

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

Pohjola, J., Turunen, J. & Lipping, T., 3 Sep 2017, p. 439-440. 2 p.

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

Marcían, P., Narra, N., Borák, L., Chamrad, J. & Wolff, J., 1 Jun 2019, In : Computers in Biology and Medicine. 109, p. 43-52 10 p.

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

Conformal mapping of the human scapula to generate dense landmark features

Narra, N., Fouefack, J. R., Douglas, T. & Mutsvangwa, T., 23 May 2018, *2018 3rd Biennial South African Biomedical Engineering Conference, SAIBMEC 2018*. Institute of Electrical and Electronics Engineers Inc., p. 1-4 4 p. (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, J., Altamirano-Medina, H., Shrubsole, C., Das, P., Biddulph, P., Davies, M., Mavrogianni, A. & Oikonomou, E., 1 Jan 2014, p. 60-67. 8 p.

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

Using probabilistic sampling-based sensitivity analyses for indoor air quality modelling

Das, P., Chalabi, Z., Davies, M., Hamilton, I., Jones, B., Mavrogianni, A., Shrubsole, C. & Taylor, J., 1 Jan 2014, p. 553-555. 3 p.

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

Statistical short-term network planning of distribution system and distributed generation

Repo, S., Laaksonen, H. & Järventausta, P., 1 Jan 2005.

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., 1 Jan 1999, *SMCia 1999 - Proceedings of the 1999 IEEE Midnight-Sun Workshop on Soft Computing Methods in Industrial Applications*. Martikainen, J. (ed.). IEEE, p. 97-102 6 p. (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, I., Suntio, T., Zenger, K. & Vallittu, P., 1 Jan 1999, *SMCia 1999 - Proceedings of the 1999 IEEE Midnight-Sun Workshop on Soft Computing Methods in Industrial Applications*. Martikainen, J. (ed.). Institute of Electrical and Electronics Engineers Inc., p. 80-85 6 p. 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, S., Dobre, C. & Misra, P., 2020, In : IEEE Communications Magazine. 58, 2, p. 34-34 1 p.

Research output: Contribution to journal › Editorial › Scientific

The Internet of Things and Sensor Networks

Andreev, S. & Dobre, C., 1 Sep 2019, In : IEEE Communications Magazine. 57, 9, p. 70-70 1 p.

Research output: Contribution to journal › Editorial › Scientific

Guest Editorial Special Issue on Multimedia Big Data in Internet of Things

Ma, H., Yu, S., Gabbouj, M. & Mueller, P., Oct 2018, In : IEEE Internet of Things Journal. 5, 5, p. 3405-3407 3 p., 8534720.

Research output: Contribution to journal › Editorial › Scientific

Preface: Special Issue on 'New Hydraulic Components for Tough Robots'

Suzumori, K., Hyon, S. H., Semini, C., Mattila, J. & Kanda, T., 3 May 2018, In : *Advanced Robotics*. 32, 9, 1 p.
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., 1 Apr 2017, In : *IEEE - ASME Transactions on Mechatronics*. 22, 2, p. 585-588 4 p.

Research output: Contribution to journal › Editorial › Scientific

Guest editorial special issue on the internet of nano things

Balasubramaniam, S., Jornet, J. M., Pierobon, M. & Koucheryavy, Y., 1 Feb 2016, In : *IEEE Internet of Things Journal*. 3, 1, p. 1-3 3 p.

Research output: Contribution to journal › Article › Scientific

Flow-bounded trajectory-scaling algorithm for hydraulic robotic manipulators

Lampinen, S., Niemi, J. & Mattila, J., 1 Jul 2020, *2020 IEEE/ASME International Conference on Advanced Intelligent Mechatronics, AIM 2020*. IEEE, p. 619-624 6 p. (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, J. & Taibi, D., 1 Mar 2020, *2020 IEEE International Conference on Software Architecture Companion, ICSCA-C 2020*. IEEE, p. 49-50 2 p.

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

ICface: Interpretable and controllable face reenactment using GANs

Tripathy, S., Kannala, J. & Rahtu, E., 1 Mar 2020, *2020 IEEE Winter Conference on Applications of Computer Vision, WACV 2020*. IEEE, p. 3374-3383 10 p. (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, M. S., Sokolenko, B., Gorodetsky, A. & Petrov, N. V., 2020, *Broadband Access Communication Technologies XIV*. Dingel, B. B., Tsukamoto, K. & Mikroulis, S. (eds.). SPIE, 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, H. M., Kahle, H., Penttinen, J.-P., Rajala, P., Ranta, S. & Guina, M., 2020, *Vertical External Cavity Surface Emitting Lasers (VECSELs)*. X. Hastie, J. E. (ed.). SPIE, 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, M. S., Katkovnik, V., Egjazarian, K. & Petrov, N. V., 2020, *Terahertz, RF, Millimeter, and Submillimeter-Wave Technology and Applications XIII*. Sadwick, L. P. & Yang, T. (eds.). SPIE, 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:CNGG laser at 2061 nm

Wang, Y., Zhao, Y., Pan, Z., Suomalainen, S., Härkönen, A., Guina, M., Griebner, U., Wang, L., Loiko, P., Mateos, X., Chen, W. & Petrov, V., 2020, *Solid State Lasers XXIX: Technology and Devices*. Clarkson, W. A. & Shori, R. K. (eds.). SPIE, 1125929. (Proceedings of SPIE - The International Society for Optical Engineering; vol. 11259).

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

Continuous-wave optical parametric oscillators for mid-infrared spectroscopy

Vainio, M., 2020, *Nonlinear Frequency Generation and Conversion: Materials and Devices XIX*. Schunemann, P. G. & Schepler, K. L. (eds.). SPIE, 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., 2020, *Advanced Optical Techniques for Quantum Information, Sensing, and Metrology*. Hemmer, P. R., Migdall, A. L. & Hasan, Z. U. (eds.). SPIE, 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, D., El Ioini, N., Pahl, C. & Niederkofler, J. R. S., 2020, *CLOSER 2020 - Proceedings of the 10th International Conference on Cloud Computing and Services Science*. Ferguson, D., Helfert, M. & Pahl, C. (eds.). SCITEPRESS, Vol. 1. p. 181-192 12 p.

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, P., Mustalahti, P., Launis, S. & Mattila, J., 2020, *2020 IEEE/ASME International Conference on Advanced Intelligent Mechatronics, AIM 2020*. IEEE, p. 1387-1393 7 p. (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, M., Perttu, L., Alanen, M., Luscietti, D. & Pilotelli, M., 2020, *Building Simulation Applications, BSA 2019 - 4th IBPSA-Italy Conference*. Pernigotto, G., Patuzzi, F., Prada, A., Corrado, V. & Gasparella, A. (eds.). Free University of Bozen Bolzano, p. 123-130 8 p. (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, H. D. K., Lotfi, F., Taghirad, H. D. & Germi, S. B., 1 Nov 2019, *ICRoM 2019 - 7th International Conference on Robotics and Mechatronics*. IEEE, p. 120-124 5 p.

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, M. T., Michalas, A., Groot, A. E. D., Marquering, H. A. & Olabarraga, S. D., 1 Oct 2019, *2019 IEEE International Conference on E-Health Networking, Application and Services, HealthCom 2019*. IEEE, 9009598

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

Visibility-Aware Part Coding for Vehicle Viewing Angle Estimation

Yang, D., Qian, Y., Cai, D., Yan, S., Kämäräinen, J-K. & Chen, K., 1 Aug 2019, *9th International Conference on Information Science and Technology, ICIST 2019*. IEEE, p. 65-70 6 p.

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

Portrait instance segmentation for mobile devices

Zhu, L., Wang, T., Aksu, E. & Kämäräinen, J-K., 1 Jul 2019, *2019 IEEE International Conference on Multimedia and Expo, ICME 2019*. IEEE, p. 1630-1635 6 p.

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, Y., Bregovic, R., Gotchev, A. & Koch, R., 1 Jul 2019, *2019 IEEE International Conference on Multimedia and Expo, ICME 2019*. IEEE, p. 187-192 6 p.

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, T. R., Calvo-Fullana, M., Pyattaev, A., Mox, D., Andreev, S., Ribeiro, A. & Valkama, M., 1 Jul 2019, *2019 IEEE 20th International Workshop on Signal Processing Advances in Wireless Communications, SPAWC 2019*. IEEE, (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, M. A., Mahmoodpour, M. & Lobov, A., 1 Jul 2019, *2019 IEEE 17th International Conference on Industrial Informatics, INDIN 2019*. IEEE, p. 93-99 7 p. (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, A., Ferrer, B. R. & Lastra, J. L. M., 1 Jul 2019, *2019 IEEE 17th International Conference on Industrial Informatics, INDIN 2019*. IEEE, p. 827-834 8 p. (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, V., Linna, J., Keskinen, T., Hakulinen, J. & Turunen, M., 12 Jun 2019, *Pervasive Displays 2019 - 8th ACM International Symposium on Pervasive Displays, PerDis 2019*. Gentile, V. & Cauchard, J. R. (eds.). ACM, 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, G., Falchi, F., Gennaro, C., Massoli, F. V., Passalis, N., Tefas, A., Trivilini, A. & Vairo, C., 1 Jun 2019, *7th International Symposium on Digital Forensics and Security, ISDFS 2019*. Varol, A., Karabatak, M., Varol, C. & Teke, S. (eds.). IEEE

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

Linearization of BJTs with logarithmic predistortion

Lunden, O-P. & Paldanius, T., 14 May 2019, *2019 IEEE Radio and Wireless Symposium, RWS 2019*. IEEE, (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, C. B., Anttila, L., Fleischer, M. & Valkama, M., 14 May 2019, *2019 IEEE Radio and Wireless Symposium, RWS 2019*. IEEE COMPUTER SOCIETY PRESS, 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, O-P., Lenarduzzi, V. & Taibi, D., 9 May 2019, *2019 7th IEEE International Conference on Mobile Cloud Computing, Services, and Engineering, MobileCloud 2019*. IEEE, p. 38-47 10 p.

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

Error analysis of NOMA-based user cooperation with SWIPT

Li, S., Bariah, L., Muhaidat, S., Sofotasios, P., Liang, J. & Wang, A., 1 May 2019, *Proceedings - 15th Annual International Conference on Distributed Computing in Sensor Systems, DCOSS 2019*. IEEE, p. 507-513 7 p.

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

Digging deeper into egocentric gaze prediction

Tavakoli, H. R., Rahtu, E., Kannala, J. & Borji, A., 4 Mar 2019, *2019 IEEE Winter Conference on Applications of Computer Vision, WACV 2019*. IEEE, p. 273-282 10 p. (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, A., Isomottonen, V., Nieminen, P. & Keto, H., 4 Mar 2019, *Frontiers in Education: Fostering Innovation Through Diversity, FIE 2018 - Conference Proceedings*. IEEE, 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, I., Tiulpin, A., Sattler, T., Pollefeys, M., Rahtu, E. & Kannala, J., 4 Mar 2019, *2019 IEEE Winter Conference on Applications of Computer Vision, WACV 2019*. IEEE, p. 1034-1042 9 p. (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, A. & Haapala, K. R., 1 Feb 2019, *2019 IEEE International Conference on Industrial Technology, ICIT 2019*. IEEE, p. 1329-1335 7 p.

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

Thin form-factor super multiview head-up display system

Akpinar, U., Sahin, E., Suominen, O. & Gotchev, A., 13 Jan 2019, *Stereoscopic Displays and Applications XXX*. (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, M., Miroshnichenko, O., Lukin, V. & Egiazarian, K., 13 Jan 2019, *Image Processing: Algorithms and Systems XVII*. (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, M., Katkovnik, V. & Egiazarian, K., 13 Jan 2019, *Image Processing: Algorithms and Systems XVII*. (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, O., Lukin, V., Ponomarenko, N. & Egiazarian, K., 13 Jan 2019, *Image Processing: Algorithms and Systems XVII*. (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, H., Penttinen, J. P., Phung, H. M., Rajala, P., Tukiainen, A., Ranta, S. & Guina, M., 2019, *Vertical External Cavity Surface Emitting Lasers (VECSELs) IX*. Keller, U. (ed.). SPIE, IEEE, 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- μm wavelength wafer-fused OP-VECSELs in flip-chip configuration

Mereuta, A., Nechay, K., Caliman, A., Suruceanu, G., Gallo, P., Guina, M. & Kapon, E., 2019, *Vertical External Cavity Surface Emitting Lasers (VECSELs) IX*. Keller, U. (ed.). SPIE, IEEE, 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, P., Partanen, T., Toivanen, T., Toikkanen, T., Kangas, V. & Översti, M., 2019, *Digital Turn in Schools - Research, Policy, Practice: Proceedings of ICEM 2018 Conference*. Springer International Publishing, p. 157-169 13 p. (Lecture Notes in Educational Technology).

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

From monolithic systems to microservices: A decomposition framework based on process mining

Taibi, D. & Systä, K., 2019, *CLOSER 2019 - Proceedings of the 9th International Conference on Cloud Computing and Services Science*. Ferguson, D., Munoz, V. M., Helfert, M. & Pahl, C. (eds.). SCITEPRESS, p. 153-164 12 p.

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

405-nm pumped Ce^{3+} -doped silica fiber for broadband fluorescence from cyan to red

Yadav, A., Chichkov, N. B., Gumenyuk, R., Zherebtsov, E., Melkumov, M. A., Yashkov, M. V., Dianov, E. M. & Rafailov, E. U., 2019, *Optical Components and Materials XVI*. Digonnet, M. J. F. & Jiang, S. (eds.). SPIE, IEEE, 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, I., Sadi, T., Tripurari, T., Tiira, J., Ranta, S., Tukiainen, A., Guina, M. & Oksanen, J., 2019, *Photonic Heat Engines: Science and Applications*. Seletskiy, D. V., Epstein, R. I. & Sheik-Bahae, M. (eds.). SPIE, IEEE, 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, J., Tuorila, H., Zia, N., Cherchi, M., Aalto, T. & Guina, M., 2019, *Silicon Photonics XIV*. Reed, G. T. & Knights, A. P. (eds.). SPIE, IEEE, 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, A. E., Pertuz, S. & Kämäräinen, J.-K., 2019, *VISIGRAPP 2019 - Proceedings of the 14th International Joint Conference on Computer Vision, Imaging and Computer Graphics Theory and Applications*. Kerren, A., Hurter, C. & Braz, J. (eds.). SCITEPRESS, p. 561-568 8 p.

