case of collaborative course development in higher education.** / AbuJarour, Safa'a; Pawlowski, Jan; Bick, Markus; Bagucanskyte, Migle; Frankenberg, Anna; Hudak, Raimund; Makropoulos, Constantinos; Pappa, Dimitra; Pitsilis, Vabilis; Pirkkalainen, Henri; Tannhauser, Anne Christin; Trepule, Elena; Vidalis, Aristedes; Volungeviciene, Airina. Wissens-Gemeinschaften 2015. TUDpress Verlag der Wissenschaften GmbH, 2015. p. 149-156.

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

**Roadmap for organic and printed electronics.** / Hecker, Klaus; Clemens, Wolfgang; Lupo, Donald; Breitung, Sven. Smart Systems Integration 2015 - 9th International Conference and Exhibition on Integration Issues of Miniaturized Systems: MEMS, NEMS, ICs and Electronic Components, SSI 2015. Apprimus Verlag, 2015. p. 125-126.

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

**Measuring bend losses in large-mode-area fibers.** / Ye, Changgeng; Koponen, Joonas; Aallos, Ville; Kokki, Teemu; Petit, Laetitia; Kimmelma, Ossi.

Fiber Lasers XII: Technology, Systems, and Applications. Vol. 9344 SPIE, 2015. 934425.

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

**Multi-physics modeling and simulation of a frequency doubling antenna sensor for passive wireless strain sensing.** / Cho, Chunhee; Yi, Xiaohua; Wang, Yang; Tentzeris, Manos M.

Structural Health Monitoring 2015: System Reliability for Verification and Implementation - Proceedings of the 10th International Workshop on Structural Health Monitoring, IWSHM 2015. Vol. 2 DEStech Publications, 2015. p. 864-872.

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

**DYNAMO sound engine - Exploring the aesthetics of dynamic sound interactions.** / Luhtala, Matti; Heimonen, Tomi; Mäkelä, Ville; Keskinen, Tuuli; Turunen, Markku; Saarinen, Santeri.

MINDTREK 2014 - Proceedings of the 18th International Academic MindTrek Conference: "Media Business, Management, Content and Services". Association for Computing Machinery, Inc, 2014. p. 159-166.

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

**Body-touching : An embodied interaction technique for health information systems in developing regions.** / Sharma, Sumita; Srivastava, Saurabh; Sorathia, Keyur; Hakulinen, Jaakko; Heimonen, Tomi; Turunen, Markku; Rajput, Nitendra.

MINDTREK 2014 - Proceedings of the 18th International Academic MindTrek Conference: "Media Business, Management, Content and Services". Association for Computing Machinery, Inc, 2014. p. 49-56.

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

**Email intensity, productivity and control in the knowledge worker's performance on the desktop.** / Franssila, Heljä; Okkonen, Jussi; Savolainen, Reijo.

MINDTREK 2014 - Proceedings of the 18th International Academic MindTrek Conference: "Media Business, Management, Content and Services". Association for Computing Machinery, Inc, 2014. p. 19-22.

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

**Games and energy : Profiling power usage during play.** / Salmela, Jussi Matti; Thanisch, Peter; Sotamaa, Olli; Niemi, Tapio.

MINDTREK 2014 - Proceedings of the 18th International Academic MindTrek Conference: "Media Business, Management, Content and Services". Association for Computing Machinery, Inc, 2014. p. 192-199.

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

**MurMur Moderators, the talking playful seats.** / Nummenmaa, Timo; Kultima, Annakaisa; Tyni, Heikki; Alha, Kati.

MINDTREK 2014 - Proceedings of the 18th International Academic MindTrek Conference: "Media Business, Management, Content and Services". Association for Computing Machinery, Inc, 2014. p. 231-237.

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

**On computation of calcium cycling anomalies in cardiomyocytes data.** / Juhola, Martti; Joutsijoki, Henry; Varpa, Kirsi; Saarikoski, Jyri; Rasku, Jyrki; Iltanen, Kati; Laurikkala, Jorma; Hyyro, Heikki; Avalos-Salguero, Jorge; Siirtola, Harri; Penttinen, Kirsi; Aalto-Setälä, Katriina.

2014 36th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, EMBC 2014. Institute of Electrical and Electronics Engineers Inc., 2014. p. 1444-1447 6943872.

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

**RF tag front-end design for uncompromised communication and harvesting.** / Kimionis, John; Tentzeris, Manos M.  
2014 IEEE RFID Technology and Applications Conference, RFID-TA 2014. Institute of Electrical and Electronics Engineers Inc., 2014. p. 109-114 6934210.

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

**Effect of feeder cable's phase tolerance on the first sidelobe level of base station antenna.** / He, Yejun; Pan, Zhengzheng; Yang, Jie; Sun, Guiyuan; Tentzeris, Manos M.  
IWCMC 2014 - 10th International Wireless Communications and Mobile Computing Conference. Institute of Electrical and Electronics Engineers Inc., 2014. p. 1022-1026 6906495.

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

**Adaptive sampling for compressed sensing based image compression.** / Zhu, Shuyuan; Zeng, Bing; Gabbouj, Moncef.  
2014 IEEE International Conference on Multimedia and Expo (ICME), 14-18 July 2014, Chengdu. 2014.

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

**Radar micro-Doppler feature extraction using the Singular Value Decomposition.** / De Wit, J. J M; Harmanny, R. I A; Molchanov, P.

2014 International Radar Conference, Radar 2014. The Institute of Electrical and Electronics Engineers, Inc., 2014.

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

**Haptic user interface enhancement system for touchscreen based interaction : A novel system for multimodal interaction with touchscreen interfaces.** / Farooq, Ahmed; Evreinov, Grigori; Raisamo, Roope; Majeed, Atif Abdul.

ICOSST 2014 - 2014 International Conference on Open Source Systems and Technologies, Proceedings. Institute of Electrical and Electronics Engineers Inc., 2014. p. 25-31 7029316.

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

**Developing novel multimodal interaction techniques for touchscreen in-vehicle infotainment systems.** / Farooq, Ahmed; Evreinov, Grigori; Raisamo, Roope; Mäkinen, Erno; Nukarinen, Tomi; Majeed, Atif Abdul.

ICOSST 2014 - 2014 International Conference on Open Source Systems and Technologies, Proceedings. Institute of Electrical and Electronics Engineers Inc., 2014. p. 32-42 7029317.

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

**The lord of the sense : A privacy preserving reputation system for participatory sensing applications.** / Michalás, Antonis; Komninos, Nikos.

2014 IEEE Symposium on Computers and Communications, ISCC 2014 - Proceedings. Institute of Electrical and Electronics Engineers Inc., 2014. 6912480.

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

**Pulsed high-power yellow-orange VECSEL.** / Kantola, Emmi; Leinonen, Tomi; Ranta, Sanna; Tavast, Miki; Guina, Mircea.

Photonics Europe 2014, Semiconductor Lasers and Laser Dynamics VI, April 14-17, 2014, Brussels, Belgium.

Proceedings of SPIE. Vol. 9134 SPIE, 2014. 91340Z (SPIE Conference Proceedings; Vol. 9134).

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

**Graph based representation and analyses for conceptual stages.** / Coatanéa, Eric; Nonsiri, Sarayut; Christophe, Francois; Mokammel, Faisal.

34th Computers and Information in Engineering Conference. Vol. 1A The American Society of Mechanical Engineers ASME, 2014.

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

**Optical and topographic changes in water-responsive patterned cholesteric liquid crystalline polymer coatings.** / Stumpel, Jelle E.; Broer, Dirk J.; Bastiaansen, Cees W M; Schenning, Albert P H J.

Proceedings of SPIE: Organic Photonics VI. Vol. 9137 SPIE, 2014. 91370U (Proceedings of SPIE: the International Society for Optical Engineering).

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

**A hand-held immaterial volumetric display.** / Sand, Antti; Rakkolainen, Ismo.

Proceedings of SPIE-IS and T Electronic Imaging - Stereoscopic Displays and Applications XXV. Vol. 9011 SPIE, 2014. 90110Q.

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

**Avoiding anomalies when modeling a many-to-many relationship in a multidimensional database.** / Thanisch, Peter; Lindell, Teppo; Nummenmaa, Jyrki; Nummenmaa, Timo.

BIR 2009 - 8th International Conference on Perspectives in Business Informatics Research. Kristianstad Academic Press, 2014.

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

**Mode coupling in few-mode large-mode-area fibers.** / Ye, Changgeng; Koponen, Joonas; Aallos, Ville; Petit, Laetitia; Kimmelma, Ossi; Kokki, Teemu.

Fiber Lasers XI: Technology, Systems, and Applications. Vol. 8961 SPIE, 2014. 89612W.

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

**Building energy-efficiency interventions in North-East Europe : Effects on indoor environmental quality and public health.** / Du, Liuliu; Prasauskas, Tadas; Leivo, Virpi; Turunen, Mari; Aaltonen, Anu; Kiviste, Mihkel; Martuzevicius, Dainius; Haverinen-Shaughnessy, Ulla.

Indoor Air 2014 - 13th International Conference on Indoor Air Quality and Climate. International Society of Indoor Air Quality and Climate, 2014. p. 637-639.

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

**Crack propagation measurement using a battery-free slotted patch antenna sensor.** / Yi, Xiaohua; Cho, Chunhee; Wang, Yang; Cook, Benjamin; Tentzeris, Manos M.; Leon, Roberto T.

7th European Workshop on Structural Health Monitoring, EWSHM 2014 - 2nd European Conference of the Prognostics and Health Management (PHM) Society. INRIA, 2014. p. 1040-1047.

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

**Compressive strain measurement using RFID patch antenna sensors.** / Cho, Chunhee; Yi, Xiaohua; Wang, Yang; Tentzeris, Manos M.; Leon, Roberto T.

Sensors and Smart Structures Technologies for Civil, Mechanical, and Aerospace Systems 2014. Vol. 9061 SPIE, 2014. 90610X.

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

**An origami inspired reconfigurable spiral antenna.** / Saintsing, Christy D.; Cook, Benjamin S.; Tentzeris, Manos M.

38th Mechanisms and Robotics Conference. Vol. 5B The American Society of Mechanical Engineers ASME, 2014.

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

**Characterization of charge in airborne fungal spores.** / Reponen, Tiina; Saari, Sampo; Mensah-Attipoe, Jacob; Ukkonen, Ari; Veijalainen, Annamaria; Pasanen, Pertti; Keskinen, Jorma.

Indoor Air 2014 - 13th International Conference on Indoor Air Quality and Climate. International Society of Indoor Air Quality and Climate, 2014. p. 359-361.

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

**Wearable and implantable antennas for wireless body-centric sensing systems.** / Björninen, Toni; Moradi, Elham; Koski, Karoliina; Sydänheimo, Lauri; Ukkonen, Leena; Muller, Rikky; Ledochowitsch, Peter; Rabaey, Jan M.; Rahmat-Samii, Yahya.

BODYNETS 2013 - 8th International Conference on Body Area Networks. ICST, 2013. p. 288.

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

**Variable switching point predictive torque control.** / Karamanakos, Petros; Stolze, Peter; Kennel, Ralph; Manias, Stefanos; Mouton, Toit.

Proceedings - 2013 IEEE International Conference on Industrial Technology, ICIT 2013. 2013. p. 422-427.