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

Revisiting gray pixel for statistical illumination estimation

Qian, Y., Pertuz, S., Nikkanen, J., Kämäräinen, J.-K. & Matas, J., 2019, *VISIGRAPP 2019 - Proceedings of the 14th International Joint Conference on Computer Vision, Imaging and Computer Graphics Theory and Applications*. Kerren, A., Hurter, C. & Braz, J. (eds.). SCITEPRESS, p. 36-46 11 p.

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

Benchmarking of several disparity estimation algorithms for light field processing

Zakeri, F. S., Bätz, M., Jaschke, T., Keinert, J. & Chuchvara, A., 2019, *Fourteenth International Conference on Quality Control by Artificial Vision*. Bazeille, S., Verrier, N. & Cudel, C. (eds.). SPIE, IEEE, 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, G. Y., Aho, T., Kesseli, J., Yli-Harja, O. & Kauffman, S. A., 2019, *Evolution, Development and Complexity - Multiscale Evolutionary Models of Complex Adaptive Systems*. Flores Martinez, C. L., Georgiev, G. Y., Smart, J. M. & Price, M. E. (eds.). Springer, p. 229-244 16 p. (Springer Proceedings in Complexity).

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

Single exposure lensless subpixel phase imaging

Kocsis, P., Shevkunov, I., Katkovnik, V. & Egiazarian, K., 2019, *Digital Optical Technologies 2019*. Kress, B. C. & Schelkens, P. (eds.). SPIE, IEEE, 9 p. (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, A., Ryczkowski, P., Genty, G. & Toivonen, J., 2019, *SPIE Future Sensing Technologies*. Kimata, M. & Valenta, C. R. (eds.). SPIE, IEEE, 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, L., Saerens, G., Timofeeva, M., Miroshnichenko, A. E., Camacho-Morales, R., Volkovskaya, I., Smirnova, D. A., Lysevych, M., Huang, L., Cai, M., Karouta, F., Hoe Tan, H., Kauranen, M., Jagadish, C., Grange, R., Neshev, D. N. & Rahmani, M., 2019, *AOS Australian Conference on Optical Fibre Technology, ACOFT 2019 and Australian Conference on Optics, Lasers, and Spectroscopy, ACOLS 2019*. Mitchell, A. & Rubinsztein-Dunlop, H. (eds.). SPIE, 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., 2019,

AOS Australian Conference on Optical Fibre Technology, ACOFT 2019 and Australian Conference on Optics, Lasers, and Spectroscopy, ACOLS 2019. Mitchell, A. & Rubinsztein-Dunlop, H. (eds.). SPIE, 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, F., Raitoharju, J., Iosifidis, A., Nikkanen, J. & Gabbouj, M., 2019, *2019 IEEE Symposium Series on Computational Intelligence, SSCI 2019*. IEEE, p. 1085-1090 6 p. 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, J. & Meissner, K., 2019, *2019 IEEE Symposium Series on Computational Intelligence, SSCI 2019*. IEEE, p. 1338-1343 6 p. 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, J. E., Gafurov, S., Kopylov, S., Minav, T., Grebennikov, S. & Kurbanov, A., 2019, *Proceedings - 12th International Conference on the Developments in eSystems Engineering, DeSE 2019*. Al-Jumeily, D., Hind, J., Mustafina, J., Al-Hajj, A., Hussain, A., Magid, E. & Tawfik, H. (eds.). IEEE, p. 906-911 6 p. 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, P., Raitoharju, M. & Piché, R., 13 Nov 2018, *IPIN 2018 - 9th International Conference on Indoor Positioning and Indoor Navigation*. IEEE, 7 p.

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, K., Rantala, J., Isokoski, P., Lehtonen, M., Müller, P., Karjalainen, M., Väliäho, J., Kontunen, A., Nieminen, V., Leivo, J., Telembeci, A. A., Lekkala, J., Kallio, P. & Surakka, V., 2 Oct 2018, *ICMI 2018 - Proceedings of the 2018 International Conference on Multimodal Interaction*. ACM, p. 73-77 5 p.

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, B., Lanz, M., Kämäräinen, J.-K. & Hietanen, A., 27 Aug 2018, *2018 14th IEEE/ASME International Conference on Mechatronic and Embedded Systems and Applications, MESA 2018*. IEEE, 6 p. 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, P., Mononen, T. & Mattila, J., 27 Aug 2018, *2018 14th IEEE/ASME International Conference on Mechatronic and Embedded Systems and Applications, MESA 2018*. IEEE, 8 p. 8449188

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

Role-based visualization of industrial IoT-based systems

Mahmoodpour, M., Lobov, A., Lanz, M., Mäkelä, P. & Rundas, N., 27 Aug 2018, *2018 14th IEEE/ASME International Conference on Mechatronic and Embedded Systems and Applications, MESA 2018*. IEEE, 8 p. 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, E. & Roca, R., 7 Aug 2018, *2018 13th System of Systems Engineering Conference, SoSE 2018*. IEEE, p. 245-252 8 p.

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, M. U., Biswas, R. & Lempiäinen, J., 20 Jul 2018, *2018 IEEE 87th Vehicular Technology Conference, VTC Spring 2018 - Proceedings*. IEEE, p. 1-6 6 p.

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, D., Petrov, V., Nikopour, H., Akdeniz, M., Orhan, O., Himayat, N., Talwar, S., Andreev, S. & Koucheryavy, Y., 20 Jul 2018, *2018 IEEE 87th Vehicular Technology Conference, VTC Spring 2018 - Proceedings*. IEEE, p. 1-7 7 p.

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, J., Gerasimenko, M., Stusek, M., Masek, P., Andreev, S., Hosek, J. & Koucheryavy, Y., 20 Jul 2018, *2018 IEEE 87th Vehicular Technology Conference, VTC Spring 2018*. IEEE, p. 1-7 7 p.

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, B., Muhaidat, S., Sofotasios, P. C., Sharif, B. S., Stouraitis, T., Karagiannidis, G. K. & Al-Dhahir, N., 20 Jul 2018, *2018 IEEE 87th Vehicular Technology Conference, VTC Spring 2018*. IEEE, p. 1-5 5 p.

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

Optical Asymmetric Modulation for VLC Systems - Invited Paper

Marshoud, H., Muhaidat, S., Sofotasios, P. C., Imran, M., Sharif, B. S. & Karagiannidis, G. K., 20 Jul 2018, *2018 IEEE 87th Vehicular Technology Conference, VTC Spring 2018*. IEEE, p. 1-5 5 p.

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, P. C., Yoo, S. K., Muhaidat, S., Cotton, S. L., Matthaiou, M., Valkama, M. & Karagiannidis, G. K., 20 Jul 2018, *2018 IEEE 87th Vehicular Technology Conference*. IEEE, p. 1-5 5 p.

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, D., Turunen, M., Anttila, L. & Valkama, M., 3 Jul 2018, *2018 IEEE International Conference on Communications Workshops*. IEEE, p. 1-6 6 p.

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, M., Bor-Yaliniz, I., Andreev, S., Yanikomeroglu, H. & Koucheryavy, Y., 3 Jul 2018, *2018 IEEE International Conference on Communications Workshops*. IEEE, p. 1-6 6 p.

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

Optimizing wirelessly powered crowd sensing: Trading energy for data

Li, X., You, C., Andreev, S., Gong, Y. & Huang, K., 3 Jul 2018, *2018 IEEE International Conference on Communications Workshops*. IEEE, p. 1-6 6 p.

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

Secure Firmware Updates for IoT: A Survey

Kolehmainen, A., 1 Jul 2018, *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, p. 112-117 6 p.

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

Cybersecurity Attacks and Defences for Unmanned Smart Ships

Silverajan, B., Ocak, M. & Nagel, B., 1 Jul 2018, *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, p. 15-20 6 p.

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

Activation game for older adults - Development and initial user experiences

Merilampi, S., Koivisto, A. & Virkki, J., 29 Jun 2018, *2018 IEEE 6th International Conference on Serious Games and Applications for Health, SeGAH 2018*. IEEE, p. 1-5 5 p.

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

PIVO: Probabilistic inertial-visual odometry for occlusion-robust navigation

Solin, A., Cortés, S., Rahtu, E. & Kannala, J., 3 May 2018, *Proceedings - 2018 IEEE Winter Conference on Applications of Computer Vision, WACV 2018*. IEEE, p. 616-625 10 p.

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., 27 Apr 2018, *2018 IEEE International Conference on Industrial Technology (ICIT)*. IEEE, p. 1055-1060 6 p.

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

Towards secure cloud orchestration for multi-cloud deployments

Paladi, N., Michalas, A. & Dang, H. V., 23 Apr 2018, *CrossCloud 2018 - 5th Workshop on CrossCloud Infrastructures and Platforms, colocated with EuroSys 2018*. ACM, 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, A., Harju, J., Vehkaoja, A., Parak, J., Delgado-Gonzalo, R., Renevey, P., Yli-Hankala, A. & Korhonen, I., 6 Apr 2018, *2018 IEEE EMBS International Conference on Biomedical and Health Informatics, BHI 2018*. IEEE, p. 133-136 4 p.

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

Exploiting suppliers' potential in construction innovations

Sariola, R., 2 Feb 2018, *2017 International Conference on Engineering, Technology and Innovation: Engineering, Technology and Innovation Management Beyond 2020: New Challenges, New Approaches, ICE/ITMC 2017 - Proceedings*. IEEE, p. 678-684 7 p.

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, W. M., Ferrer, B. R., Jose, L., Lastra, M., Aleixo, D. & Agostinho, C., 2 Feb 2018, *2017 International Conference on Engineering, Technology and Innovation: Engineering, Technology and Innovation Management Beyond 2020: New Challenges, New Approaches, ICE/ITMC 2017 - Proceedings*. IEEE, p. 1201-1208 8 p.

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

A multi-agent approach for processing industrial enterprise data

Mohammed, W. M., Ferrer, B. R., Martinez, J. L., Sanchis, R., Andres, B. & Agostinho, C., 2 Feb 2018, *2017 International Conference on Engineering, Technology and Innovation: Engineering, Technology and Innovation Management Beyond 2020: New Challenges, New Approaches, ICE/ITMC 2017 - Proceedings*. IEEE, p. 1209-1215 7 p.

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, A., Lastusilta, T., Korvola, T., Saari, L., Bendas, D., Mohammed, W. M. & Lee, A. N., 2 Feb 2018, *2017 International Conference on Engineering, Technology and Innovation: Engineering, Technology and Innovation Management Beyond 2020: New Challenges, New Approaches, ICE/ITMC 2017 - Proceedings*. IEEE, p. 1123-1130 8 p.

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, D., Petrov, V., Nikopour, H., Akdeniz, M., Orhan, O., Himayat, N., Talwar, S., Andreev, S. & Koucheryavy, Y., 24 Jan 2018, *2017 IEEE Globecom Workshops*. IEEE, p. 1-6 6 p.

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, O., Pyattaev, A., Johnsson, K., Andreev, S. & Koucheryavy, Y., 24 Jan 2018, *2017 IEEE Globecom Workshops, GC Wkshps 2017 - Proceedings*. IEEE, p. 1-7 7 p.

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

Image-Based Localization Using Hourglass Networks

Melekhov, I., Ylioinas, J., Kannala, J. & Rahtu, E., 19 Jan 2018, *2017 IEEE International Conference on Computer Vision Workshops, ICCVW 2017*. IEEE, p. 870-877 8 p.

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, M., Kartasalo, K., Liimatainen, K., Nykter, M., Latonen, L. & Ruusuvoori, P., 19 Jan 2018, *2017 IEEE International Conference on Computer Vision Workshops, ICCVW 2017*. IEEE, p. 27-35 9 p.

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, T., Fedotov, A., Rissanen, J., Gumenyuk, R., Butov, O., Chamorovskii, Y., Golant, K., Odnoblyudov, M. & Filippov, V., 1 Jan 2018, *Fiber Lasers XV: Technology and Systems*. SPIE, IEEE, 6 p. 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, V., Shevkunov, I., Petrov, N. V. & Eguiazarian, K., 1 Jan 2018, *Unconventional Optical Imaging 2018. Strasbourg, France*. SPIE, 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, P. & Valmari, A., 2018, *CSEDU 2018 - Proceedings of the 10th International Conference on Computer Supported Education*. SCITEPRESS, Vol. 2. p. 154-165 12 p.

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, P., Fowley, F., Pahl, C., Taibi, D. & Lynn, T., 2018, *CLOSER 2018 - Proceedings of the 8th International Conference on Cloud Computing and Services Science*. SCITEPRESS, p. 364-375 12 p.

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

Integrated multi-wavelength mid-IR light source for gas sensing

Karioja, P., Alajoki, T., Cherchi, M., Ollila, J., Harjanne, M., Heinlehto, N., Suomalainen, S., Zia, N., Tuorila, H., Viheriälä, J., Guina, M., Buczynski, R., Kasztelanic, R., Salo, T., Virtanen, S., Kluczynski, P., Borgen, L., Ratajczyk, M. & Kalinowski, P., 2018, *Next-Generation Spectroscopic Technologies XI*. SPIE, IEEE, 106570A. (SPIE Conference Proceedings; vol. 10657).

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

Highly-efficient Ho:KY(WO₄)₂ thin-disk lasers at 2.06 μm

Mateos, X., Loiko, P., Lamrini, S., Scholle, K., Fuhrberg, P., Suomalainen, S., Härkönen, A., Guina, M., Vatnik, S., Vedin, I., Aguiló, M., Díaz, F., Wang, Y., Griebner, U. & Petrov, V., 2018, *Pacific-Rim Laser Damage 2018: Optical Materials for High-Power Lasers*. SPIE, IEEE, 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, M., Katkovnik, V. & Eguiazarian, K., 2018, *Electronic Imaging: Image Processing: Algorithms and Systems XVI*. Society for Imaging Science and Technology

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

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, M., Gapon, N., Voronin, V. & Egiazarian, K., 2018, *Electronic Imaging: Image Processing: Algorithms and Systems XVI*. Society for Imaging Science and Technology

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

Robust linearized combined metrics of image visual quality

Ieremeiev, O., Lukin, V., Ponomarenko, N. & Egiazarian, K., 2018, *Electronic Imaging: Image Processing: Algorithms and Systems XVI*. Society for Imaging Science and Technology

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

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, O., Ponomarenko, M., Lukin, V. & Egiazarian, K., 2018, *Electronic Imaging: Image Processing: Algorithms and Systems XVI*. Society for Imaging Science and Technology

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, E., Vagharshakyan, S., Bregovic, R., Lee, G. & Gotchev, A., 2018, *Electronic Imaging: Stereoscopic Displays and Applications XXIX*. Society for Imaging Science and Technology, p. 1441-1445 5 p.

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, E., Wu, D., Tsarkov, V., Gary Wang, G., Modi, S. & Jafarian, H., 2018, *38th Computers and Information in Engineering Conference*. The American Society of Mechanical Engineers ASME, Vol. 1B-2018. 12 p.

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

Architectural patterns for microservices: A systematic mapping study

Taibi, D., Lenarduzzi, V. & Pahl, C., 2018, *CLOSER 2018 - Proceedings of the 8th International Conference on Cloud Computing and Services Science*. SCITEPRESS, p. 221-232 12 p.

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, Y., Nadykto, A. & Egiazarian, K., 2018, *Counterterrorism, Crime Fighting, Forensics, and Surveillance Technologies II*. SPIE, 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, L., Leinonen, J., Ihtola, P. & Hellas, A., 27 Sep 2017, *SIGITE 2017 - Proceedings of the 18th Annual Conference on Information Technology Education*. ACM, p. 13-18 6 p.

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

Comparison of time metrics in programming

Leinonen, J., Leppänen, L., Ihtola, P. & Hellas, A., 14 Aug 2017, *ICER 2017 - Proceedings of the 2017 ACM Conference on International Computing Education Research*. ACM, p. 200-208 9 p.

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

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

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

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 CO₂ incubator

Rajan, D. K., Verho, J., Kreutzer, J., Valimaki, H., Ihalainen, H., Lekkala, J., Patrikoski, M. & Miettinen, S., 19 Jul 2017, *2017 IEEE International Symposium on Medical Measurements and Applications (MeMeA)*. IEEE, p. 470-474 5 p.

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, L., Leinonen, J., Ihantola, P. & Hellas, A., 29 Jun 2017, *Proceedings - 2017 IEEE/ACM 39th International Conference on Software Engineering: Software Engineering and Education Track, ICSE-SEET 2017*. IEEE, p. 4-12 9 p.

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

Towards the Utilization of Crowdsourcing in Traffic Condition Reporting

Rantanen, P., Sillberg, P. & Soini, J., May 2017, *2017 40th International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2017 - Proceedings*. IEEE, p. 985-990 6 p.

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

Preventing keystroke based identification in open data sets

Leinonen, J., Ihantola, P. & Hellas, A., 12 Apr 2017, *L@S 2017 - Proceedings of the 4th (2017) ACM Conference on Learning at Scale*. ACM, p. 101-109 9 p.

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, S., Berki, E., Nykänen, P., Zolotavkin, Y., Helenius, M. & Kela, J., 23 Feb 2017, *2016 22nd International Conference on Virtual System & Multimedia (VSMM)*. IEEE

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, K., Aminlou, A., Hannuksela, M. M. & Gabbouj, M., 18 Jan 2017, *2016 IEEE International Symposium on Multimedia (ISM)*. IEEE, p. 583-586 4 p.

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, K., Aminlou, A., Hannuksela, M. M. & Gabbouj, M., 18 Jan 2017, *2016 IEEE International Symposium on Multimedia (ISM)*. IEEE, p. 295-300 6 p.

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, R. G., Aminlou, A., Hannuksela, M. M. & Gabbouj, M., 18 Jan 2017, *2016 IEEE International Symposium on Multimedia (ISM)*. IEEE, p. 525-528 4 p.

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

Color-distribution similarity by information theoretic divergence for color images

Murayama, M., Oguro, D., Kikuchi, H., Huttunen, H., Ho, Y. S. & Shin, J., 17 Jan 2017, *2016 Asia-Pacific Signal and Information Processing Association Annual Summit and Conference, APSIPA 2016*. IEEE

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

Dynamic laser speckle metrology with binarization of speckle patterns

Stoykova, E., Nazarova, D., Berberova, N., Gotchev, A., Ivanov, B. & Mateev, G., 2017, *19th International Conference and School on Quantum Electronics: Laser Physics and Applications*. SPIE, 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, V., Vorotynskii, A., Noronen, T., Gumenyuk, R., Chamorovskii, Y. & Golant, K., 2017, *Fiber Lasers XIV: Technology and Systems*. SPIE, Vol. 10083. 6 p. 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, J. & Alapaholuoma, T., 2017, *CSEDU 2017 - Proceedings of the 9th International Conference on Computer Supported Education*. SCITEPRESS, p. 476-480 5 p.
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, V., Shevkunov, I., Petrov, N. V. & Egiazarian, K., 2017, *Digital Optical Technologies 2017*. SPIE, 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, D., Coatanea, E. & Wang, G. G., 2017, *43rd Design Automation Conference*. The American Society of Mechanical Engineers ASME
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Complex elevator system DSM-case for a DSM design sprint

Niutanen, V., Hölttä-Otto, K., Rahardjo, A., Stowe, H. M., Helo, P. & Pulkkinen, A., 2017, *Understand, Innovate, and Manage your Complex System! - Proceedings of the 19th International DSM Conference*. The Design Society, p. 259-264 6 p.
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Full-reference metrics multidistortional analysis

Ieremeiev, O., Lukin, V., Ponomarenko, N. & Egiazarian, K., 2017, *Image Processing: Algorithms and Systems XV*. p. 27-35 9 p. (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, K., Danielyan, A., Ponomarenko, N., Foia, A., Ieremeiev, O. & Lukin, V., 2017, *Image Processing: Algorithms and Systems XV*. p. 48-55 8 p. (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, V., Stan, A. C., Taibi, D., Tosi, D. & Venters, G., 2017, *Proceedings of the 11th European Conference on Information Systems Management, ECISM 2017*. Academic Conferences and Publishing International Limited, p. 168-178 11 p.
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, D., Lenarduzzi, V., Morasca, S. & Taibi, D., 2017, *Proceedings of the 11th European Conference on Information Systems Management, ECISM 2017*. Academic Conferences and Publishing International Limited, p. 304-314 11 p.
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Describing mobile devices as RESTful services for the end-users

Ruokonen, A., Wu, Z. & Lu, R., 16 Dec 2016, *2016 IEEE International Conference on Mobile Services (MS)*. IEEE, p. 127-134 8 p.

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

Dynamic social trust associations over d2d communications: An implementation perspective

Urama, J., Olshannikova, E., Ometov, A., Masek, P., Andreev, S., Olsson, T., Hosek, J., Niutanen, J., Koucheryavy, Y. & Mikkonen, T., 16 Dec 2016, *2016 IEEE International Conference on Mobile Services (MS)*. IEEE, p. 186-189 4 p.

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, S., Pesonen, E. & Väättäjä, H., 17 Oct 2016, *AcademicMindtrek 2016 - Proceedings of the 20th International Academic Mindtrek Conference*. ACM, p. 192-197

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

Software visualization today - Systematic literature review

Mattila, A-L., Ihantola, P., Kilamo, T., Luoto, A., Nurminen, M. & Väättäjä, H., 17 Oct 2016, *AcademicMindtrek 2016 - Proceedings of the 20th International Academic Mindtrek Conference*. ACM, p. 262-271 10 p.

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, E., Väättäjä, H., Roto, V. & Uusitalo, K., 17 Oct 2016, *AcademicMindtrek '16 Proceedings of the 20th International Academic Mindtrek Conference*. ACM, p. 49-58 10 p.

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, L., Xu, Y. & Väänänen, K., 17 Oct 2016, *AcademicMindtrek 2016 - Proceedings of the 20th International Academic Mindtrek Conference*. ACM, p. 59-67 9 p.

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

Casual immersive viewing with smartphones

Rakkolainen, I., Raisamo, R., Turk, M., Höllerer, T. & Palovuori, K., 17 Oct 2016, *AcademicMindtrek 2016 - Proceedings of the 20th International Academic Mindtrek Conference*. ACM, p. 449-452 4 p.

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

A coordination-based brokerage architecture for multi-cloud resource markets

Aldawood, S., Fowley, F., Pahl, C., Taibi, D. & Liu, X., 14 Oct 2016, *Proceedings - 2016 4th International Conference on Future Internet of Things and Cloud Workshops, W-FiCloud 2016*. Institute of Electrical and Electronics Engineers Inc., p. 7-14 8 p.

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, V. & Taibi, D., 14 Oct 2016, *Proceedings - 42nd Euromicro Conference on Software Engineering and Advanced Applications, SEAA 2016*. IEEE, p. 112-119 8 p.

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

Viehrig, M., Tuukkanen, S. & Kallio, P., 6 Sep 2016, *2016 International Conference on Manipulation, Automation and Robotics at Small Scales, MARSS 2016*. Institute of Electrical and Electronics Engineers Inc., 5 p.

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

Trading exploits online: A preliminary case study

Ruohonen, J., Hyrynsalmi, S. & Leppänen, V., 23 Aug 2016, *IEEE RCIS 2016 - IEEE 10th International Conference on Research Challenges in Information Science*. IEEE COMPUTER SOCIETY PRESS

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

Asymmetric full-duplex with contiguous downlink carrier aggregation

Korpi, D., Anttila, L. & Valkama, M., 9 Aug 2016, *2016 IEEE 17th International Workshop on Signal Processing Advances in Wireless Communications (SPAWC)*. IEEE

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

Utilizing MOOCs in the development of education and training programs

Linna, P., Mäkinen, T. & Keto, H., 25 Jul 2016, *2016 39th International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2016 - Proceedings*. p. 861-864 4 p.

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., 25 Jul 2016, *2016 39th International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2016 - Proceedings*. p. 1190-1195 6 p.

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, H. & Renfors, M., 5 Jul 2016, *2016 IEEE 83rd Vehicular Technology Conference (VTC Spring)*.

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, S., Ilyas, Z., Sofotasios, P., Renfors, M. & Valkama, M., 5 Jul 2016, *2016 IEEE 83rd Vehicular Technology Conference (VTC Spring)*. IEEE

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, A., Johnsson, K., Andreev, S. & Koucheryavy, Y., 5 Jul 2016, *2016 IEEE 83rd Vehicular Technology Conference (VTC Spring)*. IEEE

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

Investigating mid-air gestures and handhelds in motion tracked environments

Mäkelä, V., Korhonen, H., Ojala, J., Järvi, A., Väänänen, K., Raisamo, R. & Turunen, M., 20 Jun 2016, *PerDis 2016 - Proceedings of the 5th ACM International Symposium on Pervasive Displays*. ACM, p. 45-51 7 p.

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, D. & Zoitl, A., 19 May 2016, *2016 IEEE International Conference on Industrial Technology (ICIT)*. Institute of Electrical and Electronics Engineers IEEE, p. 879-884 6 p.

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, N., Aaltonen, T. & Mikkonen, T., 14 May 2016, *MOBILESoft '16 Proceedings of the International Conference on Mobile Software Engineering and Systems*. ACM, p. 179-188 10 p.

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

Feasibility characterization of cryptographic primitives for constrained (wearable) IoT devices

Ometov, A., Masek, P., Malina, L., Florea, R., Hosek, J., Andreev, S., Hajny, J., Niutanen, J. & Koucheryavy, Y., 19 Apr 2016, *IEEE International Conference on Pervasive Computing and Communication Workshops, PerCom Workshops 2016*. IEEE

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

Random Value Impulse Noise Removal Based on Most Similar Neighbors

Habib, M., Rasheed, S., Hussain, A. & Ali, M., 26 Feb 2016, *2015 13th International Conference on Frontiers of Information Technology (FIT)*. IEEE, p. 329-333 5 p.

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, J., Joutsiniemi, A., Ahn, Y. & Fernandez, J. J., 24 Feb 2016, *2015 Digital Heritage International Congress, Digital Heritage 2015*. IEEE, p. 207-208 2 p.

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

Lean manufacturing methods in simulation literature: Review and association analysis

Tokola, H., Niemi, E. & Väistö, V., 16 Feb 2016, *2015 Winter Simulation Conference (WSC)*. p. 2239-2248 10 p.

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, T., Harjanne, M., Offrein, B. J., Caër, C., Neumeyr, C., Malacarne, A., Guina, M., Sheehan, R. N., Peters, F. H. & Melanen, P., 2016, *Optical Interconnects XVI*. SPIE, 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, N., Viheriälä, J., Koskinen, R., Koskinen, M., Suomalainen, S. & Guina, M., 2016, *Light-Emitting Diodes: Materials, Devices, and Applications for Solid State Lighting XX*. SPIE, 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, J., Aho, A. T., Mäkelä, J., Salmi, J., Virtanen, H., Leinonen, T., Dumitrescu, M. & Guina, M., 2016, *High-Power Diode Laser Technology and Applications XIV*. SPIE, 7 p. 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, S. O., Gonzalez Moctezuma, L. E., Rak, M., Casola, V., Rios, E. & Martinez Lastra, J. L., 2016, *CLOSER 2016 - Proceedings of the 6th International Conference on Cloud Computing and Services Science*. SCITEPRESS, Vol. 1 . p. 327-332 6 p.