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

**View-independent human action recognition based on multi-view action images and discriminant learning.** / Iosifidis, Alexandros; Tefas, Anastasios; Pitas, Ioannis.  
2013 IEEE 11th IVMSWP Workshop: 3D Image/Video Technologies and Applications, IVMSWP 2013 - Proceedings. 2013.  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**Person identification from actions based on dynemes and discriminant learning.** / Iosifidis, Alexandros; Tefas, Anastasios; Pitas, Ioannis.  
2013 International Workshop on Biometrics and Forensics, IWBF 2013. 2013.  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**Exploiting RSS measurements among neighbouring devices : A matter of trust.** / Rosa, Francescantonio Della; Paakki, Tommi; Nurmi, Jari; Pelosi, Mauro.  
2013 International Conference on Indoor Positioning and Indoor Navigation, IPIN 2013. IEEE COMPUTER SOCIETY PRESS, 2013.  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**Towards an approach for evaluating the quality of requirements.** / Mokammel, Faisal; Coatanea, Eric; Christophe, Francois; Ba Khouya, Mohamed; Medyna, Galina.  
33rd Computers and Information in Engineering Conference. Vol. 2 B American Society of Mechanical Engineers, 2013. V02BT02A024.  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**Checking visual data flow programs with finite process models.** / Nummenmaa, Jyrki; Marttila-Kontio, Maija; Nummenmaa, Timo.  
13th Symposium on Programming Languages and Software Tools, SPLST 2013 - Proceedings. University of Szeged, 2013. p. 245-258.  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**Design and simulation of a slotted patch antenna sensor for wireless strain sensing.** / Yi, Xiaohua; Cho, Chunhee; Cook, Benjamin; Wang, Yang; Tentzeris, Manos M.; Leon, Roberto T.  
Nondestructive Characterization for Composite Materials, Aerospace Engineering, Civil Infrastructure, and Homeland Security 2013. Vol. 8694 2013. 86941J.  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**Chip-to-package wireless power transfer and its application to mm-Wave antennas and monolithic radiometric receivers.** / Aluigi, Luca; Thai, Trang T.; Tentzeris, Manos M.; Roselli, Luca; Alimenti, Federico.  
RSW 2013 - 2013 IEEE Radio and Wireless Symposium - RWW 2013. 2013. p. 202-204 6486688.  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**Virtualizing power cords by wireless power transmission and energy harvesting.** / Kawahara, Yoshihiro; Wei, Wei; Narusue, Yoshiaki; Shigeta, Ryo; Asami, Tohru; Tentzeris, Manos.  
RSW 2013 - 2013 IEEE Radio and Wireless Symposium - RWW 2013. 2013. p. 37-39 6486633.  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**Wireless chipless passive electromagnetic transducers for SHM applications.** / Pons, P.; Aubert, H.; Tentzeris, M.  
Structural Health Monitoring 2013: A Roadmap to Intelligent Structures - Proceedings of the 9th International Workshop on Structural Health Monitoring, IWSHM 2013. Vol. 1 DEStech Publications, 2013. p. 577-584.  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**Multi-physics modeling and simulation of a slotted patch antenna for wireless strain sensing.** / Yi, X.; Wang, Y.; Tentzeris, M. M.; Leon, R. T.  
Structural Health Monitoring 2013: A Roadmap to Intelligent Structures - Proceedings of the 9th International Workshop on Structural Health Monitoring, IWSHM 2013. Vol. 2 DEStech Publications, 2013. p. 1857-1864.  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**Service-oriented approach to improve interoperability of e-learning systems.** / Karavirta, Ville; Ithantola, Petri; Koskinen, Teemu.



Proceedings - 2013 IEEE 13th International Conference on Advanced Learning Technologies, ICALT 2013. 2013. p. 341-345 6601947.

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

**How do students solve parsons programming problems? - Execution-based vs. line-based feedback.** / Helminen, Juha; Ihantola, Petri; Karavirta, Ville; Alaoutinen, Satu.

Proceedings - 2013 Learning and Teaching in Computing and Engineering, LaTiCE 2013. 2013. p. 55-61 6542239.

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

**A novel framework for design and implementation of adaptive stream mining systems.** / Sudusinghe, Kishan; Won, Stephen; Van Der Schaar, Mihaela; Bhattacharyya, Shuvra.

2013 IEEE International Conference on Multimedia and Expo, ICME 2013. 2013. 6607565.

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

**Face typing : Vision-based perceptual interface for hands-free text entry with a scrollable virtual keyboard.** / Gizatdinova, Yulia; Spakov, Öleg; Surakka, Veikko.

2012 IEEE Workshop on the Applications of Computer Vision, WACV 2012. 2012. p. 81-87 6162997.

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

**A system for real-time detection and tracking of vehicles from a single car-mounted camera.** / Caraffi, Claudio; Vojir, Tomáš; Trefný, Jiří; Šochman, Jan; Matas, Jiří.

2012 15th International IEEE Conference on Intelligent Transportation Systems, ITSC 2012. 2012. p. 975-982 6338748.

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

**Wear and corrosion behaviour of HVOF coatings engineered from conventional WC-Co-Cr and conventional WC-Co-Cr added nanostructured Wc-Co powders.** / Hulka, Iosif; Şerban, Viorel Aurel; Uţu, Dragoş; Koivuluoto, Heli; Vuoristo, Petri; Niemi, Kari.

NANOCON 2012 - Conference Proceedings, 4th International Conference. TANGER Ltd., 2012. p. 322-327.

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

**Wireless sensing and identification of passive electromagnetic sensors based on millimetre-wave FMCW RADAR.** /

Aubert, H.; Chebila, F.; Jatlaoui, M.; Thai, T.; Hallil, H.; Traille, A.; Bouaziz, S.; Rifai, A.; Pons, P.; Menini, P.; Tentzeris, M.

2012 IEEE International Conference on RFID-Technologies and Applications, RFID-TA 2012. 2012. p. 398-403 6404554.

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

**Thermal effects on a passive wireless antenna sensor for strain and crack sensing.** / Yi, Xiaohua; Vyas, Rushi; Cho, Chunhee; Fang, Chia Hung; Cooper, James; Wang, Yang; Leon, Roberto T.; Tentzeris, Manos M.

Sensors and Smart Structures Technologies for Civil, Mechanical, and Aerospace Systems 2012. Vol. 8345 2012.

83450F.

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

**Systematic integration of flowgraph- and module-level parallelism in implementation of DSP applications on multiprocessor systems-on-chip.** / Zhou, Zheng; Shen, Chung Ching; Plishker, William; Wu, Hsiang Huang; Bhattacharyya, Shuvra S.

ICSP 2012 - 2012 11th International Conference on Signal Processing, Proceedings. Vol. 1 2012. p. 402-408 6491686.

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

**Multiobjective TDMA optimization for neuron-based molecular communication.** / Suzuki, Junichi; Balasubramaniam, Sasitharan; Prina-Mello, Adriele.

BODYNETS 2012 - 7th International Conference on Body Area Networks. ICST, 2012.

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

**Distributed pervasive services using group service communication supporting body area networks.** / Foley, Christopher; Balasubramaniam, Sasitharan; Botvich, Dmitri; Donnelly, William; Michaelis, Stefan; Schmutzler, Jens; Stair, Thomas.

BODYNETS 2008 - 3rd International ICST Conference on Body Area Networks. ICST, 2011.

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

**Visually lossless compression of synthetic aperture radar images.** / Ponomarenko, N. N.; Lukin, V. V.; Egiazarian, K. O.  
8th International Conference on Antenna Theory and Techniques, ICATT'11. 2011. p. 263-265 6170755.  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**Performance evaluation of distributed NoTA applications on multi-core platforms.** / Khan, Suabyal; Saastamoinen, Jukka; Huusko, Jyrki; Nurmi, Jari.  
Proceedings - 2011 IEEE 2nd International Conference on Networked Embedded Systems for Enterprise Applications, NESEA 2011. 2011. 6144931.  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**Influence factors for sharing open science and open educational resources through social networking services.** / Kalb, Hendrik; Pirkkalainen, Henri; Pawlowski, Jan; Schoop, Eric.  
6th Conference on Professional Knowledge Management: From Knowledge to Action - Proceedings. Vol. P-182  
Gesellschaft fur Informatik (GI), 2011. p. 23-32.  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**SkyMedia - UAV-based capturing of HD/3D content with WSN augmentation for immersive media experiences.** / Neri, M.; Campi, A.; Suffritti, R.; Grimaccia, F.; Sinogas, P.; Guye, O.; Papin, C.; Michalareas, T.; Gazdag, L.; Rakkolainen, I.  
Electronic Proceedings of the 2011 IEEE International Conference on Multimedia and Expo, ICME 2011. 2011. 6012133.  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**PETMEI 2011 : The 1st international workshop on pervasive eye tracking and mobile eye-based interaction.** / Bulling, Andreas; Duchowski, Andrew T.; Majaranta, Päivi.  
UbiComp'11 - Proceedings of the 2011 ACM Conference on Ubiquitous Computing. 2011. p. 627-628.  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**Database-driven tool support for DisCo executable specifications.** / Nummenmaa, Jyrki; Nummenmaa, Timo.  
SPLST'11 - Proceedings 12th Symposium on Programming Languages and Software Tools. 2011. p. 44-54.  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**Multicolor nonlinear pulse compression by consecutive optical parametric amplification in quasi-phase matched structures.**  
/ Sapaev, U. K.; Yusupov, D. B.; Assanto, G.  
ICONO 2010: International Conference on Coherent and Nonlinear Optics. Vol. 7993 2011. 79930Q.  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**Thickness variation study of RFID-based folded patch antennas for strain sensing.** / Yi, Xiaohua; Wu, Terence; Lantz, Gabriel; Wang, Yang; Leon, Roberto T.; Tentzeris, Manos M.  
Sensors and Smart Structures Technologies for Civil, Mechanical, and Aerospace Systems 2011. Vol. 7981 2011. 79811H.  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**A design tool for efficient mapping of multimedia applications onto heterogeneous platforms.** / Shen, Chung Ching; Wu, Hsiang Huang; Sane, Nimish; Plishker, William; Bhattacharyya, Shuvra S.  
Electronic Proceedings of the 2011 IEEE International Conference on Multimedia and Expo, ICME 2011. 2011. 6011952.  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**On delay distribution in IEEE 802.11 wireless networks.** / Ivanov, Stepan; Botvich, Dmitri; Balasubramaniam, Sasitharan.  
16th IEEE Symposium on Computers and Communications, ISCC'11. 2011. p. 254-256 5983849.  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**Bio-inspired service management framework : Green data-centres case study.** / Carroll, Raymond; Balasubramaniam, Sasitharan; Botvich, Dmitri; Donnelly, William.  
Proceedings - 25th IEEE International Conference on Advanced Information Networking and Applications Workshops, WAINA 2011. 2011. p. 226-231 5763678.  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**A probability-based approach to modeling the risk of unauthorized propagation of information in on-line social networks.** / Carminati, Barbara; Ferrari, Elena; Morasca, Sandro; Taibi, Davide.  
CODASPY'11 - Proceedings of the 1st ACM Conference on Data and Application Security and Privacy. 2011. p. 51-61.  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**A framework for building behavioral models for design-stage failure identification using dimensional analysis.** / Coatanéa, Eric; Ritola, Tuomas; Tumer, Irem Y.; Jensen, David.  
Proceedings of the ASME Design Engineering Technical Conference. Vol. 5 AMER SOC MECHANICAL ENGINEERS, 2010. p. 591-601.  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**Wrench feasible workspace analysis of cable-driven parallel manipulators using LMI approach.** / Loloei, Azadeh Zarif; Mohammadi Aref, Mohammad; Taghirad, Hamid D.  
IEEE/ASME International Conference on Advanced Intelligent Mechatronics, AIM. 2009. p. 1034-1039 5229723.  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**Mobile Journalist Toolkit : A field study on producing news articles with a mobile device.** / Jokela, Tero; Väättäjä, Heli; Koponen, Tiina.  
MindTrek 2009 - 13th International Academic MindTrek Conference: Everyday Life in the Ubiquitous Era. 2009. p. 45-52.  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**The magical world of metamaterials.** / Caglayan, Humeyra; Ozbay, Ekmel.  
Photonic Materials, Devices, and Applications III. Vol. 7366 2009. 73660X (Proceedings of SPIE; Vol. 7366).  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**Towards certifying the testing process of open-source software : New challenges or old methodologies?** / Morasca, Sandro; Taibi, Davide; Tosi, Davide.  
Proceedings of the 2009 ICSE Workshop on Emerging Trends in Free/Libre/Open Source Software Research and Development, FLOSS 2009. 2009. p. 25-30 5071356.  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**Network classes and graph complexity measures.** / Dehmer, Matthias; Borgert, Stephan; Emmert-Streib, Frank.  
Proc. - 2008 1st International Conference on Complexity and Intelligence of the Artificial and Natural Complex Systems. Medical Applications of the Complex Systems. Biomedical Computing, CANS 2008. 2008. p. 77-84 5231507.  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**Towards a channel capacity of communication networks.** / Emmert-Streib, Frank; Dehmer, Matthias.  
Proc. - 2008 1st International Conference on Complexity and Intelligence of the Artificial and Natural Complex Systems. Medical Applications of the Complex Systems. Biomedical Computing, CANS 2008. 2008. p. 94-99 5231493.  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**Measurement theory and dimensional analysis : Methodological impact on the comparison and evaluation process.** / Coatanéa, Eric; Yannou, Bernard; Honkala, Sauli; Lajunen, Antti; Saarelainen, Tanja; Makkonen, Petri.  
19th International Conference on Design Theory and Methodology and 1st International Conference on Micro and Nano Systems, presented at - 2007 ASME International Design Engineering Technical Conferences and Computers and Information in Engineering Conference, IDETC/CIE2007. AMER SOC MECHANICAL ENGINEERS, 2008. p. 173-182.  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**Global information processing in gene networks : Fault tolerance.** / Emmert-Streib, Frank; Dehmer, Matthias.  
Proceedings of the Bio-Inspired Models of Network, Information, and Computing Systems, Bionetics 2007. 2007. p. 326-329 4610138.  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**Labyrinth based left-handed metamaterials and sub-wavelength focusing of electromagnetic waves.** / Ozbay, Ekmel; Bulu, Irfan; Caglayan, Humeyra.  
Photonic Crystal Materials and Devices IV. Vol. 6128 2006. 612813 (Proceedings of SPIE; Vol. 6128).  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**Classification of large graphs by a local tree decomposition.** / Emmert-Streib, Frank; Dehmert, Matthias; Kilian, Jürgen.  
Proceedings of the 2005 International Conference on Data Mining, DMIN'05. 2005. p. 200-207.  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