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, A. A., Korobko, D. A., Okhotnikov, O. G. & Zolotovskii, I. O., 2016, *Nonlinear Optics and its Applications IV*. SPIE, Vol. 9894. 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, T. J. & Niemi, T., 2016, *SPIE Proceedings: Alternative Lithographic Technologies VIII*. Bencher, C. (ed.). SPIE, Vol. 9777. 7 p. 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, P., Martins, L., Mora, A., S. Ribeiro, A. & Fonseca, J., 2016, *SIMULTECH 2016 - Proceedings of the 6th International Conference on Simulation and Modeling Methodologies, Technologies and Applications*. SCITEPRESS, p. 44-55 12 p.

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., Semishchev, E. A., Egiazarian, K. O. & Agaian, S., 2016, *Mobile Multimedia/Image Processing, Security, and Applications 2016*. SPIE, 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, M., Stumpel, J. E., Alp, B., Teunissen, P., Bastiaansen, C. W. M. & Schenning, A. P. H. J., 2016, *Emerging Liquid Crystal Technologies XI*. SPIE, Vol. 9769. 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, O., Ponomarenko, N., Lukin, V., Astola, J. & Egiazarian, K., 14 Dec 2015, *2015 2nd International Scientific-Practical Conference Problems of Infocommunications Science and Technology, PIC S and T 2015 - Conference Proceedings*. IEEE, p. 189-192 4 p.

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

Method of data compression for traffic monitoring

Kozhemiakina, N., Lukin, V., Ponomarenko, N., Akulynichev, A., Astola, J. & Egiazarian, K., 14 Dec 2015, *2015 2nd International Scientific-Practical Conference Problems of Infocommunications Science and Technology, PIC S and T 2015 - Conference Proceedings*. IEEE, p. 153-156 4 p.

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., 14 Dec 2015, *2015 Second International Scientific-Practical Conference Problems of Infocommunications Science and Technology (PIC S&T)*. IEEE, p. 224-226 3 p.

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

Texture detection in noisy images by combining several local parameters

Naumenko, A., Krivenko, S., Ponomarenko, N., Zelensky, A. & Lukin, V., 14 Dec 2015, *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., p. 230-233 4 p. 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, M. S. & Rahman, M. S., 1 Nov 2015, *IoT-App 2015 - Proceedings of the 2015 International Workshop on Internet of Things Towards Applications, co-located with SenSys 2015*. ACM, p. 19-22 4 p.

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

Antroposeeni - A mixed reality game

Luhtala, M., Karvonen, T., Pylväs, J., Ala-Kokko, A., Magica, R., Takeda, Y. & Turunen, M., 22 Sep 2015, *ACADEMICMINDTREK 2015 - Proceedings of the 19th International Academic Mindtrek Conference*. Association for Computing Machinery, Inc, p. 211-213 3 p.

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

OASIS deck of cards - House of colleagues: A playful

Nummenmaa, T., Kultima, A., Kankainen, V., Savolainen, S., Syvänen, A., Alha, K. & Mäyrä, F., 22 Sep 2015, *ACADEMICMINDTREK 2015 - Proceedings of the 19th International Academic Mindtrek Conference*. Association for Computing Machinery, Inc, p. 2-9 8 p.

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

Kymalainen, T., Perala, P., Hakulinen, J., Heimonen, T., James, J. & Pera, J., 12 Aug 2015, *Proceedings - 2015 International Conference on Intelligent Environments, IE 2015*. Institute of Electrical and Electronics Engineers Inc., p. 81-88 8 p. 7194274

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

Image interpolation based on non-local geometric similarities

Zhu, S., Zeng, B., Liu, G., Zeng, L., Fang, L. & Gabbouj, M., 4 Aug 2015, *2015 IEEE International Conference on Multimedia and Expo (ICME)*. IEEE COMPUTER SOCIETY PRESS

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., 15 Jul 2015, *2015 38th International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2015 - Proceedings*. The Institute of Electrical and Electronics Engineers, Inc., p. 229-234 6 p. 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, T., Choi, Y. S., Liikkanen, P., Korpi, D., Talwar, S. & Valkama, M., 1 Jul 2015, *2015 IEEE 81st Vehicular Technology Conference (VTC Spring)*. The Institute of Electrical and Electronics Engineers, Inc.

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

Prioritized centrally-controlled resource allocation in integrated multi-RAT HetNets

Gerasimenko, M., Moltchanov, D., Florea, R., Himayat, N., Andreev, S. & Koucheryavy, Y., 1 Jul 2015, *IEEE Vehicular Technology Conference*. The Institute of Electrical and Electronics Engineers, Inc., Vol. 2015-July. 7 p.

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., 30 Jun 2015, *2015 IEEE International Symposium on Medical Measurements and Applications, MeMeA 2015 - Proceedings*. IEEE, p. 52-57 6 p.

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

Collaborative cloud-based management of home networks

Silverajan, B., Luoma, J-P., Vajaranta, M. & Itäpuro, R., 29 Jun 2015, *Proceedings of the 2015 IFIP/IEEE International Symposium on Integrated Network Management, IM 2015*. IEEE, p. 786-789 4 p.

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

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., 25 Jun 2015, *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.

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., 25 Jun 2015, *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., 3 p.

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

Variable switching point predictive torque control with extended prediction horizon

Alevras, I., Karamanakos, P., Manias, S. & Kennel, R., 18 Mar 2015, *2015 IEEE International Conference on Industrial Technology, ICIT 2015*. June ed. Institute of Electrical and Electronics Engineers Inc., p. 2352-2357 6 p.

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, A., Leppäkoski, H. & Piché, R., 5 Feb 2015, *2014 Ubiquitous Positioning Indoor Navigation and Location Based Service, UPINLBS 2014 - Conference Proceedings*. Piscataway, NJ, USA: IEEE, p. 97-102 6 p. 7033715

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

Video summarization based on Subclass Support Vector Data Description

Mygdalis, V., Iosifidis, A., Tefas, A. & Pitas, I., 15 Jan 2015, *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., p. 183-187 5 p.

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, E., Das, P., Taylor, J. & Davies, M., 1 Jan 2015, *Proceedings of the 2014 Building Simulation and Optimization Conference*. p. 2093-2100 8 p.

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, Z., Björninen, T., Tentzeris, M. M., Sydänheimo, L. & Ukkonen, L., Jan 2015, *2015 IEEE Radio and Wireless Symposium (RWS), 25-28 Jan. 2015, San Diego, CA*. IEEE, p. 153-155 3 p.

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, J., Gumenyuk, R., Rantamäki, A., Lyytikäinen, J., Leinonen, T., Zolotovskii, I., Melkumov, M., Dianov, E. M. & Okhotnikov, O. G., 2015, *Vertical External Cavity Surface Emitting Lasers (VECSELs) V*. Guina, M. (ed.). BELLINGHAM: SPIE, 7 p. 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, Y. M., Payusov, A. S., Gordeev, N. Y., Maximov, M. V., Schlichting, S., Nippert, F. & Hoffmann, A., 2015, *Proceedings of SPIE: Light-Emitting Diodes: Materials, Devices, and Applications for Solid State Lighting XIX*. SPIE, Vol. 9383. 93830E

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

Preserving natural scene lighting by strobe-lit video

Suominen, O. & Gotchev, A., 2015, *Image Processing: Algorithms and Systems XIII*. SPIE, 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, I., Egiazarian, K. & Pulli, K., 2015, *Image Processing: Algorithms and Systems XIII*. SPIE, Vol. 9399. 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., 2015, *Image Processing: Algorithms and Systems XIII*. SPIE, 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., 2015, *Image Processing: Algorithms and Systems XIII*. SPIE, 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, S. & Gotchev, A., 2015, *Proceedings of SPIE - The International Society for Optical Engineering*. SPIE, 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, A. S., Lukin, V. V. & Egiazarian, K., 2015, *Proceedings of SPIE - The International Society for Optical Engineering*. SPIE, Vol. 9399. 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., 2015, *Image Processing: Algorithms and Systems XIII*. SPIE, 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, E., Leinonen, T., Ranta, S., Tavast, M., Penttinen, J-P. & Guina, M., 2015, *Proceedings of SPIE - The International Society for Optical Engineering*. SPIE, Vol. 9349. 93490U

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

Monolithic GaInNAsSb/GaAs VECSEL emitting at 1550 nm

Korpijärvi, V-M., Kantola, E. L., Leinonen, T. & Guina, M., 2015, *SPIE conference proceedings*. SPIE, Vol. 9349. 93490D

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

>8W GaInNAs VECSEL emitting at 615 nm

Leinonen, T., Penttinen, J. P., Korpijärvi, V. M., Kantola, E. & Guina, M., 2015, *Proceedings of SPIE: Vertical External Cavity Surface Emitting Lasers (VECSELs) V*. SPIE, Vol. 9349. 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, V. V., Ponomarenko, N. N., Ieremeiev, O., Egiazarian, K. & Astola, J., 2015, *Proceedings of SPIE - The International Society for Optical Engineering*. SPIE, Vol. 9394. 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, S., Pawlowski, J., Bick, M., Bagucanskyte, M., Frankenberg, A., Hudak, R., Makropoulos, C., Pappa, D., Pitsilis, V., Pirkkalainen, H., Tannhauser, A. C., Trepule, E., Vidalis, A. & Volungeviciene, A., 2015, *Wissens-Gemeinschaften 2015*. TUDpress Verlag der Wissenschaften GmbH, p. 149-156 8 p.

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

Roadmap for organic and printed electronics

Hecker, K., Clemens, W., Lupo, D. & Breitung, S., 2015, *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, p. 125-126 2 p.

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

Measuring bend losses in large-mode-area fibers

Ye, C., Koponen, J., Aallos, V., Kokki, T., Petit, L. & Kimmelma, O., 2015, *Fiber Lasers XII: Technology, Systems, and Applications*. SPIE, Vol. 9344. 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, C., Yi, X., Wang, Y. & Tentzeris, M. M., 2015, *Structural Health Monitoring 2015: System Reliability for Verification and Implementation - Proceedings of the 10th International Workshop on Structural Health Monitoring, IWSHM 2015*. DEStech Publications, Vol. 2. p. 864-872 9 p.

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

DYNAMO sound engine - Exploring the aesthetics of dynamic sound interactions

Luhtala, M., Heimonen, T., Mäkelä, V., Keskinen, T., Turunen, M. & Saarinen, S., 4 Nov 2014, *MINDTREK 2014 - Proceedings of the 18th International Academic MindTrek Conference: "Media Business, Management, Content and Services"*. Association for Computing Machinery, Inc, p. 159-166 8 p.

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, S., Srivastava, S., Sorathia, K., Hakulinen, J., Heimonen, T., Turunen, M. & Rajput, N., 4 Nov 2014, *MINDTREK 2014 - Proceedings of the 18th International Academic MindTrek Conference: "Media Business, Management, Content and Services"*. Association for Computing Machinery, Inc, p. 49-56 8 p.

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, H., Okkonen, J. & Savolainen, R., 4 Nov 2014, *MINDTREK 2014 - Proceedings of the 18th International Academic MindTrek Conference: "Media Business, Management, Content and Services"*. Association for Computing Machinery, Inc, p. 19-22 4 p.

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

Games and energy: Profiling power usage during play

Salmela, J. M., Thanisch, P., Sotamaa, O. & Niemi, T., 4 Nov 2014, *MINDTREK 2014 - Proceedings of the 18th International Academic MindTrek Conference: "Media Business, Management, Content and Services"*. Association for Computing Machinery, Inc, p. 192-199 8 p.

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

MurMur Moderators, the talking playful seats

Nummenmaa, T., Kultima, A., Tyni, H. & Alha, K., 4 Nov 2014, *MINDTREK 2014 - Proceedings of the 18th International Academic MindTrek Conference: "Media Business, Management, Content and Services"*. Association for Computing Machinery, Inc, p. 231-237 7 p.

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

On computation of calcium cycling anomalies in cardiomyocytes data

Juhola, M., Joutsijoki, H., Varpa, K., Saarikoski, J., Rasku, J., Iltanen, K., Laurikkala, J., Hyiro, H., Avalos-Salguero, J., Siirtola, H., Penttinen, K. & Aalto-Setälä, K., 2 Nov 2014, *2014 36th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, EMBC 2014*. Institute of Electrical and Electronics Engineers Inc., p. 1444-1447 4 p. 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, J. & Tentzeris, M. M., 22 Oct 2014, *2014 IEEE RFID Technology and Applications Conference, RFID-TA 2014*. Institute of Electrical and Electronics Engineers Inc., p. 109-114 6 p. 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, Y., Pan, Z., Yang, J., Sun, G. & Tentzeris, M. M., 22 Sep 2014, *IWCMC 2014 - 10th International Wireless Communications and Mobile Computing Conference*. Institute of Electrical and Electronics Engineers Inc., p. 1022-1026 5 p. 6906495

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

Adaptive sampling for compressed sensing based image compression

Zhu, S., Zeng, B. & Gabbouj, M., 3 Sep 2014, *2014 IEEE International Conference on Multimedia and Expo (ICME), 14-18 July 2014, Chengdu*.