**Framework for optimization and scheduling of a copper production plant.** / Suominen, Olli; Mörsky, Ville; Ritala, Risto; Vilkkö, Matti.  
26th European Symposium on Computer Aided Process Engineering, 2016. Vol. 38 Elsevier Science B.V., 2016. p. 1243-1248 (Computer Aided Chemical Engineering).  
Research output: Chapter in Book/Report/Conference proceeding › Chapter › Scientific › peer-review

**Two models for hydraulic cylinders in flexible multibody simulations.** / Ylinen, Antti; Mäkinen, Jari; Kouhia, Reijo.  
Computational Methods for Solids and Fluids: Multiscale Analysis, Probability Aspects and Model Reduction. Springer, 2016. p. 463-493 (Computational Methods in Applied Sciences; Vol. 41).  
Research output: Chapter in Book/Report/Conference proceeding › Chapter › Scientific › peer-review

**Towards dependable automation.** / Seppälä, Jari; Salmenperä, Mikko.  
Cyber Security: Analytics, Technology and Automation: Part IV. Springer International Publishing, 2015. p. 229-249 (Intelligent Systems, Control and Automation: Science and Engineering; Vol. 78).  
Research output: Chapter in Book/Report/Conference proceeding › Chapter › Scientific › peer-review

**A survey on control of hydraulic robotic manipulators with projection to future trends.** / Mattila, Jouni; Koivumäki, Janne; Caldwell, Darwin G.; Semini, Claudio.  
In: IEEE - ASME Transactions on Mechatronics, Vol. 22, No. 2, 01.04.2017, p. 669-680.  
Research output: Contribution to journal › Review Article › Scientific › peer-review

**Necessary and sufficient conditions for the existence of solution of generalized fuzzy relation equations  $A \Leftrightarrow X = B$ .** / Turunen, Esko.  
In: Information Sciences, Vol. 536, 01.10.2020, p. 351-357.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Tree species classification using structural features derived from terrestrial laser scanning.** / Terryn, Louise; Calders, Kim; Disney, Mathias; Origo, Niall; Malhi, Yadvinder; Newnham, Glenn; Raumonon, Pasi; Åkerblom, Markku; Verbeeck, Hans.  
In: ISPRS Journal of Photogrammetry and Remote Sensing, Vol. 168, 01.10.2020, p. 170-181.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Soft robotic gripper with compliant cell stacks for industrial part handling.** / Netzev, Metodi; Angleraud, Alexandre; Pieters, Roel.  
In: IEEE Robotics and Automation Letters, Vol. 5, No. 4, 01.10.2020, p. 6821-6828.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Measurements of Mobile Blockchain Execution Impact on Smartphone Battery.** / Bardinova, Yulia; Zhidanov, Konstantin; Bezzateev, Sergey; Komarov, Mikhail; Ometov, Aleksandr.  
In: Data, Vol. 5, No. 3, 66, 30.07.2020.  
Research output: Contribution to journal › Article › Scientific › peer-review

**On the zeros of the partial Hosoya polynomial of graphs.** / Ghorbani, Modjtaba; Dehmer, Matthias; Cao, Shujuan; Feng, Lihua; Tao, Jin; Emmert-Streib, Frank.  
In: Information Sciences, Vol. 524, 01.07.2020, p. 199-215.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Wake-up Radio-Based 5G Mobile Access : Methods, Benefits, and Challenges.** / Rostami, Soheil; Kela, Petteri; Leppänen, Kari; Valkama, Mikko.  
In: IEEE Communications Magazine, Vol. 58, No. 7, 01.07.2020, p. 14-20.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Characterizing Resource Allocation Trade-Offs in 5G NR Serving Multicast and Unicast Traffic.** / Samuylov, Andrey; Moltchanov, Dmitri; Kovalchukov, Roman; Pirmagomedov, Rustam; Gaidamaka, Yuliya; Andreev, Sergey; Koucheryavy, Yevgeni; Samouylov, Konstantin.

In: IEEE Transactions on Wireless Communications, Vol. 19, No. 5, 9003488, 01.05.2020, p. 3421-3434.

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

**TinderMIX : Time-dose integrated modelling of toxicogenomics data.** / Serra, Angela; Fratello, Michele; Del Giudice, Giusy; Saarimäki, Laura Aliisa; Paci, Michelangelo; Federico, Antonio; Greco, Dario.

In: GigaScience, Vol. 9, No. 5, 01.05.2020.

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

**Utilizing Neurons for Digital Logic Circuits : A Molecular Communications Analysis.** / Adonias, Geofly L.; Yastrebova, Anastasia; Barros, Michael Taynnan; Koucheryavy, Yevgeni; Cleary, Frances; Balasubramaniam, Sasitharan.

In: IEEE Transactions on Nanobioscience, Vol. 19, No. 2, 01.04.2020, p. 224-236.

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

**Anthropometric clothing measurements from 3D body scans.** / Yan, Song; Wirta, Johan; Kämäräinen, Joni-Kristian.

In: Machine Vision and Applications, Vol. 31, No. 1-2, 7, 2020.

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

**Data augmentation approaches for improving animal audio classification.** / Nanni, Loris; Maguolo, Gianluca; Paci, Michelangelo.

In: Ecological Informatics, Vol. 57, 101084, 2020.

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

**Correlates of social media fatigue and academic performance decrement : A large cross-sectional study.** / Malik, Aqdas; Dhir, Amandeep; Kaur, Puneet; Johri, Aditya.

In: INFORMATION TECHNOLOGY AND PEOPLE, 2020.

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

**Lage und Zukunft des wissenschaftlichen Nachwuchses : Eine Stellungnahme des Beirats des Wissenschaftlichen Nachwuchses (WiN) der Gesellschaft für Informatik (GI e.V.).** / Lenk, Kerstin; Gleirscher, Mario; Nestler, Simon; Rödiger, Stefan; Petersen, Tom; Loebel, Jens Martin.

In: Informatik-Spektrum, Vol. 43, No. 2, 2020, p. 94-102.

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

**In-flight wind field identification and prediction of parafoil systems.** / Gao, Haitao; Tao, Jin; Dehmer, Matthias; Emmert-Streib, Frank; Sun, Qinglin; Chen, Zengqiang; Xie, Guangming; Zhou, Quan.

In: Applied Sciences (Switzerland), Vol. 10, No. 6, 1958, 2020.

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

**Game-theoretic semantics for  $ATL^+$  with applications to model checking.** / Goranko, Valentin; Kuusisto, Antti; Rönholm, Raine.

In: Information and Computation, 2020.

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

**Modified Wilkinson power divider with harmonics suppression and compact size for GSM applications.** / Moloudian, Gholamhosein; Miri Rostami, Seyyed Reza; Björninen, Toni.

In: International Journal of RF and Microwave Computer-Aided Engineering, 2020.

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

**Who contributes what? Scrutinizing the activity data of 4.2 million Zhihu users via immersion scores.** / Deng, Shengli; Jiang, Yuting; Li, Hongxiu; Liu, Yong.

In: INFORMATION PROCESSING AND MANAGEMENT, Vol. 57, No. 5, 102274, 2020.

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

**Social media overload, exhaustion, and use discontinuance : Examining the effects of information overload, system feature overload, and social overload.** / Fu, Shaoxiong; Li, Hongxiu; Liu, Yong; Pirkkalainen, Henri; Salo, Markus.  
In: INFORMATION PROCESSING AND MANAGEMENT, Vol. 57, No. 6, 102307, 2020.

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

**Microflow-Based Device for In Vitro and Ex Vivo Drug Permeability Studies.** / Hemmilä, Samu; Ruponen, Marika; Toropainen, Elisa; Tengvall-Unadike, Unni; Urtti, Arto; Kallio, Pasi.  
In: SLAS Technology, 2020.

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

**Development of measurement instrument for visual qualities of graphical user interface elements (VISQUAL) : a test in the context of mobile game icons.** / Jylhä, Henrietta; Hamari, Juho.

In: User Modeling and User-Adapted Interaction, 2020.

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

**On the diffuseness of technical debt items and accuracy of remediation time when using SonarQube.** / Baldassarre, Maria Teresa; Lenarduzzi, Valentina; Romano, Simone; Saarimäki, Nytyi.

In: Information and Software Technology, Vol. 128, 106377, 2020.

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

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

In: Engineering Optimization, 2020.

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

**Hysteresis and eddy-current losses in electrical steel utilising edge degradation due to cutting effects.** / Elfgen, Silas; Rasilo, Paavo; Hameyer, Kay.

In: International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2020.

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

**FinnForest dataset : A forest landscape for visual SLAM.** / Ali, Ihtisham; Durmush, Ahmed; Suominen, Olli; Yli-Hietanen, Jari; Peltonen, Sari; Collin, Jussi; Gotchev, Atanas.

In: ROBOTICS AND AUTONOMOUS SYSTEMS, Vol. 132, 103610, 2020.

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

**Probabilistic approach to physical object disentangling.** / Pajarinen, Joni; Arenz, Oleg; Peters, Jan; Neumann, Gerhard.

In: IEEE Robotics and Automation Letters, Vol. 5, No. 4, 2020, p. 5510-5517.

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

**Multi-sensor next-best-view planning as matroid-constrained submodular maximization.** / Lauri, Mikko; Pajarinen, Joni; Peters, Jan; Frintrop, Simone.

In: IEEE Robotics and Automation Letters, Vol. 5, No. 4, 2020, p. 5323-5330.

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

**UAV-Aided Interference Assessment for Private 5G NR Deployments : Challenges and Solutions.** / Urama, Jani; Wiren, Richard; Galinina, Olga; Kauppi, Juhani; Hiltunen, Kimmo; Erkkilä, Juha; Chernogorov, Fedor; Eteläaho, Pentti; Heikkilä, Marjo; Torsner, Johan; Andreev, Sergey; Valkama, Mikko.

In: IEEE Communications Magazine, Vol. 58, No. 8, 2020, p. 89-95.

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

**Empowering Heterogeneous Communication Data Links in General Aviation through mmWave Signals.** / Wang, Wenbo; Talvitie, Jukka; Adamova, Eva Josth; Fath, Thilo; Korenciak, Lubos; Valkama, Mikko; Lohan, Elena Simona.

In: IEEE Wireless Communications, Vol. 26, No. 6, 8926332, 06.12.2019, p. 164-171.