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

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, A., Evreinov, G., Raisamo, R. & Majeed, A. A., 2 Feb 2014, *ICOSST 2014 - 2014 International Conference on Open Source Systems and Technologies, Proceedings*. Institute of Electrical and Electronics Engineers Inc., p. 25-31 7 p. 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, A., Evreinov, G., Raisamo, R., Mäkinen, E., Nukarinen, T. & Majeed, A. A., 2 Feb 2014, *ICOSST 2014 - 2014 International Conference on Open Source Systems and Technologies, Proceedings*. Institute of Electrical and Electronics Engineers Inc., p. 32-42 11 p. 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

Michalas, A. & Komninos, N., 1 Jan 2014, *2014 IEEE Symposium on Computers and Communications, ISCC 2014 - Proceedings*. Institute of Electrical and Electronics Engineers Inc., 6912480

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

Pulsed high-power yellow-orange VECSEL

Kantola, E., Leinonen, T., Ranta, S., Tavast, M. & Guina, M., 2014, *Photonics Europe 2014, Semiconductor Lasers and Laser Dynamics VI, April 14-17, 2014, Brussels, Belgium. Proceedings of SPIE*. SPIE, Vol. 9134. 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, E., Nonsiri, S., Christophe, F. & Mokammel, F., 2014, *34th Computers and Information in Engineering Conference*. The American Society of Mechanical Engineers ASME, Vol. 1A.

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, J. E., Broer, D. J., Bastiaansen, C. W. M. & Schenning, A. P. H. J., 2014, *Proceedings of SPIE: Organic Photonics VI*. SPIE, Vol. 9137. 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, A. & Rakkolainen, I., 2014, *Proceedings of SPIE-IS and T Electronic Imaging - Stereoscopic Displays and Applications XXV*. SPIE, Vol. 9011. 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, P., Lindell, T., Nummenmaa, J. & Nummenmaa, T., 2014, *BIR 2009 - 8th International Conference on Perspectives in Business Informatics Research*. Kristianstad Academic Press

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

Mode coupling in few-mode large-mode-area fibers

Ye, C., Koponen, J., Aallos, V., Petit, L., Kimmelma, O. & Kokki, T., 2014, *Fiber Lasers XI: Technology, Systems, and Applications*. SPIE, Vol. 8961. 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, L., Prasauskas, T., Leivo, V., Turunen, M., Aaltonen, A., Kiviste, M., Martuzevicius, D. & Haverinen-Shaughnessy, U., 2014, *Indoor Air 2014 - 13th International Conference on Indoor Air Quality and Climate*. International Society of Indoor Air Quality and Climate, p. 637-639 3 p.

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, X., Cho, C., Wang, Y., Cook, B., Tentzeris, M. M. & Leon, R. T., 2014, *7th European Workshop on Structural Health Monitoring, EWSHM 2014 - 2nd European Conference of the Prognostics and Health Management (PHM) Society*. INRIA, p. 1040-1047 8 p.

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

Compressive strain measurement using RFID patch antenna sensors

Cho, C., Yi, X., Wang, Y., Tentzeris, M. M. & Leon, R. T., 2014, *Sensors and Smart Structures Technologies for Civil, Mechanical, and Aerospace Systems 2014*. SPIE, Vol. 9061. 90610X

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

An origami inspired reconfigurable spiral antenna

Saintsing, C. D., Cook, B. S. & Tentzeris, M. M., 2014, *38th Mechanisms and Robotics Conference*. The American Society of Mechanical Engineers ASME, Vol. 5B.

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

Characterization of charge in airborne fungal spores

Reponen, T., Saari, S., Mensah-Attipoe, J., Ukkonen, A., Veijalainen, A., Pasanen, P. & Keskinen, J., 2014, *Indoor Air 2014 - 13th International Conference on Indoor Air Quality and Climate*. International Society of Indoor Air Quality and Climate, p. 359-361 3 p.

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

Wearable and implantable antennas for wireless body-centric sensing systems

Björninen, T., Moradi, E., Koski, K., Sydänheimo, L., Ukkonen, L., Müller, R., Ledochowitsch, P., Rabaey, J. M. & Rahmat-Samii, Y., 29 Oct 2013, *BODYNETS 2013 - 8th International Conference on Body Area Networks*. ICST, p. 288 1 p.

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

Variable switching point predictive torque control

Karamanakos, P., Stolze, P., Kennel, R., Manias, S. & Mouton, T., Feb 2013, *Proceedings - 2013 IEEE International Conference on Industrial Technology, ICIT 2013*. p. 422-427 6 p.

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, A., Tefas, A. & Pitas, I., 2013, *2013 IEEE 11th IVMSP Workshop: 3D Image/Video Technologies and Applications, IVMSP 2013 - Proceedings*.

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

Person identification from actions based on dynamemes and discriminant learning

Iosifidis, A., Tefas, A. & Pitas, I., 2013, *2013 International Workshop on Biometrics and Forensics, IWBF 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, F. D., Paakki, T., Nurmi, J. & Pelosi, M., 2013, *2013 International Conference on Indoor Positioning and Indoor Navigation, IPIN 2013*. IEEE COMPUTER SOCIETY PRESS

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

Towards an approach for evaluating the quality of requirements

Mokammel, F., Coatanea, E., Christophe, F., Ba Khouya, M. & Medyna, G., 2013, *33rd Computers and Information in Engineering Conference*. American Society of Mechanical Engineers, Vol. 2 B. V02BT02A024

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

Checking visual data flow programs with finite process models

Nummenmaa, J., Marttila-Kontio, M. & Nummenmaa, T., 2013, *13th Symposium on Programming Languages and Software Tools, SPLST 2013 - Proceedings*. University of Szeged, p. 245-258 14 p.

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, X., Cho, C., Cook, B., Wang, Y., Tentzeris, M. M. & Leon, R. T., 2013, *Nondestructive Characterization for Composite Materials, Aerospace Engineering, Civil Infrastructure, and Homeland Security 2013*. Vol. 8694. 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, L., Thai, T. T., Tentzeris, M. M., Roselli, L. & Alimenti, F., 2013, *RSW 2013 - 2013 IEEE Radio and Wireless Symposium - RWW 2013*. p. 202-204 3 p. 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, Y., Wei, W., Narusue, Y., Shigeta, R., Asami, T. & Tentzeris, M., 2013, *RSW 2013 - 2013 IEEE Radio and Wireless Symposium - RWW 2013*. p. 37-39 3 p. 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., 2013, *Structural Health Monitoring 2013: A Roadmap to Intelligent Structures - Proceedings of the 9th International Workshop on Structural Health Monitoring, IWSHM 2013*. DEStech Publications, Vol. 1. p. 577-584 8 p.

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., 2013, *Structural Health Monitoring 2013: A Roadmap to Intelligent Structures - Proceedings of the 9th International Workshop on Structural Health Monitoring, IWSHM 2013*. DEStech Publications, Vol. 2. p. 1857-1864 8 p.

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

Service-oriented approach to improve interoperability of e-learning systems

Karavirta, V., Ihantola, P. & Koskinen, T., 2013, *Proceedings - 2013 IEEE 13th International Conference on Advanced Learning Technologies, ICALT 2013*. p. 341-345 5 p. 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, J., Ihantola, P., Karavirta, V. & Alaoutinen, S., 2013, *Proceedings - 2013 Learning and Teaching in Computing and Engineering, LaTiCE 2013*. p. 55-61 7 p. 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, K., Won, S., Van Der Schaar, M. & Bhattacharyya, S., 2013, *2013 IEEE International Conference on Multimedia and Expo, ICME 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, Y., Spakov, Ö. & Surakka, V., 2012, *2012 IEEE Workshop on the Applications of Computer Vision, WACV 2012*. p. 81-87 7 p. 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, C., Vojir, T., Trefný, J., Šochman, J. & Matas, J., 2012, *2012 15th International IEEE Conference on Intelligent Transportation Systems, ITSC 2012*. p. 975-982 8 p. 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, I., Şerban, V. A., Uţu, D., Koivuluoto, H., Vuoristo, P. & Niemi, K., 2012, *NANOCON 2012 - Conference Proceedings, 4th International Conference*. TANGER Ltd., p. 322-327 6 p.

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, *2012 IEEE International Conference on RFID-Technologies and Applications, RFID-TA 2012*. p. 398-403 6 p. 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, X., Vyas, R., Cho, C., Fang, C. H., Cooper, J., Wang, Y., Leon, R. T. & Tentzeris, M. M., 2012, *Sensors and Smart Structures Technologies for Civil, Mechanical, and Aerospace Systems 2012*. Vol. 8345. 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, Z., Shen, C. C., Plishker, W., Wu, H. H. & Bhattacharyya, S. S., 2012, *ICSP 2012 - 2012 11th International Conference on Signal Processing, Proceedings*. Vol. 1. p. 402-408 7 p. 6491686

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

Multiobjective TDMA optimization for neuron-based molecular communication

Suzuki, J., Balasubramaniam, S. & Prina-Mello, A., 2012, *BODYNETS 2012 - 7th International Conference on Body Area Networks*. ICST

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, C., Balasubramaniam, S., Botvich, D., Donnelly, W., Michaelis, S., Schmutzler, J. & Stair, T., 29 Nov 2011, *BODYNETS 2008 - 3rd International ICST Conference on Body Area Networks*. ICST

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., 2011, *8th International Conference on Antenna Theory and Techniques, ICATT'11*. p. 263-265 3 p. 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, S., Saastamoinen, J., Huusko, J. & Nurmi, J., 2011, *Proceedings - 2011 IEEE 2nd International Conference on Networked Embedded Systems for Enterprise Applications, NESEA 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, H., Pirkkalainen, H., Pawlowski, J. & Schoop, E., 2011, *6th Conference on Professional Knowledge Management: From Knowledge to Action - Proceedings*. Gesellschaft fur Informatik (GI), Vol. P-182. p. 23-32 10 p.

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., 2011, *Electronic Proceedings of the 2011 IEEE International Conference on Multimedia and Expo, ICME 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, A., Duchowski, A. T. & Majaranta, P., 2011, *UbiComp'11 - Proceedings of the 2011 ACM Conference on Ubiquitous Computing*. p. 627-628 2 p.

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

Database-driven tool support for DisCo executable specifications

Nummenmaa, J. & Nummenmaa, T., 2011, *SPLST'11 - Proceedings 12th Symposium on Programming Languages and Software Tools*. p. 44-54 11 p.

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., 2011, *ICONO 2010: International Conference on Coherent and Nonlinear Optics*. Vol. 7993. 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, X., Wu, T., Lantz, G., Wang, Y., Leon, R. T. & Tentzeris, M. M., 2011, *Sensors and Smart Structures Technologies for Civil, Mechanical, and Aerospace Systems 2011*. Vol. 7981. 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, C. C., Wu, H. H., Sane, N., Plishker, W. & Bhattacharyya, S. S., 2011, *Electronic Proceedings of the 2011 IEEE International Conference on Multimedia and Expo, ICME 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, S., Botvich, D. & Balasubramaniam, S., 2011, *16th IEEE Symposium on Computers and Communications, ISCC'11*. p. 254-256 3 p. 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, R., Balasubramaniam, S., Botvich, D. & Donnelly, W., 2011, *Proceedings - 25th IEEE International Conference on Advanced Information Networking and Applications Workshops, WAINA 2011*. p. 226-231 6 p. 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, B., Ferrari, E., Morasca, S. & Taibi, D., 2011, *CODASPY'11 - Proceedings of the 1st ACM Conference on Data and Application Security and Privacy*. p. 51-61 11 p.

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, E., Ritola, T., Tumer, I. Y. & Jensen, D., 2010, *Proceedings of the ASME Design Engineering Technical Conference. AMER SOC MECHANICAL ENGINEERS*, Vol. 5. p. 591-601 11 p.

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, A. Z., Mohammadi Aref, M. & Taghirad, H. D., 2009, *IEEE/ASME International Conference on Advanced Intelligent Mechatronics, AIM*. p. 1034-1039 6 p. 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, T., Väättäjä, H. & Koponen, T., 2009, *MindTrek 2009 - 13th International Academic MindTrek Conference: Everyday Life in the Ubiquitous Era*. p. 45-52 8 p.

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

The magical world of metamaterials

Caglayan, H. & Ozbay, E., 2009, *Photonic Materials, Devices, and Applications III*. Vol. 7366. 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, S., Taibi, D. & Tosi, D., 2009, *Proceedings of the 2009 ICSE Workshop on Emerging Trends in Free/Libre/Open Source Software Research and Development, FLOSS 2009*. p. 25-30 6 p. 5071356

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

Network classes and graph complexity measures

Dehmer, M., Borgert, S. & Emmert-Streib, F., 2008, *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*. p. 77-84 8 p. 5231507

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

Towards a channel capacity of communication networks

Emmert-Streib, F. & Dehmer, M., 2008, *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*. p. 94-99 6 p. 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, E., Yannou, B., Honkala, S., Lajunen, A., Saarelainen, T. & Makkonen, P., 2008, *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, p. 173-182 10 p.

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

Global information processing in gene networks: Fault tolerance

Emmert-Streib, F. & Dehmer, M., 2007, *Proceedings of the Bio-Inspired Models of Network, Information, and Computing Systems, Bionetics 2007*. p. 326-329 4 p. 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, E., Bulu, I. & Caglayan, H., 2006, *Photonic Crystal Materials and Devices IV*. Vol. 6128. 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, F., Dehmert, M. & Kilian, J., 2005, *Proceedings of the 2005 International Conference on Data Mining, DMIN'05*. p. 200-207 8 p.

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

Framework for optimization and scheduling of a copper production plant

Suominen, O., Mörsky, V., Ritala, R. & Vilkkko, M., 25 Jun 2016, *26th European Symposium on Computer Aided Process Engineering, 2016*. Elsevier Science B.V., Vol. 38. p. 1243-1248 6 p. (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, A., Mäkinen, J. & Kouhia, R., 2016, *Computational Methods for Solids and Fluids: Multiscale Analysis, Probability Aspects and Model Reduction*. Springer, p. 463-493 31 p. (Computational Methods in Applied Sciences; vol. 41).