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

**Motivating scholars' responses in academic social networking sites : An empirical study on ResearchGate Q&A behavior.** / Deng, Shengli; Tong, Jingjing; Lin, Yanqing; Li, Hongxiu; Liu, Yong.  
In: INFORMATION PROCESSING AND MANAGEMENT, Vol. 56, No. 6, 102082, 01.11.2019.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Deliberate or Instinctive? Proactive and Reactive Coping for Technostress.** / Pirkkalainen, Henri; Salo, Markus; Tarafdar, Monideepa; Makkonen, Markus.  
In: Journal of Management Information Systems, Vol. 36, No. 4, 02.10.2019, p. 1179-1212.  
Research output: Contribution to journal › Article › Scientific › peer-review

**DevOps in practice : A multiple case study of five companies.** / Lwakatare, Lucy Ellen; Kilamo, Terhi; Karvonen, Teemu; Sauvola, Tanja; Heikkilä, Ville; Itkonen, Juha; Kuvaja, Pasi; Mikkonen, Tommi; Oivo, Markku; Lassenius, Casper.  
In: Information and Software Technology, Vol. 114, 01.10.2019, p. 217-230.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Automatic word count estimation from daylong child-centered recordings in various language environments using language-independent syllabification of speech.** / Räsänen, Okko; Seshadri, Shreyas; Karadayi, Julien; Riebling, Eric; Bunce, John; Cristia, Alejandrina; Metze, Florian; Casillas, Marisa; Rosemberg, Celia; Bergelson, Erika; Soderstrom, Melanie.  
In: Speech Communication, Vol. 113, 01.10.2019, p. 63-80.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Hermitian normalized Laplacian matrix for directed networks.** / Yu, Guihai; Dehmer, Matthias; Emmert-Streib, Frank; Jodlbauer, Herbert.  
In: Information Sciences, Vol. 495, 01.08.2019, p. 175-184.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Internet of Autonomous Vehicles : Architecture, Features, and Socio-Technological Challenges.** / Jameel, Furqan; Chang, Zheng; Huang, Jun; Ristaniemi, Tapani.  
In: IEEE Wireless Communications, Vol. 26, No. 4, 8809655, 01.08.2019, p. 21-29.  
Research output: Contribution to journal › Article › Scientific › peer-review

**High-performance SIMD implementation of the lattice-Boltzmann method on the Xeon Phi processor.** / Robertsén, Fredrik; Mattila, Keijo; Westerholm, Jan.  
In: Concurrency Computation, Vol. 31, No. 13, e5072, 10.07.2019.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Energy Efficiency of Multi-Radio Massive Machine-Type Communication (MR-MMTC) : Applications, Challenges, and Solutions.** / Mikhaylov, Konstantin; Petrov, Vitaly; Gupta, Rohit; Lema, Maria A.; Galinina, Olga; Andreev, Sergey; Koucheryavy, Yevgeni; Valkama, Mikko; Pouttu, Ari; Dohler, Mischa.  
In: IEEE Communications Magazine, Vol. 57, No. 6, 8694791, 01.06.2019, p. 100-106.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Socially inspired relaying and proactive mode selection in mmWave vehicular communications.** / Moltchanov, Dmitri; Kovalchukov, Roman; Gerasimenko, Mikhail; Andreev, Sergey; Koucheryavy, Yevgeni; Gerla, Mario.  
In: IEEE Internet of Things Journal, Vol. 6, No. 3, 01.06.2019, p. 5172-5183.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Future of Ultra-Dense Networks Beyond 5G : Harnessing Heterogeneous Moving Cells.** / Andreev, Sergey; Petrov, Vitaly; Dohler, Mischa; Yanikomeroglu, Halim.  
In: IEEE Communications Magazine, Vol. 57, No. 6, 8722593, 01.06.2019, p. 66-92.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Approximate robust output regulation of boundary control systems.** / Humaloja, Jukka Pekka; Kurula, Mikael; Paunonen, Lassi.

In: IEEE Transactions on Automatic Control, Vol. 64, No. 6, 06.2019, p. 2210-2223.  
Research output: Contribution to journal › Article › Scientific › peer-review

**On Unified Vehicular Communications and Radar Sensing in Millimeter-Wave and Low Terahertz Bands.** / Petrov, Vitaly; Fodor, Gabor; Kokkonen, Joonas; Moltchanov, Dmitri; Lehtomäki, Janne; Andreev, Sergey; Koucheryavy, Yevgeni; Juntti, Markku; Valkama, Mikko.

In: IEEE Wireless Communications, Vol. 26, No. 3, 8722599, 06.2019, p. 146-153.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Dense Moving Fog for Intelligent IoT : Key Challenges and Opportunities.** / Andreev, Sergey; Petrov, Vitaly; Huang, Kaibin; Lema, Maria A.; Dohler, Mischa.

In: IEEE Communications Magazine, Vol. 57, No. 5, 8648449, 01.05.2019, p. 34-41.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Effects of percutaneous transluminal angioplasty of superficial femoral artery on photoplethysmographic pulse transit times.** / Peltokangas, Mikko; Suominen, Velipekka; Vakhitov, Damir; Korhonen, Janne; Verho, Jarmo; Mattila, Ville M.; Ronsi, Pekka; Lekkala, Jukka; Vehkaoja, Antti; Oksala, Niku.

In: IEEE Journal of Biomedical and Health Informatics, Vol. 23, No. 3, 05.2019, p. 1058-1065.  
Research output: Contribution to journal › Article › Scientific › peer-review

**On the complexity of restoring corrupted colorings.** / De Biasi, Marzio; Lauri, Juho.

In: Journal of Combinatorial Optimization, Vol. 37, No. 4, 05.2019, p. 1150-1169.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Energy-efficient and high-precision control of hydraulic robots.** / Koivumäki, Janne; Zhu, Wen Hong; Mattila, Jouni.

In: Control Engineering Practice, Vol. 85, 01.04.2019, p. 176-193.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Employing Knowledge on Causal Relationship to Assist Multidisciplinary Design Optimization.** / Wu, Di; Coatanea, Eric; Wang, G. Gary.

In: Journal of Mechanical Design, Transactions of the ASME, Vol. 141, No. 4, 041402, 04.2019.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Layered approach for improving the quality of free-viewpoint depth-image-based rendering images.** / Smirnov, Sergey; Battisti, Federica; Gotchev, Atanas.

In: Journal of Electronic Imaging, Vol. 28, No. 1, 013049, 27.02.2019.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Iterative unsupervised domain adaptation for generalized cell detection from brightfield z-stacks.** / Liimatainen, Kaisa; Kananen, Lauri; Latonen, Leena; Ruusuvoori, Pekka.

In: BMC Bioinformatics, Vol. 20, No. 1, 80, 15.02.2019.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Challenges and recommended practices for software architecting in global software development.** / Sievi-Korte, Outi; Beecham, Sarah; Richardson, Ita.

In: Information and Software Technology, Vol. 106, 01.02.2019, p. 234-253.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Towards detecting structural branching and cyclicity in graphs : A polynomial-based approach.** / Dehmer, Matthias; Chen, Zengqiang; Emmert-Streib, Frank; Mowshowitz, Abbe; Shi, Yongtang; Tripathi, Shailesh; Zhang, Yusen.

In: Information Sciences, Vol. 471, 01.01.2019, p. 19-28.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Performance evaluation of bandwidth reservation for mmWave 5G NR systems.** / Begishev, V. O.; Sopin, E. S.; Molchanov, D. A.; Samouylov, A. K.; Gaidamaka, Yu V.; Samouylov, K. E.

In: Informatsionno-Upravliaiushchie Sistemy, No. 5, 01.01.2019, p. 51-63.



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

**Uses and Gratifications of Pokémon Go : Why do People Play Mobile Location-Based Augmented Reality Games? /**

Hamari, Juho; Malik, Aqdas; Koski, Johannes; Johri, Aditya.

In: International Journal of Human-Computer Interaction, Vol. 35, No. 9, 2019.

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

**Customized dimensional analysis conceptual modelling framework for design optimization—a case study on the cross-flow micro turbine model. /**

Woldemariam, Endashaw Tesfaye; Coatanéa, Eric; Wang, G. Gary; Lemu, Hirpa G.; Wu, Di.

In: Engineering Optimization, Vol. 51, No. 7, 2019, p. 1168-1184.

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

**Measuring stem diameters with TLS in boreal forests by complementary fitting procedure. /**

Pitkänen, Timo P.; Raunonen, Pasi; Kangas, Annika.

In: ISPRS Journal of Photogrammetry and Remote Sensing, Vol. 147, 2019, p. 294-306.

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

**Modeling mass transfer in fracture flows with the time domain-random walk method. /**

Kuva, J.; Voutilainen, M.; Mattila, K.

In: COMPUTATIONAL GEOSCIENCES, 2019.

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

**Quality and Capacity Analysis of Molecular Communications in Bacterial Synthetic Logic Circuits. /**

Martins, Daniel P.; Barros, Michael Taynnan; Balasubramaniam, Sasitharan.

In: IEEE Transactions on Nanobioscience, 2019.

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

**DNA Molecular Storage System : Transferring Digitally Encoded Information through Bacterial Nanonetworks. /**

Tavella, Federico; Giaretta, Alberto; Dooley-Cullinane, Triona Marie; Conti, Mauro; Coffey, Lee; Balasubramaniam, Sasitharan.

In: IEEE Transactions on Emerging Topics in Computing , 2019.

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

**Positioning and Location-Aware Communications for Modern Railways with 5G New Radio. /**

Talvitie, Jukka; Levanen, Toni; Koivisto, Mike; Ihalainen, Tero; Pajukoski, Kari; Valkama, Mikko.

In: IEEE Communications Magazine, Vol. 57, No. 9, 2019, p. 24-30.

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

**Environmental and social sustainability—emergence of well-being in the built environment, assessment tools and real estate market implications. /**

Danivska, Vitalija; Heywood, Christopher; Christersson, Matti; Zhang, Eva; Nenonen, Suvi.

In: Intelligent Buildings International, 2019.

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

**Characterization of the anisotropic deformation of the right ventricle during open heart surgery. /**

Soltani, A.; Lahti, J.; Järvelä, K.; Laurikka, J.; Kuokkala, V. T.; Hokka, M.

In: COMPUTER METHODS IN BIOMECHANICS AND BIOMEDICAL ENGINEERING, 2019.

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

**Emptiness problems for distributed automata. /**

Kuusisto, Antti; Reiter, Fabian.

In: Information and Computation, 2019.

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

**Experimental analysis on the turning of aluminum alloy 7075 based on Taguchi method and artificial neural network. /**

Joshu, Arjun; Dsouza, Royson; Muthirulan, Veerakumar; Sachidananda, Krishnamurthy H.

In: Journal Europeen des Systemes Automatisés, Vol. 52, No. 5, 2019, p. 429-437.

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

**5G-U: Conceptualizing Integrated Utilization of Licensed and Unlicensed Spectrum for Future IoT.** / Lu, Xi; Petrov, Vitaly; Moltchanov, Dmitri; Andreev, Sergey; Mahmoodi, Toktam; Dohler, Mischa.  
In: IEEE Communications Magazine, Vol. 57, No. 7, 8722595, 2019, p. 92-98.  
Research output: Contribution to journal › Article › Scientific › peer-review

**SCIP : a single-cell image processor toolbox.** / Martins, Leonardo; Neeli-Venkata, Ramakanth; Oliveira, Samuel M.D.; Häkkinen, Antti; Ribeiro, Andre S.; Fonseca, José M.  
In: Bioinformatics, Vol. 34, No. 24, 15.12.2018, p. 4318-4320.  
Research output: Contribution to journal › Article › Scientific › peer-review