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

Towards dependable automation

Seppälä, J. & Salmenperä, M., 2015, *Cyber Security: Analytics, Technology and Automation: Part IV*. Springer International Publishing, p. 229-249 21 p. (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, J., Koivumäki, J., Caldwell, D. G. & Semini, C., 1 Apr 2017, In : *IEEE - ASME Transactions on Mechatronics*. 22, 2, p. 669-680 12 p.

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, E., 1 Oct 2020, In : *Information Sciences*. 536, p. 351-357 7 p.

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

Tree species classification using structural features derived from terrestrial laser scanning

Terryn, L., Calders, K., Disney, M., Origo, N., Malhi, Y., Newnham, G., Raunonen, P., Åkerblom, M. & Verbeeck, H., 1 Oct 2020, In : *ISPRS Journal of Photogrammetry and Remote Sensing*. 168, p. 170-181 12 p.

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

Soft robotic gripper with compliant cell stacks for industrial part handling

Netzev, M., Angleraud, A. & Pieters, R., 1 Oct 2020, In : *IEEE Robotics and Automation Letters*. 5, 4, p. 6821-6828 8 p.

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

Measurements of Mobile Blockchain Execution Impact on Smartphone Battery

Bardinova, Y., Zhidanov, K., Bezzateev, S., Komarov, M. & Ometov, A., 30 Jul 2020, In : *Data*. 5, 3, 11 p., 66.

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

On the zeros of the partial Hosoya polynomial of graphs

Ghorbani, M., Dehmer, M., Cao, S., Feng, L., Tao, J. & Emmert-Streib, F., 1 Jul 2020, In : Information Sciences. 524, p. 199-215 17 p.

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

Wake-up Radio-Based 5G Mobile Access: Methods, Benefits, and Challenges

Rostami, S., Kela, P., Leppanen, K. & Valkama, M., 1 Jul 2020, In : IEEE Communications Magazine. 58, 7, p. 14-20 7 p.

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

Characterizing Resource Allocation Trade-Offs in 5G NR Serving Multicast and Unicast Traffic

Samuylov, A., Moltchanov, D., Kovalchukov, R., Pirmagomedov, R., Gaidamaka, Y., Andreev, S., Koucheryavy, Y. & Samouylov, K., 1 May 2020, In : IEEE Transactions on Wireless Communications. 19, 5, p. 3421-3434 14 p., 9003488.

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

TinderMIX: Time-dose integrated modelling of toxicogenomics data

Serra, A., Fratello, M., Del Giudice, G., Saarimäki, L. A., Paci, M., Federico, A. & Greco, D., 1 May 2020, In : GigaScience. 9, 5

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

Utilizing Neurons for Digital Logic Circuits: A Molecular Communications Analysis

Adonias, G. L., Yastrebova, A., Barros, M. T., Koucheryavy, Y., Cleary, F. & Balasubramaniam, S., 1 Apr 2020, In : IEEE Transactions on Nanobioscience. 19, 2, p. 224-236 13 p.

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

Anthropometric clothing measurements from 3D body scans

Yan, S., Wirta, J. & Kämäräinen, J-K., 2020, In : Machine Vision and Applications. 31, 1-2, 11 p., 7.

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

Data augmentation approaches for improving animal audio classification

Nanni, L., Maguolo, G. & Paci, M., 2020, In : Ecological Informatics. 57, 8 p., 101084.

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

Correlates of social media fatigue and academic performance decrement: A large cross-sectional study

Malik, A., Dhir, A., Kaur, P. & Johri, A., 2020, In : INFORMATION TECHNOLOGY AND PEOPLE. 24 p.

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, K., Gleirscher, M., Nestler, S., Rödiger, S., Petersen, T. & Loebel, J. M., 2020, In : Informatik-Spektrum. 43, 2, p. 94–102 9 p.

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

In-flightwind field identification and prediction of parafoil systems

Gao, H., Tao, J., Dehmer, M., Emmert-Streib, F., Sun, Q., Chen, Z., Xie, G. & Zhou, Q., 2020, In : Applied Sciences (Switzerland). 10, 6, 15 p., 1958.

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

Game-theoretic semantics for ATL⁺ with applications to model checking

Goranko, V., Kuusisto, A. & Rönholm, R., 2020, In : Information and Computation. 23 p., 104554.

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

Modified Wilkinson power divider with harmonics suppression and compact size for GSM applications

Moloudian, G., Miri Rostami, S. R. & Björninen, T., 2020, In : International Journal of RF and Microwave Computer-Aided Engineering. 11 p., e22209.

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, S., Jiang, Y., Li, H. & Liu, Y., 2020, In : INFORMATION PROCESSING AND MANAGEMENT. 57, 5, 14 p., 102274.
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, S., Li, H., Liu, Y., Pirkkalainen, H. & Salo, M., 2020, In : INFORMATION PROCESSING AND MANAGEMENT. 57, 6, 102307.
Research output: Contribution to journal › Article › Scientific › peer-review

Microflow-Based Device for In Vitro and Ex Vivo Drug Permeability Studies

Hemmilä, S., Ruponen, M., Toropainen, E., Tengvall-Unadike, U., Urtti, A. & Kallio, P., 2020, In : SLAS Technology.
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, H. & Hamari, J., 2020, In : User Modeling and User-Adapted Interaction.
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, M. T., Lenarduzzi, V., Romano, S. & Saarimäki, N., 2020, In : Information and Software Technology. 128, 18 p., 106377.
Research output: Contribution to journal › Article › Scientific › peer-review

Adjoint-based optimization in the development of low-emission industrial boilers

Kanellis, G., Oksanen, A. & Konttinen, J., 2020, In : Engineering Optimization. 21 p.
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, S., Rasilo, P. & Hameyer, K., 2020, In : International Journal of Numerical Modelling: Electronic Networks, Devices and Fields. 10 p.
Research output: Contribution to journal › Article › Scientific › peer-review

FinnForest dataset: A forest landscape for visual SLAM

Ali, I., Durmush, A., Suominen, O., Yli-Hietanen, J., Peltonen, S., Collin, J. & Gotchev, A., 2020, In : ROBOTICS AND AUTONOMOUS SYSTEMS. 132, 13 p., 103610.
Research output: Contribution to journal › Article › Scientific › peer-review

Probabilistic approach to physical object disentangling

Pajarinen, J., Arenz, O., Peters, J. & Neumann, G., 2020, In : IEEE Robotics and Automation Letters. 5, 4, p. 5510-5517 8 p.
Research output: Contribution to journal › Article › Scientific › peer-review

Multi-sensor next-best-view planning as matroid-constrained submodular maximization

Lauri, M., Pajarinen, J., Peters, J. & Frintrop, S., 2020, In : IEEE Robotics and Automation Letters. 5, 4, p. 5323-5330 8 p.
Research output: Contribution to journal › Article › Scientific › peer-review

UAV-Aided Interference Assessment for Private 5G NR Deployments: Challenges and Solutions

Urama, J., Wiren, R., Galinina, O., Kauppi, J., Hiltunen, K., Erkkilä, J., Chernogorov, F., Eteläaho, P., Heikkilä, M., Torsner, J., Andreev, S. & Valkama, M., 2020, In : IEEE Communications Magazine. 58, 8, p. 89-95 7 p.
Research output: Contribution to journal › Article › Scientific › peer-review

Empowering Heterogeneous Communication Data Links in General Aviation through mmWave Signals

Wang, W., Talvitie, J., Adamova, E. J., Fath, T., Korenciak, L., Valkama, M. & Lohan, E. S., 6 Dec 2019, In : IEEE Wireless Communications. 26, 6, p. 164-171 8 p., 8926332.

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, S., Tong, J., Lin, Y., Li, H. & Liu, Y., 1 Nov 2019, In : INFORMATION PROCESSING AND MANAGEMENT. 56, 6, 102082.

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

Deliberate or Instinctive? Proactive and Reactive Coping for Technostress

Pirkkalainen, H., Salo, M., Tarafdar, M. & Makkonen, M., 2 Oct 2019, In : Journal of Management Information Systems. 36, 4, p. 1179-1212 34 p.

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

DevOps in practice: A multiple case study of five companies

Lwakatare, L. E., Kilamo, T., Karvonen, T., Sauvola, T., Heikkilä, V., Itkonen, J., Kuvaja, P., Mikkonen, T., Oivo, M. & Lassenius, C., 1 Oct 2019, In : Information and Software Technology. 114, p. 217-230 14 p.

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, O., Seshadri, S., Karadayi, J., Riebling, E., Bunce, J., Cristia, A., Metze, F., Casillas, M., Rosemberg, C., Bergelson, E. & Soderstrom, M., 1 Oct 2019, In : Speech Communication. 113, p. 63-80 18 p.

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

Hermitian normalized Laplacian matrix for directed networks

Yu, G., Dehmer, M., Emmert-Streib, F. & Jodlbauer, H., 1 Aug 2019, In : Information Sciences. 495, p. 175-184 10 p.

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

Internet of Autonomous Vehicles: Architecture, Features, and Socio-Technological Challenges

Jameel, F., Chang, Z., Huang, J. & Ristaniemi, T., 1 Aug 2019, In : IEEE Wireless Communications. 26, 4, p. 21-29 9 p., 8809655.

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

High-performance SIMD implementation of the lattice-Boltzmann method on the Xeon Phi processor

Robertsén, F., Mattila, K. & Westerholm, J., 10 Jul 2019, In : Concurrency Computation. 31, 13, 16 p., e5072.

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, K., Petrov, V., Gupta, R., Lema, M. A., Galinina, O., Andreev, S., Koucheryavy, Y., Valkama, M., Pouttu, A. & Dohler, M., 1 Jun 2019, In : IEEE Communications Magazine. 57, 6, p. 100-106 7 p., 8694791.

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

Socially inspired relaying and proactive mode selection in mmWave vehicular communications

Moltchanov, D., Kovalchukov, R., Gerasimenko, M., Andreev, S., Koucheryavy, Y. & Gerla, M., 1 Jun 2019, In : IEEE Internet of Things Journal. 6, 3, p. 5172-5183 12 p.

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

Future of Ultra-Dense Networks Beyond 5G: Harnessing Heterogeneous Moving Cells

Andreev, S., Petrov, V., Dohler, M. & Yanikomeroglu, H., 1 Jun 2019, In : IEEE Communications Magazine. 57, 6, p. 66-92 27 p., 8722593.

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

Approximate robust output regulation of boundary control systems

Humaloja, J. P., Kurula, M. & Pounonen, L., Jun 2019, In : IEEE Transactions on Automatic Control. 64, 6, 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, V., Fodor, G., Kokkonen, J., Moltchanov, D., Lehtomäki, J., Andreev, S., Koucheryavy, Y., Juntti, M. & Valkama, M., Jun 2019, In : IEEE Wireless Communications. 26, 3, p. 146-153 8 p., 8722599.

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

Dense Moving Fog for Intelligent IoT: Key Challenges and Opportunities

Andreev, S., Petrov, V., Huang, K., Lema, M. A. & Dohler, M., 1 May 2019, In : IEEE Communications Magazine. 57, 5, p. 34-41 8 p., 8648449.

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

Effects of percutaneous transluminal angioplasty of superficial femoral artery on photoplethysmographic pulse transit times

Peltokangas, M., Suominen, V., Vakhitov, D., Korhonen, J., Verho, J., Mattila, V. M., Ronsi, P., Lekkala, J., Vehkaoja, A. & Oksala, N., May 2019, In : IEEE Journal of Biomedical and Health Informatics. 23, 3, p. 1058-1065

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

On the complexity of restoring corrupted colorings

De Biasi, M. & Lauri, J., May 2019, In : Journal of Combinatorial Optimization. 37, 4, p. 1150-1169 20 p.

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

Energy-efficient and high-precision control of hydraulic robots

Koivumäki, J., Zhu, W. H. & Mattila, J., 1 Apr 2019, In : Control Engineering Practice. 85, p. 176-193 18 p.

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

Employing Knowledge on Causal Relationship to Assist Multidisciplinary Design Optimization

Wu, D., Coatanea, E. & Wang, G. G., Apr 2019, In : Journal of Mechanical Design, Transactions of the ASME. 141, 4, 041402.

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

Layered approach for improving the quality of free-viewpoint depth-image-based rendering images

Smirnov, S., Battisti, F. & Gotchev, A., 27 Feb 2019, In : Journal of Electronic Imaging. 28, 1, 013049.

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

Iterative unsupervised domain adaptation for generalized cell detection from brightfield z-stacks

Liimatainen, K., Kananen, L., Latonen, L. & Ruusuvaori, P., 15 Feb 2019, In : BMC Bioinformatics. 20, 1, 80.

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

Challenges and recommended practices for software architecting in global software development

Sievi-Korte, O., Beecham, S. & Richardson, I., 1 Feb 2019, In : Information and Software Technology. 106, p. 234-253 20 p.

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

Towards detecting structural branching and cyclicity in graphs: A polynomial-based approach

Dehmer, M., Chen, Z., Emmert-Streib, F., Mowshowitz, A., Shi, Y., Tripathi, S. & Zhang, Y., 1 Jan 2019, In : Information Sciences. 471, p. 19-28 10 p.

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, Y. V. & Samouylov, K. E., 1 Jan 2019, In : Informatsionno-Upravliaiushchie Sistemy. 5, p. 51-63 13 p.

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, J., Malik, A., Koski, J. & Johri, A., 2019, In : International Journal of Human-Computer Interaction. 35, 9

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, E. T., Coatanéa, E., Wang, G. G., Lemu, H. G. & Wu, D., 2019, In : Engineering Optimization. 51, 7, 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, T. P., Raunonen, P. & Kangas, A., 2019, In : ISPRS Journal of Photogrammetry and Remote Sensing. 147, p. 294-306 13 p.

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., 2019, In : COMPUTATIONAL GEOSCIENCES.