**A Portable Microscale Cell Culture System with Indirect Temperature Control.** / Mäki, Antti Juhana; Verho, Jarmo; Kreutzer, Joose; Rynnänen, Tomi; Rajan, Dhanesh; Pekkanen-Mattila, Mari; Ahola, Antti; Hyttinen, Jari; Aalto-Setälä, Katriina; Lekkala, Jukka; Kallio, Pasi.  
In: SLAS Technology, Vol. 23, No. 6, 01.12.2018, p. 566-579.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Organizing for openness : six models for developer involvement in hybrid OSS projects.** / Mäenpää, Hanna; Mäkinen, Simo; Kilamo, Terhi; Mikkonen, Tommi; Männistö, Tomi; Ritala, Paavo.  
In: Journal of Internet Services and Applications, Vol. 9, No. 1, 17, 01.12.2018.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Active scanner control on paper machines.** / Raunio, Jukka-Pekka; Ritala, Risto.  
In: Journal of Process Control, Vol. 72, 01.12.2018, p. 74-90.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Empirical Effects of Dynamic Human-Body Blockage in 60 GHz Communications.** / Slezak, Christopher; Semkin, Vasilii; Andreev, Sergey; Koucheryavy, Yevgeni; Rangan, Sundeeep.  
In: IEEE Communications Magazine, Vol. 56, No. 12, 01.12.2018, p. 60-66.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Benefits of Positioning-Aided Communication Technology in High-Frequency Industrial IoT.** / Lohan, Elena Simona; Koivisto, Mike; Galinina, Olga; Andreev, Sergey; Töllli, Antti; Destino, Giuseppe; Costa, Mário; Leppänen, Kari; Koucheryavy, Yevgeni; Valkama, Mikko.  
In: IEEE Communications Magazine, Vol. 56, No. 12, 8535084, 14.11.2018, p. 142-148.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Chromatographic studies of n-Propyl Propionate : Adsorption equilibrium, modelling and uncertainties determination.** / Nogueira, Idelfonso B.R.; Faria, Rui P.V.; Requião, Reiner; Koivisto, Hannu; Martins, Márcio A.F.; Rodrigues, Alírio E.; Loureiro, José M.; Ribeiro, Ana M.  
In: Computers and Chemical Engineering, Vol. 119, 02.11.2018, p. 371-382.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Computation of Dynamic Polarizabilities and van der Waals Coefficients from Path-Integral Monte Carlo.** / Tiihonen, Juha; Kylänpää, Ilkka; Rantala, Tapio T.  
In: Journal of Chemical Theory and Computation, Vol. 14, 02.10.2018, p. 5750-5763.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Focus model for metric depth estimation in standard plenoptic cameras.** / Pertuz, Said; Pulido-Herrera, Edith; Kämäräinen, Joni-Kristian.  
In: ISPRS Journal of Photogrammetry and Remote Sensing, Vol. 144, 01.10.2018, p. 38-47.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Graph measures with high discrimination power revisited : A random polynomial approach.** / Dehmer, Matthias; Chen, Zengqiang; Emmert-Streib, Frank; Shi, Yongtang; Tripathi, Shailesh.  
In: Information Sciences, Vol. 467, 01.10.2018, p. 407-414.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Breaking the limits in urban video monitoring : Massive crowd sourced surveillance over vehicles.** / Petrov, Vitaly; Andreev, Sergey; Gerla, Mario; Koucheryavy, Yevgeni.

In: IEEE Wireless Communications, Vol. 25, No. 5, 01.10.2018, p. 104-112.

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

**Molecular Communications Pulse-based Jamming Model for Bacterial Biofilm Suppression.** / Martins, Daniel P.; Leetanasaksakul, Kantinan; Barros, Michael Taynnan; Thamchaipenet, Arinthip; Donnelly, William; Balasubramaniam, Sasitharan.

In: IEEE Transactions on Nanobioscience, Vol. 17, No. 4, 10.2018, p. 533-542.

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

**Comparative analysis of tissue reconstruction algorithms for 3D histology.** / Kartasalo, Kimmo; Latonen, Leena; Vihinen, Jorma; Visakorpi, Tapio; Nykter, Matti; Ruusuvuori, Pekka.

In: Bioinformatics, Vol. 34, No. 17, 01.09.2018, p. 3013-3021.

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

**Intellectual capital and bi-tools in private healthcare value creation.** / Ratia, Milla.

In: Electronic Journal of Knowledge Management, Vol. 16, No. 2, 01.09.2018, p. 143-154.

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

**Nocturnal Heart Rate Variability Spectrum Characterization in Preschool Children with Asthmatic Symptoms.** / Milagro, Javier; Gil, Eduardo; Lazaro, Jesus; Seppae, Ville Pekka; Malmberg, Leo Pekka; Pelkonen, Anna Susanna; Kotaniemi-Syrjanen, Anne; Makela, Mika; Viik, Jari; Bailon, Raquel.

In: IEEE Journal of Biomedical and Health Informatics, Vol. 22, No. 5, 09.2018, p. 1332-1340.

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

**High surface quality welding of aluminum using adjustable ring-mode fiber laser.** / Maina, Martin Ruthandi; Okamoto, Yasuhiro; Okada, Akira; Närhi, Matti; Kangastupa, Jarno; Vihinen, Jorma.

In: Journal of Materials Processing Technology, Vol. 258, 01.08.2018, p. 180-188.

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

**Summarization of User-Generated Sports Video by Using Deep Action Recognition Features.** / Tejero-de-Pablos, Antonio; Nakashima, Yuta; Sato, Tomokazu; Yokoya, Naokazu; Linna, Marko; Rahtu, Esa.

In: IEEE Transactions on Multimedia, Vol. 20, No. 8, 08.2018, p. 2000-2011.

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

**Wireless Communications for Optogenetics-Based Brain Stimulation : Present Technology and Future Challenges.** /

Balasubramaniam, Sasitharan; Wirdatmadja, Stefanus A.; Barros, Michael Taynnan; Koucheryavy, Yevgeni; Stachowiak, Michal; Jornet, Josep Miquel.

In: IEEE Communications Magazine, Vol. 56, No. 7, 8419204, 01.07.2018, p. 218-224.

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

**Effect of surfactant type and sonication energy on the electrical conductivity properties of nanocellulose-CNT nanocomposite films.** / Siljander, Sanna; Keinänen, Pasi; Rätty, Anna; Ramakrishnan, Karthik Ram; Tuukkanen, Sampo; Kunnari, Vesa; Harlin, Ali; Vuorinen, Jyrki; Kanerva, Mikko.

In: International Journal of Molecular Sciences, Vol. 19, No. 6, 1819, 20.06.2018.

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

**Last Meter Indoor Terahertz Wireless Access : Performance Insights and Implementation Roadmap.** / Petrov, Vitaly; Kokkonen, Joonas; Moltchanov, Dmitri; Lehtomäki, Janne; Koucheryavy, Yevgeni; Juntti, Markku.

In: IEEE Communications Magazine, Vol. 56, No. 6, 01.06.2018, p. 158-165.

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

**Caching-Aided Collaborative D2D Operation for Predictive Data Dissemination in Industrial IoT.** / Orsino, Antonino; Kovalchukov, Roman; Samuylov, Andrey; Moltchanov, Dmitri; Andreev, Sergey; Koucheryavy, Yevgeni; Valkama, Mikko.

In: IEEE Wireless Communications, Vol. 25, No. 3, 01.06.2018, p. 50-57.  
Research output: Contribution to journal › Article › Scientific › peer-review

**The effect of percutaneous transluminal angioplasty of superficial femoral artery on pulse wave features.** / Peltokangas, Mikko; Suominen, Velipekka; Vakhitov, Damir; Verho, Jarmo; Korhonen, Janne; Leikkala, Jukka; Vehkaoja, Antti; Oksala, Niku.

In: Computers in Biology and Medicine, Vol. 96, 01.05.2018, p. 274-282.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Backshoring of production in the context of a small and open Nordic economy.** / Heikkilä, Jussi; Martinsuo, Miia; Nenonen, Sanna.

In: Journal of Manufacturing Technology Management, Vol. 29, No. 4, 05.2018, p. 658-675.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Wirelessly powered urban crowd sensing over wearables : Trading energy for data.** / Galinina, Olga; Mikhaylov, Konstantin; Huang, Kaibin; Andreev, Sergey; Koucheryavy, Yevgeni.

In: IEEE Wireless Communications, Vol. 25, No. 2, 01.04.2018, p. 140-149.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Generic platform for manufacturing execution system functions in knowledge-driven manufacturing systems.** /

Mohammed, Wael M.; Ramis Ferrer, Borja; Iarovyi, Sergii; Negri, Elisa; Fumagalli, Luca; Lobov, Andrei; Martinez Lastra, Jose L.

In: International Journal of Computer Integrated Manufacturing, 04.03.2018, p. 1-13.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Noise minimized high resolution digital holographic microscopy applied to surface topography.** / Achimova, Elena; Abaskin, Vladimir; Claus, Daniel; Pedrini, Giancarlo; Shevkunov, Igor; Katkovnik, Vladimir.

In: Computer Optics, Vol. 42, No. 2, 01.03.2018, p. 267-272.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Technologies for Efficient Amateur Drone Detection in 5G Millimeter-Wave Cellular Infrastructure.** / Solomitskii, Dmitrii; Gapeyenko, Margarita; Semkin, Vasili; Andreev, Sergey; Koucheryavy, Yevgeni.

In: IEEE Communications Magazine, Vol. 56, No. 1, 01.01.2018, p. 43-50.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Mixed-integer linear programming approach for global discrete sizing optimization of frame structures.** / van Mellaert, R.; Mela, K.; Tiainen, T.; Heinisuo, M.; Lombaert, G.; Schevenels, M.

In: Structural and Multidisciplinary Optimization, Vol. 57, No. 2, 2018, p. 579-593.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Effect of paint baking treatment on the properties of press hardened boron steels.** / Järvinen, Henri; Honkanen, Mari; Järvenpää, Martti; Peura, Pasi.

In: Journal of Materials Processing Technology, Vol. 252, 2018, p. 90-104.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Robust Regulation of Infinite-Dimensional Port-Hamiltonian Systems.** / Humaloja, Jukka-Pekka; Paunonen, Lassi.

In: IEEE Transactions on Automatic Control, Vol. 63, No. 5, 2018.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Reduced Order Internal Models in the Frequency Domain.** / Laakkonen, Petteri; Paunonen, Lassi.

In: IEEE Transactions on Automatic Control, Vol. 63, No. 6, 2018, p. 1806-1812.  
Research output: Contribution to journal › Article › Scientific › peer-review

**A Primal Neural Network for Online Equality-Constrained Quadratic Programming.** / Chen, Ke; Zhang, Zhaoxiang.

In: Cognitive Computation, Vol. 10, No. 2, 2018, p. 381-388.  
Research output: Contribution to journal › Article › Scientific › peer-review

**How to design gamification? A method for engineering gamified software.** / Morschheuser, Benedikt; Hassan, Lobna; Werder, Karl; Hamari, Juho.

In: Information and Software Technology, Vol. 95, 2018, p. 219-237.

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

**Gamification, quantified-self or social networking? Matching users' goals with motivational technology.** / Hamari, Juho; Hassan, Lobna; Dias, Antonio.

In: User Modeling and User-Adapted Interaction, Vol. 28, No. 1, 2018, p. 35–74.

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

**System-level analysis of IEEE 802.11ah technology for unsaturated MTC traffic.** / Ometov, Aleksandr; Daneshfar, Nader; Hazmi, Ali; Andreev, Sergey; Del Carpio, Luis Felipe; Amin, Parth; Torsner, Johan; Koucheryavy, Yevgeni; Valkama, Mikko.

In: International Journal of Sensor Networks, Vol. 26, No. 4, 2018, p. 269-282.

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

**Transmit Power Optimization and Feasibility Analysis of Self-backhauling Full-Duplex Radio Access Systems.** / Korpi, Dani; Riihonen, Taneli; Sabharwal, Ashutosh; Valkama, Mikko.

In: IEEE Transactions on Wireless Communications, Vol. 17, No. 6, 2018, p. 4219-4236.

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

**On the degeneracy of the Randić entropy and related graph measures.** / Dehmer, Matthias; Chen, Zengqiang; Mowshowitz, Abbe; Jodlbauer, Herbert; Emmert-Streib, Frank; Shi, Yongtang; Tripathi, Shailesh; Xia, Chengyi.

In: Information Sciences, 2018.

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

**Multisensor Time–Frequency Signal Processing MATLAB package : An analysis tool for multichannel non-stationary data.** / Boashash, Boualem; Aïssa-El-Bey, Abdeldjalil; Al-Sa'd, Mohammad F.

In: SoftwareX, Vol. 8, 2018, p. 53-58.

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

**Quantitative Graph Theory : A new branch of graph theory and network science.** / Dehmer, Matthias; Emmert-Streib, Frank; Shi, Yongtang.

In: Information Sciences, Vol. 418-419, 01.12.2017, p. 575-580.

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

**How developers perceive smells in source code : A replicated study.** / Taibi, Davide; Janes, Andrea; Lenarduzzi, Valentina.

In: Information and Software Technology, Vol. 92, 01.12.2017, p. 223-235.

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

**Fast Water Simulation Methods for Games.** / Kellomäki, Timo.

In: Computers in Entertainment, Vol. 16, No. 1, 2, 01.12.2017.

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

**DoGlycans-Tools for Preparing Carbohydrate Structures for Atomistic Simulations of Glycoproteins, Glycolipids, and Carbohydrate Polymers for GROMACS.** / Danne, Reinis; Poojari, Chetan; Martinez-Seara, Hector; Rissanen, Sami; Lolicato, Fabio; Róg, Tomasz; Vattulainen, Ilpo.

In: Journal of Chemical Information and Modeling, Vol. 57, No. 10, 23.10.2017, p. 2401-2406.

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

**An ensemble of visual features for Gaussians of local descriptors and non-binary coding for texture descriptors.** / Nanni, Loris; Paci, Michelangelo; Brahmam, Sheryl; Ghidoni, Stefano.

In: Expert Systems with Applications, Vol. 82, 01.10.2017, p. 27-39.

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

**Highly unique network descriptors based on the roots of the permanent polynomial.** / Dehmer, Matthias; Emmert-Streib, Frank; Hu, Bo; Shi, Yongtang; Stefu, Monica; Tripathi, Shailesh.

In: Information Sciences, Vol. 408, 01.10.2017, p. 176-181.

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

**Adaptive and nonlinear control of discharge pressure for variable displacement axial piston pumps.** / Koivumäki, Janne; Mattila, Jouni.

In: Journal of Dynamic Systems, Measurement and Control: Transactions of the ASME, Vol. 139, No. 10, 101008, 01.10.2017.

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

**On the Performance of Visible Light Communication Systems with Non-Orthogonal Multiple Access.** / Marshoud, Hanaa; Sofotasios, Paschalis C.; Muhaidat, Sami; Karagiannidis, George K.; Sharif, Bayan S.

In: IEEE Transactions on Wireless Communications, Vol. 16, No. 10, 01.10.2017, p. 6350-6364.

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

**The Effect of Ultrasonic Dispersion on the Surface Chemistry of Carbon Nanotubes in the Jeffamine D-230 Polyetheramine Medium.** / Shahshahan, Mohsen; Keinänen, Pasi; Vuorinen, Jyrki.

In: IEEE Transactions on Nanotechnology, Vol. 16, No. 5, 01.09.2017, p. 741-744.

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

**Robust Output Regulation for Continuous-Time Periodic Systems.** / Paunonen, Lassi.

In: IEEE Transactions on Automatic Control, Vol. 62, No. 9, 01.09.2017, p. 4363-4375.

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

**Energy Efficiency Maximization of Full-Duplex Two-Way Relay with Non-Ideal Power Amplifiers and Non-Negligible Circuit Power.** / Cui, Qimei; Zhang, Yuhao; Ni, Wei; Valkama, Mikko; Jantti, Riku.

In: IEEE Transactions on Wireless Communications, Vol. 16, No. 9, 01.09.2017, p. 6264-6278.

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

**Indirect NO<sub>x</sub> emission monitoring in natural gas fired boilers.** / Korpela, Timo; Kumpulainen, Pekka; Majanne, Yrjö; Häyrynen, Anna; Lautala, Pentti.

In: Control Engineering Practice, Vol. 65, 01.08.2017, p. 11-25.

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

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

In: BMC Bioinformatics, Vol. 18, No. 1, 325, 04.07.2017.

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

**A Proxy-Based Solution for Asynchronous Telemedical Systems.** / Rauti, Sampsa; Lahtiranta, Janne; Parisod, Heidi; Hyrynsalmi, Sami; Salanterä, Sanna; Aromaa, Minna Elisabeth; Smed, Jouni; Leppänen, Ville.

In: International Journal of E-health and Medical Communication, Vol. 8, No. 3, 5, 01.07.2017, p. 70-83.

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

**The Fisher-Snedecor F Distribution : A Simple and Accurate Composite Fading Model.** / Yoo, Seong Ki; Cotton, Simon L.; Sofotasios, Paschalis C.; Matthaïou, Michail; Valkama, Mikko; Karagiannidis, George K.

In: IEEE Communications Letters, Vol. 21, No. 7, 01.07.2017, p. 1661-1664.

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

**CNN-based edge filtering for object proposals.** / Waris, Muhammad Adeel; Iosifidis, Alexandros; Gabbouj, Moncef.

In: Neurocomputing, Vol. 266, 02.06.2017, p. 631-640.

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

**A Mixed Finite Element Method to Solve the EEG Forward Problem.** / Vorwerk, J.; Engwer, C.; Pursiainen, S.; Wolters, C. H.

In: IEEE Transactions on Medical Imaging, Vol. 36, No. 4, 7731161, 01.04.2017, p. 930-941.

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

**Neighborhood Matching for Image Retrieval.** / González-Díaz, Iván; Birinci, Murat; Díaz-De-María, Fernando; Delp, Edward J.

In: IEEE Transactions on Multimedia, Vol. 19, No. 3, 01.03.2017, p. 544-558.

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

**Interference and SINR in Millimeter Wave and Terahertz Communication Systems With Blocking and Directional Antennas.** / Petrov, Vitaly; Komarov, Mikhail; Moltchanov, Dmitri; Jornet, Josep Miquel; Koucheryavy, Yevgeni.

In: IEEE Transactions on Wireless Communications, Vol. 16, No. 3, 01.03.2017, p. 1791-1808.

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

**Effects of Heterogeneous Mobility on D2D-and Drone-Assisted Mission-Critical MTC in 5G.** / Orsino, Antonino; Ometov, Aleksandr; Fodor, Gabor; Moltchanov, Dmitri; Militano, Leonardo; Andreev, Sergey; Yilmaz, Osman N C; Tirronen, Tuomas; Torsner, Johan; Araniti, Giuseppe; Iera, Antonio; Dohler, Mischa; Koucheryavy, Yevgeni.

In: IEEE Communications Magazine, Vol. 55, No. 2, 01.02.2017, p. 79-87.

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

**Benchmarking DFT methods with small basis sets for the calculation of halogen-bond strengths.** / Siiskonen, Antti; Priimägi, Arri.

In: Journal of Molecular Modeling, Vol. 23, No. 2, 50, 01.02.2017.

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

**GSAR : Bioconductor package for Gene Set analysis in R.** / Rahmatallah, Yasir; Zybailov, Boris; Emmert-Streib, Frank; Glazko, Galina.

In: BMC Bioinformatics, Vol. 18, No. 1, 61, 24.01.2017.

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

**Architectures and codecs for real-time light field streaming.** / Kovács, Péter Tamás; Zare, Alireza; Balogh, Tibor; Bregovic, Robert; Gotchev, Atanas.

In: Journal of Imaging Science and Technology, Vol. 61, No. 1, 010403, 01.01.2017.

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

**Using enterprise architecture artefacts in an organisation.** / Niemi, Eetu; Pekkola, Samuli.

In: Enterprise Information Systems, Vol. 11, No. 3, 2017, p. 313-338.

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

**Urban 3D segmentation and modelling from street view images and LiDAR point clouds.** / Babahajiani, Pouria; Fan, Lixin; Kämäräinen, Joni-Kristian; Gabbouj, Moncef.

In: Machine Vision and Applications, Vol. 28, No. 7, 2017, p. 679-694.

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

**Nanodevice Arrays for Peripheral Nerve Fascicle Activation Using Ultrasound Energy-harvesting.** / Donohoe, Michael; Jennings, Brendan; Jornet, Josep Miquel; Balasubramaniam, Sasitharan.

In: IEEE Transactions on Nanotechnology, Vol. 16, No. 6, 2017, p. 919-930.

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

**Method for Simulating Dose Reduction in Digital Breast Tomosynthesis.** / Borges, Lucas R.; Guerrero, Igor; Bakic, Predrag R.; Foi, Alessandro; Maidment, Andrew D.A.; Vieira, Marcelo A.C.

In: IEEE Transactions on Medical Imaging, Vol. 36, No. 11, 2017, p. 2331-2342.

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

**Time-Dependent Energy and Resource Management in Mobility-Aware D2D-Empowered 5G Systems.** / Orsino, Antonino; Samuylov, Andrey; Moltchanov, Dmitri; Andreev, Sergey; Militano, Leonardo; Araniti, Giuseppe; Koucheryavy, Yevgeni.  
In: IEEE Wireless Communications, Vol. 24, No. 4, 2017, p. 14-22.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Advanced boundary electrode modeling for tES and parallel tES/EEG.** / Pursiainen, S.; Agsten, B.; Wagner, S.; Wolters, C. H.  
In: IEEE Transactions on Neural Systems and Rehabilitation Engineering, Vol. 26, No. 1, 2017, p. 37-44.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Bayes Forest : A data-intensive generator of morphological tree clones.** / Potapov, Ilya; Järvenpää, Marko; Åkerblom, Markku; Raunonen, Pasi; Kaasalainen, Mikko.  
In: GigaScience, Vol. 6, No. 10, gix079, 2017.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Dynamic response to process disturbances—A comparison between TMB/SMB models in transient regime.** / Nogueira, Idelfonso B.R.; Ribeiro, Ana M.; Rodrigues, Alírio E.; Loureiro, José M.  
In: Computers and Chemical Engineering, Vol. 99, 2017, p. 230-244.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Visual decision support for business ecosystem analysis.** / Basole, Rahul C.; Huhtamäki, Jukka; Still, Kaisa; Russell, Martha G.  
In: Expert Systems with Applications, Vol. 65, 15.12.2016, p. 271-282.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Improving the delivery cycle : A multiple-case study of the toolchains in Finnish software intensive enterprises.** / Mäkinen, Simo; Leppänen, Marko; Kilamo, Terhi; Mattila, Anna-Liisa; Laukkanen, Eero; Pagels, Max; Männistö, Tomi.  
In: Information and Software Technology, Vol. 80, 01.12.2016, p. 1339-1351.  
Research output: Contribution to journal › Article › Scientific › peer-review

**SamExploreR : Exploring reproducibility and robustness of RNA-seq results based on SAM files.** / Stupnikov, Alexey; Tripathi, Shailesh; De Matos Simoes, Ricardo; McArt, Darragh; Salto-Tellez, Manuel; Glazko, Galina; Dehmer, Matthias; Emmert-Streib, Frank.  
In: Bioinformatics, Vol. 32, No. 21, 01.11.2016, p. 3345-3347.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Development of an England-wide indoor overheating and air pollution model using artificial neural networks.** / Symonds, Phil; Taylor, Jonathon; Chalabi, Zaid; Mavrogianni, Anna; Davies, Michael; Hamilton, Ian; Vardoulakis, Sotiris; Heaviside, Clare; Macintyre, Helen.  
In: JOURNAL OF BUILDING PERFORMANCE SIMULATION, Vol. 9, No. 6, 01.11.2016, p. 606-619.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Image interpolation based on non-local geometric similarities and directional gradients.** / Zhu, Shuyuan; Zeng, Bing; Zeng, Liaoyuan; Gabbouj, Moncef.  
In: IEEE Transactions on Multimedia, Vol. 18, No. 9, 01.09.2016, p. 1707-1719.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Full-duplex mobile device : Pushing the limits.** / Korpi, Dani; Tamminen, Joose; Turunen, Matias; Huusari, Timo; Choi, Yang Seok; Anttila, Lauri; Talwar, Shilpa; Valkama, Mikko.  
In: IEEE Communications Magazine, Vol. 54, No. 9, 01.09.2016, p. 80-87.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Toward trusted, social-aware D2D connectivity : Bridging across the technology and sociality realms.** / Ometov, Aleksandr; Orsino, Antonino; Militano, Leonardo; Moltchanov, Dmitri; Araniti, Giuseppe; Olshannikova, Ekaterina; Fodor, Gabor; Andreev, Sergey; Olsson, Thomas; Iera, Antonio; Torsner, Johan; Koucheryavy, Yevgeni; Mikkonen, Tommi.



In: IEEE Wireless Communications, Vol. 23, No. 4, 01.08.2016, p. 103-111.

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

**Exploring synergy between communications, caching, and computing in 5G-grade deployments.** / Andreev, Sergey; Galinina, Olga; Pyattaev, Alexander; Hosek, Jiri; Masek, Pavel; Yanikomeroğlu, Halim; Koucheryavy, Yevgeni.

In: IEEE Communications Magazine, Vol. 54, No. 8, 01.08.2016, p. 60-69.

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

**Robust data reconciliation of combustion variables in multi-fuel fired industrial boilers.** / Korpela, Timo; Suominen, Olli; Majanne, Yrjö; Laukkanen, Ville; Lautala, Pentti.

In: Control Engineering Practice, Vol. 55, 21.07.2016, p. 101-115.

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

**Fifty years of graph matching, network alignment and network comparison.** / Emmert-Streib, Frank; Dehmer, Matthias; Shi, Yongtang.

In: Information Sciences, Vol. 346-347, 10.06.2016, p. 180-197.