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

Quality and Capacity Analysis of Molecular Communications in Bacterial Synthetic Logic Circuits

Martins, D. P., Barros, M. T. & Balasubramaniam, S., 2019, (Accepted/In press) In : IEEE Transactions on Nanobioscience.

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

DNA Molecular Storage System: Transferring Digitally Encoded Information through Bacterial Nanonetworks

Tavella, F., Giaretta, A., Dooley-Cullinane, T. M., Conti, M., Coffey, L. & Balasubramaniam, S., 2019, In : IEEE Transactions on Emerging Topics in Computing .

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

Positioning and Location-Aware Communications for Modern Railways with 5G New Radio

Talvitie, J., Levanen, T., Koivisto, M., Ihalainen, T., Pajukoski, K. & Valkama, M., 2019, In : IEEE Communications Magazine. 57, 9, p. 24-30 7 p.

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, V., Heywood, C., Christersson, M., Zhang, E. & Nenonen, S., 2019, In : Intelligent Buildings International.

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., 2019, In : COMPUTER METHODS IN BIOMECHANICS AND BIOMEDICAL ENGINEERING. 12 p.

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

Emptiness problems for distributed automata

Kuusisto, A. & Reiter, F., 2019, In : Information and Computation. 104503.

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, A., Dsouza, R., Muthirulan, V. & Sachidananda, K. H., 2019, In : Journal Europeen des Systemes Automatises. 52, 5, p. 429-437 9 p.

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

5G-U: Conceptualizing Integrated Utilization of Licensed and Unlicensed Spectrum for Future IoT

Lu, X., Petrov, V., Moltchanov, D., Andreev, S., Mahmoodi, T. & Dohler, M., 2019, In : IEEE Communications Magazine. 57, 7, p. 92-98 7 p., 8722595.

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

SCIP: a single-cell image processor toolbox

Martins, L., Neeli-Venkata, R., Oliveira, S. M. D., Häkkinen, A., Ribeiro, A. S. & Fonseca, J. M., 15 Dec 2018, In : *Bioinformatics*. 34, 24, p. 4318-4320 3 p.

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

A Portable Microscale Cell Culture System with Indirect Temperature Control

Mäki, A. J., Verho, J., Kreuzer, J., Rynnänen, T., Rajan, D., Pekkanen-Mattila, M., Ahola, A., Hyttinen, J., Aalto-Setälä, K., Lekkala, J. & Kallio, P., 1 Dec 2018, In : *SLAS Technology*. 23, 6, 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, H., Mäkinen, S., Kilamo, T., Mikkonen, T., Männistö, T. & Ritala, P., 1 Dec 2018, In : *Journal of Internet Services and Applications*. 9, 1, 17.

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

Active scanner control on paper machines

Raunio, J-P. & Ritala, R., 1 Dec 2018, In : *Journal of Process Control*. 72, p. 74-90 17 p.

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

Empirical Effects of Dynamic Human-Body Blockage in 60 GHz Communications

Slezak, C., Semkin, V., Andreev, S., Koucheryavy, Y. & Rangan, S., 1 Dec 2018, In : *IEEE Communications Magazine*. 56, 12, p. 60-66 7 p.

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

Benefits of Positioning-Aided Communication Technology in High-Frequency Industrial IoT

Lohan, E. S., Koivisto, M., Galinina, O., Andreev, S., Tölli, A., Destino, G., Costa, M., Leppänen, K., Koucheryavy, Y. & Valkama, M., 14 Nov 2018, In : *IEEE Communications Magazine*. 56, 12, p. 142-148 7 p., 8535084.

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

Chromatographic studies of n-Propyl Propionate: Adsorption equilibrium, modelling and uncertainties determination

Nogueira, I. B. R., Faria, R. P. V., Requião, R., Koivisto, H., Martins, M. A. F., Rodrigues, A. E., Loureiro, J. M. & Ribeiro, A. M., 2 Nov 2018, In : *Computers and Chemical Engineering*. 119, p. 371-382 12 p.

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

Computation of Dynamic Polarizabilities and van der Waals Coefficients from Path-Integral Monte Carlo

Tiihonen, J., Kylänpää, I. & Rantala, T. T., 2 Oct 2018, In : *Journal of Chemical Theory and Computation*. 14, p. 5750-5763 14 p.

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

Focus model for metric depth estimation in standard plenoptic cameras

Pertuz, S., Pulido-Herrera, E. & Kämäräinen, J-K., 1 Oct 2018, In : *ISPRS Journal of Photogrammetry and Remote Sensing*. 144, p. 38-47 10 p.

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

Graph measures with high discrimination power revisited: A random polynomial approach

Dehmer, M., Chen, Z., Emmert-Streib, F., Shi, Y. & Tripathi, S., 1 Oct 2018, In : *Information Sciences*. 467, p. 407-414 8 p.

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

Breaking the limits in urban video monitoring: Massive crowd sourced surveillance over vehicles

Petrov, V., Andreev, S., Gerla, M. & Koucheryavy, Y., 1 Oct 2018, In : *IEEE Wireless Communications*. 25, 5, p. 104-112 9 p.

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

Molecular Communications Pulse-based Jamming Model for Bacterial Biofilm Suppression

Martins, D. P., Leetanasaksakul, K., Barros, M. T., Thamchaipenet, A., Donnelly, W. & Balasubramaniam, S., Oct 2018, In : *IEEE Transactions on Nanobioscience*. 17, 4, p. 533-542 12 p.

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

Comparative analysis of tissue reconstruction algorithms for 3D histology

Kartasalo, K., Latonen, L., Vihinen, J., Visakorpi, T., Nykter, M. & Ruusuvaori, P., 1 Sep 2018, In : *Bioinformatics*. 34, 17, p. 3013-3021 9 p.

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

Intellectual capital and bi-tools in private healthcare value creation

Ratia, M., 1 Sep 2018, In : *Electronic Journal of Knowledge Management*. 16, 2, p. 143-154 12 p.

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

Nocturnal Heart Rate Variability Spectrum Characterization in Preschool Children with Asthmatic Symptoms

Milagro, J., Gil, E., Lazaro, J., Seppae, V. P., Malmberg, L. P., Pelkonen, A. S., Kotaniemi-Syrjanen, A., Makela, M., Viik, J. & Bailon, R., Sep 2018, In : *IEEE Journal of Biomedical and Health Informatics*. 22, 5, 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, M. R., Okamoto, Y., Okada, A., Närhi, M., Kangastupa, J. & Vihinen, J., 1 Aug 2018, In : *Journal of Materials Processing Technology*. 258, p. 180-188 9 p.

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

Summarization of User-Generated Sports Video by Using Deep Action Recognition Features

Tejero-de-Pablos, A., Nakashima, Y., Sato, T., Yokoya, N., Linna, M. & Rahtu, E., Aug 2018, In : *IEEE Transactions on Multimedia*. 20, 8, 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, S., Wirdatmadja, S. A., Barros, M. T., Koucheryavy, Y., Stachowiak, M. & Jornet, J. M., 1 Jul 2018, In : *IEEE Communications Magazine*. 56, 7, p. 218-224 7 p., 8419204.

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, S., Keinänen, P., Rätty, A., Ramakrishnan, K. R., Tuukkanen, S., Kunnari, V., Harlin, A., Vuorinen, J. & Kanerva, M., 20 Jun 2018, In : *International Journal of Molecular Sciences*. 19, 6, 1819.

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

Last Meter Indoor Terahertz Wireless Access: Performance Insights and Implementation Roadmap

Petrov, V., Kokkonen, J., Moltchanov, D., Lehtomäki, J., Koucheryavy, Y. & Juntti, M., 1 Jun 2018, In : *IEEE Communications Magazine*. 56, 6, p. 158-165 8 p.

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

Caching-Aided Collaborative D2D Operation for Predictive Data Dissemination in Industrial IoT

Orsino, A., Kovalchukov, R., Samuylov, A., Moltchanov, D., Andreev, S., Koucheryavy, Y. & Valkama, M., 1 Jun 2018, In : *IEEE Wireless Communications*. 25, 3, p. 50-57 8 p.

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

The effect of percutaneous transluminal angioplasty of superficial femoral artery on pulse wave features

Peltokangas, M., Suominen, V., Vakhitov, D., Verho, J., Korhonen, J., Lekkala, J., Vehkaoja, A. & Oksala, N., 1 May 2018, In : *Computers in Biology and Medicine*. 96, p. 274-282 9 p.

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

Backshoring of production in the context of a small and open Nordic economy

Heikkilä, J., Martinsuo, M. & Nenonen, S., May 2018, In : *Journal of Manufacturing Technology Management*. 29, 4, p. 658-675 19 p.

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

Wirelessly powered urban crowd sensing over wearables: Trading energy for data

Galinina, O., Mikhaylov, K., Huang, K., Andreev, S. & Koucheryavy, Y., 1 Apr 2018, In : IEEE Wireless Communications. 25, 2, p. 140-149 10 p.

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

Generic platform for manufacturing execution system functions in knowledge-driven manufacturing systems

Mohammed, W. M., Ramis Ferrer, B., Iarovyj, S., Negri, E., Fumagalli, L., Lobov, A. & Martinez Lastra, J. L., 4 Mar 2018, In : International Journal of Computer Integrated Manufacturing. p. 1-13 13 p.

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

Noise minimized high resolution digital holographic microscopy applied to surface topography

Achimova, E., Abaskin, V., Claus, D., Pedrini, G., Shevkunov, I. & Katkovnik, V., 1 Mar 2018, In : Computer Optics. 42, 2, p. 267-272 6 p.

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

Technologies for Efficient Amateur Drone Detection in 5G Millimeter-Wave Cellular Infrastructure

Solomitchii, D., Gapeyenko, M., Semkin, V., Andreev, S. & Koucheryavy, Y., 1 Jan 2018, In : IEEE Communications Magazine. 56, 1, p. 43-50 8 p.

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., 2018, In : Structural and Multidisciplinary Optimization. 57, 2, p. 579–593 15 p.

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

Effect of paint baking treatment on the properties of press hardened boron steels

Järvinen, H., Honkanen, M., Järvenpää, M. & Peura, P., 2018, In : Journal of Materials Processing Technology. 252, p. 90-104 15 p.

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

Robust Regulation of Infinite-Dimensional Port-Hamiltonian Systems

Humaloja, J-P. & Paunonen, L., 2018, In : IEEE Transactions on Automatic Control. 63, 5

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

Reduced Order Internal Models in the Frequency Domain

Laakkonen, P. & Paunonen, L., 2018, In : IEEE Transactions on Automatic Control. 63, 6, p. 1806-1812

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

A Primal Neural Network for Online Equality-Constrained Quadratic Programming

Chen, K. & Zhang, Z., 2018, In : Cognitive Computation. 10, 2, p. 381–388 8 p.

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

How to design gamification? A method for engineering gamified software

Morschheuser, B., Hassan, L., Werder, K. & Hamari, J., 2018, In : Information and Software Technology. 95, 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, J., Hassan, L. & Dias, A., 2018, In : User Modeling and User-Adapted Interaction. 28, 1, p. 35–74 40 p.

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

System-level analysis of IEEE 802.11ah technology for unsaturated MTC traffic

Ometov, A., Daneshfar, N., Hazmi, A., Andreev, S., Del Carpio, L. F., Amin, P., Torsner, J., Koucheryavy, Y. & Valkama, M., 2018, In : International Journal of Sensor Networks. 26, 4, p. 269-282 14 p.

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

Transmit Power Optimization and Feasibility Analysis of Self-backhauling Full-Duplex Radio Access Systems

Korpi, D., Riihonen, T., Sabharwal, A. & Valkama, M., 2018, In : IEEE Transactions on Wireless Communications. 17, 6, p. 4219-4236

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

On the degeneracy of the Randić entropy and related graph measures

Dehmer, M., Chen, Z., Mowshowitz, A., Jodlbauer, H., Emmert-Streib, F., Shi, Y., Tripathi, S. & Xia, C., 2018, In : Information Sciences.

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, B., Aïssa-El-Bey, A. & Al-Sa'd, M. F., 2018, In : SoftwareX. 8, 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, M., Emmert-Streib, F. & Shi, Y., 1 Dec 2017, In : Information Sciences. 418-419, p. 575-580 6 p.

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

How developers perceive smells in source code: A replicated study

Taibi, D., Janes, A. & Lenarduzzi, V., 1 Dec 2017, In : Information and Software Technology. 92, p. 223-235 13 p.

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

Fast Water Simulation Methods for Games

Kellomäki, T., 1 Dec 2017, In : Computers in Entertainment. 16, 1, 2.

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, R., Poojarı, C., Martinez-Seara, H., Rissanen, S., Lolicato, F., Róg, T. & Vattulainen, I., 23 Oct 2017, In : Journal of Chemical Information and Modeling. 57, 10, p. 2401-2406 6 p.

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, L., Paci, M., Brahmam, S. & Ghidoni, S., 1 Oct 2017, In : Expert Systems with Applications. 82, p. 27-39 13 p.

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

Highly unique network descriptors based on the roots of the permanent polynomial

Dehmer, M., Emmert-Streib, F., Hu, B., Shi, Y., Stefu, M. & Tripathi, S., 1 Oct 2017, In : Information Sciences. 408, p. 176-181 6 p.

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

Adaptive and nonlinear control of discharge pressure for variable displacement axial piston pumps

Koivumäki, J. & Mattila, J., 1 Oct 2017, In : Journal of Dynamic Systems, Measurement and Control: Transactions of the ASME. 139, 10, 101008.

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

On the Performance of Visible Light Communication Systems with Non-Orthogonal Multiple Access

Marshoud, H., Sofotasios, P. C., Muhaidat, S., Karagiannidis, G. K. & Sharif, B. S., 1 Oct 2017, In : IEEE Transactions on Wireless Communications. 16, 10, p. 6350-6364 15 p.