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

**Visual Voice Activity Detection in the Wild.** / Patrona, Foteini; Iosifidis, Alexandros; Tefas, Anastasios; Nikolaidis, Nikolaos; Pitas, Ioannis.

In: IEEE Transactions on Multimedia, Vol. 18, No. 6, 01.06.2016, p. 967-977.

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

**Linear accelerometers and rate gyros for rotary joint angle estimation of heavy-duty mobile manipulators using forward kinematic modeling.** / Vihonen, Juho; Honkakorpi, Janne; Tuominen, Janne; Mattila, Jouni; Visa, Ari.

In: IEEE - ASME Transactions on Mechatronics, Vol. 21, No. 3, 01.06.2016, p. 1765-1774.

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

**Characterizing rate limiting steps in transcription from RNA production times in live cells.** / Häkkinen, Antti; Ribeiro, Andre S.

In: Bioinformatics, Vol. 32, No. 9, 01.05.2016, p. 1346-1352.

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

**A unifying perspective on proximity-based cellular-assisted mobile social networking.** / Andreev, Sergey; Hosek, Jiri; Olsson, Thomas; Johnsson, Kerstin; Pyattaev, Alexander; Ometov, Aleksandr; Olshannikova, Ekaterina; Gerasimenko, Mikhail; Masek, Pavel; Koucheryavy, Yevgeni; Mikkonen, Tommi.

In: IEEE Communications Magazine, Vol. 54, No. 4, 01.04.2016, p. 108-116.

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

**On feasibility of 5G-grade dedicated RF charging technology for wireless-powered wearables.** / Galinina, Olga; Tabassum, Hina; Mikhaylov, Konstantin; Andreev, Sergey; Hossain, Ekram; Koucheryavy, Yevgeni.

In: IEEE Wireless Communications, Vol. 23, No. 2, 01.04.2016, p. 28-37.

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

**Detection of bubbles as concentric circular arrangements.** / Strokina, Nataliya; Matas, Jiri; Eerola, Tuomas; Lensu, Lasse; Kälviäinen, Heikki.

In: Machine Vision and Applications, Vol. 27, No. 3, 04.2016, p. 387-396.

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

**Digital predistortion for mitigating spurious emissions in spectrally agile radios.** / Abdelaziz, Mahmoud; Fu, Zhu; Anttila, Lauri; Wyglinski, Alexander M.; Valkama, Mikko.

In: IEEE Communications Magazine, Vol. 54, No. 3, 01.03.2016, p. 60-69.

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

**Highly dynamic spectrum management within licensed shared access regulatory framework.** / Ponomarenko-Timofeev, Aleksei; Pyattaev, Alexander; Andreev, Sergey; Koucheryavy, Yevgeni; Mueck, Markus; Karls, Ingolf.

In: IEEE Communications Magazine, Vol. 54, No. 3, 01.03.2016, p. 100-109.  
Research output: Contribution to journal › Article › Scientific › peer-review

**First-principles data set of 45,892 isolated and cation-coordinated conformers of 20 proteinogenic amino acids.** / Ropo, Matti; Schneider, Markus; Baldauf, Carsten; Blum, Volker.

In: Scientific Data, Vol. 3, 160009, 16.02.2016.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Graph Embedded Extreme Learning Machine.** / Iosifidis, Alexandros; Tefas, Anastasios; Pitas, Ioannis.

In: IEEE Transactions on Cybernetics, Vol. 46, No. 1, 2016, p. 311 - 324.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Still image/video frame lossy compression providing a desired visual quality.** / Zemliachenko, Alexander; Lukin, Vladimir; Ponomarenko, Nikolay; Egiazarian, Karen; Astola, Jaakko.

In: Multidimensional Systems and Signal Processing, Vol. 27, No. 3, 2016, p. 697-718.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Digital storytelling promoting twenty-first century skills and student engagement.** / Niemi, Hannele; Multisilta, Jari.

In: Technology, Pedagogy and Education, Vol. 25, No. 4, 2016, p. 451-468.  
Research output: Contribution to journal › Article › Scientific › peer-review

**HTML5-based mobile agents for Web-of-Things.** / Voutilainen, Jari Pekka; Mattila, Anna Liisa; Systä, Kari; Mikkonen, Tommi.

In: Informatica, Vol. 40, No. 1, 2016, p. 43-51.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Brownfield Process : A method for modular product family development aiming for product configuration.** / Pakkanen, Jarkko; Juuti, Tero; Lehtonen, Timo.

In: DESIGN STUDIES, Vol. 45B, 2016, p. 210-241.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Metrics for polyphonic sound event detection.** / Mesaros, Annamaria; Heittola, Toni; Virtanen, Tuomas.

In: Applied Sciences, Vol. 6, No. 6, 162, 2016.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Technoeconomical Analysis of Macrocell and Femtocell Based HetNet under Different Deployment Constraints.** / Yunas, Syed Fahad; Ansari, Waqas H.; Valkama, Mikko.

In: Mobile Information Systems, Vol. 2016, 6927678, 2016.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Energy cooperation for throughput optimization based on save-then-transmit protocol in wireless communication system.** / Dai, Cui-Qin; Li, Fu-Jia; Renfors, Markku.

In: Eurasip Journal on Wireless Communications and Networking, Vol. 2015, No. 1, 119, 26.12.2015.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Polynomial Input-Output Stability for Linear Systems.** / Paunonen, Lassi; Laakkonen, Petteri.

In: IEEE Transactions on Automatic Control, Vol. 60, No. 10, 01.10.2015, p. 2797-2802.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Analytical model for magnetic anisotropy of non-oriented steel sheets.** / Martin, Florian; Singh, Deepak; Belahcen, Anouar; Rasilo, Paavo; Haavisto, Ari; Arkkio, Antero.

In: COMPEL: The International Journal for Computation and Mathematics in Electrical and Electronic Engineering, Vol. 34, No. 5, 07.09.2015, p. 1475-1488.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Estimation of additional losses due to random contacts at the edges of stator of an electrical machine.** / Shah, Sahas Bikram; Rasilo, Paavo; Belahcen, Anouar; Arkkio, Antero.  
In: COMPEL: The International Journal for Computation and Mathematics in Electrical and Electronic Engineering, Vol. 34, No. 5, 07.09.2015, p. 1501-1510.  
Research output: Contribution to journal › Article › Scientific › peer-review

**DropELM : Fast neural network regularization with Dropout and DropConnect.** / Iosifidis, Alexandros; Tefas, Anastasios; Pitas, Ioannis.  
In: Neurocomputing, Vol. 162, 25.08.2015, p. 57-66.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Distance-based human action recognition using optimized class representations.** / Iosifidis, Alexandros; Tefas, Anastasios; Pitas, Ioannis.  
In: Neurocomputing, Vol. 161, 05.08.2015, p. 47-55.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Stability-Guaranteed Force-Sensorless Contact Force/Motion Control of Heavy-Duty Hydraulic Manipulators.** / Koivumäki, Janne; Mattila, Jouni.  
In: IEEE Transactions on Robotics, Vol. 31, No. 4, 01.08.2015, p. 918-935.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Effective variable switching point predictive current control for ac low-voltage drives.** / Stolze, Peter; Karamanakos, Petros; Kennel, Ralph; Manias, Stefanos; Endisch, Christian.  
In: International Journal of Control, Vol. 88, No. 7, 03.07.2015, p. 1366-1378.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Railway fastener inspection by real-time machine vision.** / Aytekin, Caglar; Rezaeitabar, Yousef; Dogru, Sedat; Ulusoy, Ilkay.  
In: IEEE Transactions on Systems, Man, and Cybernetics: Systems, Vol. 45, No. 7, 01.07.2015, p. 1101-1107.  
Research output: Contribution to journal › Article › Scientific › peer-review

**A robust AMMI model for the analysis of genotype-by-environment data.** / Rodrigues, Paulo C.; Monteiro, Andreia; Lourenço, Vanda M.  
In: Bioinformatics, Vol. 32, No. 1, 01.07.2015, p. 58-66.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Planar monopole antennas on substrates fabricated through an additive manufacturing process.** / Saintsing, Christy D.; Yu, Kai; Qi, H. Jerry; Tentzeris, Manos.  
In: IEEE Radio and Wireless Symposium, RWS, Vol. 2015-June, No. June, 7129744, 19.06.2015, p. 159-161.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Long-term epileptic EEG classification via 2D mapping and textural features.** / Samiee, Kaveh; Kiranyaz, Serkan; Gabbouj, Moncef; Saramäki, Tapio.  
In: Expert Systems with Applications, Vol. 42, No. 20, 08.06.2015, p. 7175-7185.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Urothelial cancer gene regulatory networks inferred from large-scale RNAseq, Bead and Oligo gene expression data.** / Matos Simoes, Ricardo de; Dalleau, Sabine; Williamson, Kate E.; Emmert-Streib, Frank.  
In: BMC Systems Biology, Vol. 9, 21, 14.05.2015.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Recent advances in antenna design and interference cancellation algorithms for in-band full duplex relays.** / Heino, Mikko; Korpi, Dani; Huusari, Timo; Antonio-Rodríguez, Emilio; Venkatasubramanian, Sathya; Riihonen, Taneli; Anttila, Lauri; Icheln, Clemens; Haneda, Katsuyuki; Wichman, Risto; Valkama, Mikko.  
In: IEEE Communications Magazine, Vol. 53, No. 5, 01.05.2015, p. 91-101.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Multistep reactions of water with small Pd<sub>n</sub> clusters : A first principles study.** / Liang, Yanhua; Ma, Li; Wang, Jianguang; Wang, Guanghou.

In: Journal of Theoretical and Computational Chemistry, Vol. 14, No. 3, 1550017, 01.05.2015.

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

**The internet of Bio-Nano things.** / Akyildiz, I. F.; Pierobon, M.; Balasubramaniam, S.; Koucheryavy, Y.

In: IEEE Communications Magazine, Vol. 53, No. 3, 01.03.2015, p. 32-40.

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

**Designing controllers with reduced order internal models.** / Paunonen, Lassi.

In: IEEE Transactions on Automatic Control, Vol. 60, No. 3, 6826480, 01.03.2015, p. 775-780.

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

**Task-based information interaction evaluation : The viewpoint of program theory.** / Järvelin, Kalervo; Vakkari, Pertti;

Arvola, Paavo; Baskaya, Feza; Järvelin, Anni; Kekäläinen, Jaana; Keskustalo, Heikki; Kumpulainen, Sanna; Saastamoinen, Miamaria; Savolainen, Reijo; Sormunen, Eero.

In: ACM Transactions on Information Systems, Vol. 33, No. 1, 3, 01.03.2015.

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

**Communication challenges in high-density deployments of wearable wireless devices.** / Pyattaev, Alexander; Johnsson, Kerstin; Andreev, Sergey; Koucheryavy, Yevgeni.

In: IEEE Wireless Communications, Vol. 22, No. 1, 01.02.2015, p. 12-18.

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

**Fault tolerant control architecture design for mobile manipulation in scientific facilities.** / M. Aref, Mohammad; Oftadeh, Reza; Ghabcheloo, Reza; Mattila, Jouni.

In: international Journal of Advanced Robotic Systems, Vol. 12, No. 4, 29.01.2015.

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

**Estimation of GFP-tagged RNA numbers from temporal fluorescence intensity data.** / Häkkinen, Antti; Ribeiro, Andre S.

In: Bioinformatics, Vol. 31, No. 1, 01.01.2015, p. 69-75.

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

**Spectral and energy efficiency of ultra-dense networks under different deployment strategies.** / Yunas, Syed; Valkama, Mikko; Niemelä, Jarno.

In: IEEE Communications Magazine, Vol. 53, No. 1, 01.01.2015, p. 90-100.

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

**The assessment of constructability : BIM cases.** / Tauriainen, Matti K.; Puttonen, Jari A.; Saari, Arto J.

In: Journal of Information Technology in Construction, Vol. 20, 01.01.2015, p. 51-67.

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

**Distant speech separation using predicted time-frequency masks from spatial features.** / Pertilä, Pasi; Nikunen, Joonas.

In: Speech Communication, Vol. 68, 2015, p. 97-106.

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

**Extreme learning machine based supervised subspace learning.** / Iosifidis, Alexandros.

In: Neurocomputing, Vol. 167, 2015, p. 158-164.

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

**Busting myths of electronic word of mouth : The relationship between customer ratings and the sales of mobile applications.** / Hyrynsalmi, Sami; Seppänen, Marko; Aarikka-Stenroos, Leena; Suominen, Arho; Järveläinen, Jonna; Harkke, Ville.

In: Journal of Theoretical and Applied Electronic Commerce Research, Vol. 10, No. 2, 2015, p. 1-18.

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

**Smart home gateway system over Bluetooth low energy with wireless energy transfer capability.** / Galinina, Olga; Mikhaylov, Konstantin; Andreev, Sergey; Turlikov, Andrey; Koucheryavy, Yevgeni.  
In: Eurasip Journal on Wireless Communications and Networking, Vol. 2015, No. 1, 178, 2015.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Uncertainty propagation of iron loss from characterization measurements to computation of electrical machines.** / Belahcen, Anouar; Rasilo, Paavo; Nguyen, Thu Trang; Clénet, Stéphane.  
In: COMPEL: The International Journal for Computation and Mathematics in Electrical and Electronic Engineering, Vol. 34, No. 3, 2015, p. 624-636.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Organisational knowledge flows and structural change the case of dispersed education organizations.** / Laihonon, Harri; Syysnummi, Pirjo.  
In: International Journal of Knowledge Management Studies, Vol. 6, No. 3, 2015, p. 247-260.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Class-Specific Reference Discriminant Analysis With Application in Human Behavior Analysis.** / Iosifidis, Alexandros; Tefas, Anastasios; Pitas, Ioannis.  
In: IEEE Transactions on Human-Machine Systems, Vol. 45, No. 3, 25.12.2014, p. 315-326.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Regularized extreme learning machine for multi-view semi-supervised action recognition.** / Iosifidis, Alexandros; Tefas, Anastasios; Pitas, Ioannis.  
In: Neurocomputing, Vol. 145, 05.12.2014, p. 250-262.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Comparative evaluation of gene set analysis approaches for RNA-Seq data.** / Rahmatallah, Yasir; Emmert-Streib, Frank; Glazko, Galina.  
In: BMC Bioinformatics, Vol. 15, No. 1, 397, 05.12.2014.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Understanding social OER environments-A quantitative study on factors influencing the motivation to share and collaborate.** / Pirkkalainen, Henri; Jokinen, Jussi P P; Pawlowski, Jan M.  
In: IEEE Transactions on Learning Technologies, Vol. 7, No. 4, 6823168, 01.10.2014, p. 388-400.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Density functional theory study of transition metals doped B<sub>80</sub> fullerene.** / Wang, Jianguang; Ma, Li; Liang, Yanhua; Gao, Meiling; Wang, Guanghou.  
In: Journal of Theoretical and Computational Chemistry, Vol. 13, No. 6, 1450050, 22.09.2014.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Analysis of a city-region from the knowledge perspective : Tampere, Finland.** / Yigitcanlar, Tan; Lönnqvist, Antti; Salonius, Henna.  
In: VINE, Vol. 44, No. 3, 05.08.2014, p. 445-466.  
Research output: Contribution to journal › Article › Scientific › peer-review

**An enumeration-based model predictive control strategy for the cascaded H-bridge multilevel rectifier.** / Karamanakos, Petros; Pavlou, Konstantinos; Manias, Stefanos.  
In: IEEE Transactions on Industrial Electronics, Vol. 61, No. 7, 07.2014, p. 3480-3489.  
Research output: Contribution to journal › Article › Scientific › peer-review

**NetBioV : An R package for visualizing large network data in biology and medicine.** / Tripathi, Shailesh; Dehmer, Matthias; Emmert-Streib, Frank.  
In: Bioinformatics, Vol. 30, No. 19, 02.04.2014, p. 2834-2836.  
Research output: Contribution to journal › Article › Scientific › peer-review

**The emerging application ecosystems : An introductory analysis of android ecosystem.** / Hyrynsalmi, Sami; Suominen, Arho; Mäkilä, Tuomas; Knuutila, Timo.  
In: INTERNATIONAL JOURNAL OF E-BUSINESS RESEARCH, Vol. 10, No. 2, 01.04.2014, p. 61-81.  
Research output: Contribution to journal › Article › Scientific › peer-review

**System integration for real-time mobile manipulation.** / Oftadeh, Reza; Aref, Mohammad M.; Ghabcheloo, Reza; Mattila, Jouni.  
In: international Journal of Advanced Robotic Systems, Vol. 11, No. 1, 51, 28.03.2014.  
Research output: Contribution to journal › Article › Scientific › peer-review

**A computational approach to construct a multivariate complete graph invariant.** / Dehmer, Matthias; Emmert-Streib, Frank; Grabner, Martin.  
In: Information Sciences, Vol. 260, 01.03.2014, p. 200-208.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Gene Sets Net Correlations Analysis (GSNCA) : A multivariate differential coexpression test for gene sets.** / Rahmatallah, Yasir; Emmert-Streib, Frank; Glazko, Galina.  
In: Bioinformatics, Vol. 30, No. 3, 01.02.2014, p. 360-368.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Functional and genetic analysis of the colon cancer network.** / Emmert-Streib, Frank; de Matos Simoes, Ricardo; Glazko, Galina; McDade, Simon; Haibe-Kains, Benjamin; Holzinger, Andreas; Dehmer, Matthias; Campbell, Frederick.  
In: BMC Bioinformatics, Vol. 15, No. Suppl 6, S6, 2014.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Maturity assessment for implementing and using product lifecycle management in project-oriented engineering companies.** / Kärkkäinen, Hannu; Myllärniemi, Jussi; Okkonen, Jussi; Silventoinen, Anneli.  
In: International Journal of Electronic Business, Vol. 11, No. 2, 2014, p. 176-198.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Transparency of intentions decreases privacy concerns in ubiquitous surveillance.** / Oulasvirta, Antti; Suomalainen, Tiia; Hamari, Juho; Lampinen, Airi; Karvonen, Kristiina.  
In: CYBERPSYCHOLOGY BEHAVIOR AND SOCIAL NETWORKING, Vol. 17, No. 10, 2014.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Learning sparse representations for view-independent human action recognition based on fuzzy distances.** / Iosifidis, Alexandros; Tefas, Anastasios; Pitas, Ioannis.  
In: Neurocomputing, Vol. 121, 09.12.2013, p. 344-353.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Netmes : Assessing gene network inference algorithms by network-based measures.** / Altay, Gökmen; Kurt, Zeyneb; Dehmer, Matthias; Emmert-Streib, Frank.  
In: Evolutionary Bioinformatics, Vol. 10, 07.12.2013.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Social Network Games : Players' Perspectives.** / Paavilainen, Janne; Hamari, Juho; Stenros, Jaakko; Kinnunen, Jani.  
In: SIMULATION AND GAMING, Vol. 44, No. 6, 12.2013, p. 794-820.  
Research output: Contribution to journal › Article › Scientific › peer-review

**[COMMODE] a large-scale database of molecular descriptors using compounds from PubChem.** / Dander, Andreas; Mueller, Laurin A J; Gallasch, Ralf; Pabinger, Stephan; Emmert-Streib, Frank; Graber, Armin; Dehmer, Matthias.  
In: Source Code for Biology and Medicine, Vol. 8, 22, 13.11.2013.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Importance of the ion-pair interactions in the OPEP coarse-grained force field : Parametrization and validation.** / Sterpone, Fabio; Nguyen, Phuong H.; Kalimeri, Maria; Derreumaux, Philippe.  
In: Journal of Chemical Theory and Computation, Vol. 9, No. 10, 08.10.2013, p. 4574-4584.  
Research output: Contribution to journal > Article > Scientific > peer-review

**Comparison of Saltation, Amplitude Modulation, and a Hybrid Method of Vibrotactile Stimulation.** / Raisamo, Jukka; Raisamo, Roope; Surakka, V.  
In: IEEE Transactions on Haptics, Vol. 6, No. 4, 6517847, 10.2013, p. 517-521.  
Research output: Contribution to journal > Article > Scientific > peer-review

**Transfer learning using a nonparametric sparse topic model.** / Faisal, Ali; Gillberg, Jussi; Leen, Gayle; Peltonen, Jaakko.  
In: Neurocomputing, Vol. 112, 18.07.2013, p. 124-137.  
Research output: Contribution to journal > Article > Scientific > peer-review

**Transforming homo economicus into homo ludens : A field experiment on gamification in a utilitarian peer-to-peer trading service.** / Hamari, Juho.  
In: Electronic Commerce Research and Applications, Vol. 12, No. 4, 07.2013, p. 236-245.  
Research output: Contribution to journal > Article > Scientific > peer-review

**Indirect measurement of the vascular endothelial glycocalyx layer thickness in human submucosal capillaries with a plugin for ImageJ.** / Liuhanen, Sasu; Sallialmi, Marko; Pettilä, Ville; Oksala, Niku; Tenhunen, Jyrki.  
In: Computer Methods and Programs in Biomedicine, Vol. 110, No. 1, 04.2013, p. 38-47.  
Research output: Contribution to journal > Article > Scientific > peer-review

**Using building simulation to model the drying of flooded building archetypes.** / Taylor, Jonathon; Biddulph, Phillip; Davies, Michael; Ridley, Ian; Mavrogianni, Anna; Oikonomou, Eleni; Lai, Ka Man.  
In: JOURNAL OF BUILDING PERFORMANCE SIMULATION, Vol. 6, No. 2, 01.03.2013, p. 119-140.  
Research output: Contribution to journal > Article > Scientific > peer-review

**Magnetomechanical coupled FE simulations of rotating electrical machines.** / Belahcen, Anouar; Fonteyn, Katarzyna; Kouhia, Reijo; Rasilo, Paavo; Arkkio, Antero.  
In: COMPEL: The International Journal for Computation and Mathematics in Electrical and Electronic Engineering, Vol. 32, No. 5, 17095978, 2013, p. 1484-1499.  
Research output: Contribution to journal > Article > Scientific > peer-review

**Multidimensional sequence classification based on fuzzy distances and discriminant analysis.** / Iosifidis, Alexandros; Tefas, Anastasios; Pitas, Ioannis.  
In: IEEE Transactions on Knowledge and Data Engineering, Vol. 25, No. 11, 2013, p. 2564-2575.  
Research output: Contribution to journal > Article > Scientific > peer-review

**On the optimal class representation in linear discriminant analysis.** / Iosifidis, Alexandros; Tefas, Anastasios; Pitas, Ioannis.  
In: IEEE Transactions on Neural Networks and Learning Systems, Vol. 24, No. 9, 2013, p. 1491-1497.  
Research output: Contribution to journal > Article > Scientific > peer-review

**Preparation of water-based carbon nanotube inks and application in the inkjet printing of carbon nanotube gas sensors.** / Lin, Ziyin; Le, Taoran; Song, Xiaojuan; Yao, Yagang; Li, Zhuo; Moon, Kyoung Sik; Tentzeris, Manos M.; Wong, Ching Ping.  
In: Journal of Electronic Packaging, Vol. 135, No. 1, 011001, 2013.  
Research output: Contribution to journal > Article > Scientific > peer-review

**Inkjet printing of radio frequency electronics : Design methodologies and application of novel nanotechnologies.** / Le, Taoran; Lin, Ziyin; Vyas, Rushi; Lakafosis, Vasileios; Yang, Li; Traille, Anya; Tentzeris, Manos M.; Wong, Ching Ping.  
In: Journal of Electronic Packaging, Vol. 135, No. 1, 011007, 2013.  
Research output: Contribution to journal > Article > Scientific > peer-review

**Bio-inspired service management framework : Green data-centres case study.** / Carroll, Raymond; Balasubramaniam, Sasitharan; Suzuki, Junichi; Lee, Chonho; Donnelly, William; Botvich, Dmitri.  
In: International Journal of Grid and Utility Computing, Vol. 4, No. 4, 2013, p. 278-292.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Gene set analysis for self-contained tests : Complex null and specific alternative hypotheses.** / Rahmatallah, Y.; Emmert-Streib, F.; Glazko, G.  
In: Bioinformatics, Vol. 28, No. 23, 12.2012, p. 3073-3080.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Implementation of a direct procedure for critical point computations using preconditioned iterative solvers.** / Kouhia, Reijo; Tůma, Miroslav; Mäkinen, Jari; Fedoroff, Alexis; Marjamäki, Heikki.  
In: Computers & Structures, Vol. 108-109, 10.2012, p. 110-117.  
Research output: Contribution to journal › Article › Scientific › peer-review