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, M., Keinänen, P. & Vuorinen, J., 1 Sep 2017, In : IEEE Transactions on Nanotechnology. 16, 5, p. 741-744 4 p.

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

Robust Output Regulation for Continuous-Time Periodic Systems

Paunonen, L., 1 Sep 2017, In : IEEE Transactions on Automatic Control. 62, 9, p. 4363-4375 13 p.

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, Q., Zhang, Y., Ni, W., Valkama, M. & Jantti, R., 1 Sep 2017, In : IEEE Transactions on Wireless Communications. 16, 9, p. 6264-6278 15 p.

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

Indirect NO_x emission monitoring in natural gas fired boilers

Korpela, T., Kumpulainen, P., Majanne, Y., Häyrynen, A. & Lautala, P., 1 Aug 2017, In : Control Engineering Practice. 65, p. 11-25 15 p.

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, S., Lloyd-Price, J., Ribeiro, A., Yli-Harja, O., Dehmer, M. & Emmert-Streib, F., 4 Jul 2017, In : BMC Bioinformatics. 18, 1, 325.

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

A Proxy-Based Solution for Asynchronous Telemedical Systems

Rauti, S., Lahtiranta, J., Parisod, H., Hyrynsalmi, S., Salanterä, S., Aromaa, M. E., Smed, J. & Leppänen, V., 1 Jul 2017, In : International Journal of E-health and Medical Communication. 8, 3, p. 70-83 14 p., 5.

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

The Fisher-Snedecor F Distribution: A Simple and Accurate Composite Fading Model

Yoo, S. K., Cotton, S. L., Sofotasios, P. C., Matthaiou, M., Valkama, M. & Karagiannidis, G. K., 1 Jul 2017, In : IEEE Communications Letters. 21, 7, p. 1661-1664 4 p.

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

CNN-based edge filtering for object proposals

Waris, M. A., Iosifidis, A. & Gabbouj, M., 2 Jun 2017, In : Neurocomputing. 266, 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., 1 Apr 2017, In : IEEE Transactions on Medical Imaging. 36, 4, p. 930-941 12 p., 7731161.

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

Neighborhood Matching for Image Retrieval

González-Díaz, I., Birinci, M., Díaz-De-María, F. & Delp, E. J., 1 Mar 2017, In : IEEE Transactions on Multimedia. 19, 3, p. 544-558 15 p.

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, V., Komarov, M., Moltchanov, D., Jornet, J. M. & Koucheryavy, Y., 1 Mar 2017, In : IEEE Transactions on Wireless Communications. 16, 3, p. 1791-1808 18 p.

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

Effects of Heterogeneous Mobility on D2D-and Drone-Assisted Mission-Critical MTC in 5G

Orsino, A., Ometov, A., Fodor, G., Moltchanov, D., Militano, L., Andreev, S., Yilmaz, O. N. C., Tirronen, T., Torsner, J., Araniti, G., Iera, A., Dohler, M. & Koucheryavy, Y., 1 Feb 2017, In : IEEE Communications Magazine. 55, 2, p. 79-87 9 p.

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

Benchmarking DFT methods with small basis sets for the calculation of halogen-bond strengths

Siiskonen, A. & Priimägi, A., 1 Feb 2017, In : Journal of Molecular Modeling. 23, 2, 50.

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

GSAR: Bioconductor package for Gene Set analysis in R

Rahmatallah, Y., Zybailov, B., Emmert-Streib, F. & Glazko, G., 24 Jan 2017, In : BMC Bioinformatics. 18, 1, 61.

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

Architectures and codecs for real-time light field streaming

Kovács, P. T., Zare, A., Balogh, T., Bregovic, R. & Gotchev, A., 1 Jan 2017, In : Journal of Imaging Science and Technology. 61, 1, 010403.

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

Using enterprise architecture artefacts in an organisation

Niemi, E. & Pekkola, S., 2017, In : Enterprise Information Systems. 11, 3, 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, P., Fan, L., Kämäräinen, J-K. & Gabbouj, M., 2017, In : Machine Vision and Applications. 28, 7, p. 679–694
16 p.

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

Nanodevice Arrays for Peripheral Nerve Fascicle Activation Using Ultrasound Energy-harvesting

Donohoe, M., Jennings, B., Jornet, J. M. & Balasubramaniam, S., 2017, In : IEEE Transactions on Nanotechnology. 16, 6, p. 919-930

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

Method for Simulating Dose Reduction in Digital Breast Tomosynthesis

Borges, L. R., Guerrero, I., Bakic, P. R., Foi, A., Maidment, A. D. A. & Vieira, M. A. C., 2017, In : IEEE Transactions on Medical Imaging. 36, 11, 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, A., Samuylov, A., Moltchanov, D., Andreev, S., Militano, L., Araniti, G. & Koucheryavy, Y., 2017, In : IEEE Wireless Communications. 24, 4, p. 14-22 9 p.

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., 2017, In : IEEE Transactions on Neural Systems and Rehabilitation Engineering. 26, 1, p. 37-44

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

Bayes Forest: A data-intensive generator of morphological tree clones

Potapov, I., Järvenpää, M., Åkerblom, M., Raunonen, P. & Kaasalainen, M., 2017, In : GigaScience. 6, 10, gix079.

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

Dynamic response to process disturbances—A comparison between TMB/SMB models in transient regime

Nogueira, I. B. R., Ribeiro, A. M., Rodrigues, A. E. & Loureiro, J. M., 2017, In : Computers and Chemical Engineering. 99, p. 230-244 15 p.

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

Visual decision support for business ecosystem analysis

Basole, R. C., Huhtamäki, J., Still, K. & Russell, M. G., 15 Dec 2016, In : Expert Systems with Applications. 65, p. 271-282
12 p.

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, S., Leppänen, M., Kilamo, T., Mattila, A-L., Laukkanen, E., Pagels, M. & Männistö, T., 1 Dec 2016, In : Information and Software Technology. 80, p. 1339-1351 13 p.

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

SamExploreR: Exploring reproducibility and robustness of RNA-seq results based on SAM files

Stupnikov, A., Tripathi, S., De Matos Simoes, R., McArt, D., Salto-Tellez, M., Glazko, G., Dehmer, M. & Emmert-Streib, F., 1 Nov 2016, In : Bioinformatics. 32, 21, p. 3345-3347 3 p.

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, P., Taylor, J., Chalabi, Z., Mavrogianni, A., Davies, M., Hamilton, I., Vardoulakis, S., Heaviside, C. & Macintyre, H., 1 Nov 2016, In : JOURNAL OF BUILDING PERFORMANCE SIMULATION. 9, 6, p. 606-619 14 p.

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

Image interpolation based on non-local geometric similarities and directional gradients

Zhu, S., Zeng, B., Zeng, L. & Gabbouj, M., 1 Sep 2016, In : IEEE Transactions on Multimedia. 18, 9, p. 1707-1719 13 p.

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

Full-duplex mobile device: Pushing the limits

Korpi, D., Tamminen, J., Turunen, M., Huusari, T., Choi, Y. S., Anttila, L., Talwar, S. & Valkama, M., 1 Sep 2016, In : IEEE Communications Magazine. 54, 9, p. 80-87 8 p.

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

Toward trusted, social-aware D2D connectivity: Bridging across the technology and sociality realms

Ometov, A., Orsino, A., Militano, L., Moltchanov, D., Araniti, G., Olshannikova, E., Fodor, G., Andreev, S., Olsson, T., Iera, A., Torsner, J., Koucheryavy, Y. & Mikkonen, T., 1 Aug 2016, In : IEEE Wireless Communications. 23, 4, p. 103-111 9 p.

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

Exploring synergy between communications, caching, and computing in 5G-grade deployments

Andreev, S., Galinina, O., Pyattaev, A., Hosek, J., Masek, P., Yanikomeroglu, H. & Koucheryavy, Y., 1 Aug 2016, In : IEEE Communications Magazine. 54, 8, p. 60-69 10 p.

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

Robust data reconciliation of combustion variables in multi-fuel fired industrial boilers

Korpela, T., Suominen, O., Majanne, Y., Laukkanen, V. & Lautala, P., 21 Jul 2016, In : Control Engineering Practice. 55, p. 101-115 15 p.

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

Fifty years of graph matching, network alignment and network comparison

Emmert-Streib, F., Dehmer, M. & Shi, Y., 10 Jun 2016, In : Information Sciences. 346-347, p. 180-197 18 p.

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

Visual Voice Activity Detection in the Wild

Patrona, F., Iosifidis, A., Tefas, A., Nikolaidis, N. & Pitas, I., 1 Jun 2016, In : IEEE Transactions on Multimedia. 18, 6, p. 967-977 11 p.

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, J., Honkakorpi, J., Tuominen, J., Mattila, J. & Visa, A., 1 Jun 2016, In : IEEE - ASME Transactions on Mechatronics. 21, 3, p. 1765-1774 10 p.

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

Characterizing rate limiting steps in transcription from RNA production times in live cells

Häkkinen, A. & Ribeiro, A. S., 1 May 2016, In : *Bioinformatics*. 32, 9, p. 1346-1352 7 p.

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

A unifying perspective on proximity-based cellular-assisted mobile social networking

Andreev, S., Hosek, J., Olsson, T., Johnsson, K., Pyattaev, A., Ometov, A., Olshannikova, E., Gerasimenko, M., Masek, P., Koucheryavy, Y. & Mikkonen, T., 1 Apr 2016, In : *IEEE Communications Magazine*. 54, 4, p. 108-116 9 p.

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

On feasibility of 5G-grade dedicated RF charging technology for wireless-powered wearables

Galinina, O., Tabassum, H., Mikhaylov, K., Andreev, S., Hossain, E. & Koucheryavy, Y., 1 Apr 2016, In : *IEEE Wireless Communications*. 23, 2, p. 28-37 10 p.

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

Detection of bubbles as concentric circular arrangements

Strokina, N., Matas, J., Eerola, T., Lensu, L. & Kälviäinen, H., Apr 2016, In : *Machine Vision and Applications*. 27, 3, p. 387-396 10 p.

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

Digital predistortion for mitigating spurious emissions in spectrally agile radios

Abdelaziz, M., Fu, Z., Anttila, L., Wyglinski, A. M. & Valkama, M., 1 Mar 2016, In : *IEEE Communications Magazine*. 54, 3, p. 60-69 10 p.

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

Highly dynamic spectrum management within licensed shared access regulatory framework

Ponomarenko-Timofeev, A., Pyattaev, A., Andreev, S., Koucheryavy, Y., Mueck, M. & Karls, I., 1 Mar 2016, In : *IEEE Communications Magazine*. 54, 3, p. 100-109 10 p.

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, M., Schneider, M., Baldauf, C. & Blum, V., 16 Feb 2016, In : *Scientific Data*. 3, 160009.

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

Graph Embedded Extreme Learning Machine

Iosifidis, A., Tefas, A. & Pitas, I., 2016, In : *IEEE Transactions on Cybernetics*. 46, 1, p. 311 - 324

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

Still image/video frame lossy compression providing a desired visual quality

Zemliachenko, A., Lukin, V., Ponomarenko, N., Egiazarian, K. & Astola, J., 2016, In : *Multidimensional Systems and Signal Processing*. 27, 3, p. 697-718

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

Digital storytelling promoting twenty-first century skills and student engagement

Niemi, H. & Multisilta, J., 2016, In : *Technology, Pedagogy and Education*. 25, 4, p. 451-468

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

HTML5-based mobile agents for Web-of-Things

Voutilainen, J. P., Mattila, A. L., Systä, K. & Mikkonen, T., 2016, In : *Informatica*. 40, 1, p. 43-51 9 p.

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

Brownfield Process: A method for modular product family development aiming for product configuration

Pakkanen, J., Juuti, T. & Lehtonen, T., 2016, In : *DESIGN STUDIES*. 45B, p. 210-241 32 p.

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

Metrics for polyphonic sound event detection

Mesaros, A., Heittola, T. & Virtanen, T., 2016, In : Applied Sciences. 6, 6, 162.
Research output: Contribution to journal › Article › Scientific › peer-review

Technoeconomical Analysis of Macrocell and Femtocell Based HetNet under Different Deployment Constraints

Yunas, S. F., Ansari, W. H. & Valkama, M., 2016, In : Mobile Information Systems. 2016, 6927678.
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, C-Q., Li, F-J. & Renfors, M., 26 Dec 2015, In : Eurasip Journal on Wireless Communications and Networking. 2015, 1, 119.
Research output: Contribution to journal › Article › Scientific › peer-review

Polynomial Input-Output Stability for Linear Systems

Paunonen, L. & Laakkonen, P., 1 Oct 2015, In : IEEE Transactions on Automatic Control. 60, 10, p. 2797-2802 6 p.
Research output: Contribution to journal › Article › Scientific › peer-review

Analytical model for magnetic anisotropy of non-oriented steel sheets

Martin, F., Singh, D., Belahcen, A., Rasilo, P., Haavisto, A. & Arkkio, A., 7 Sep 2015, In : COMPEL: The International Journal for Computation and Mathematics in Electrical and Electronic Engineering. 34, 5, p. 1475-1488 14 p.
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, S. B., Rasilo, P., Belahcen, A. & Arkkio, A., 7 Sep 2015, In : COMPEL: The International Journal for Computation and Mathematics in Electrical and Electronic Engineering. 34, 5, p. 1501-1510 10 p.
Research output: Contribution to journal › Article › Scientific › peer-review

DropELM: Fast neural network regularization with Dropout and DropConnect

Iosifidis, A., Tefas, A. & Pitas, I., 25 Aug 2015, In : Neurocomputing. 162, p. 57-66 10 p.
Research output: Contribution to journal › Article › Scientific › peer-review

Distance-based human action recognition using optimized class representations

Iosifidis, A., Tefas, A. & Pitas, I., 5 Aug 2015, In : Neurocomputing. 161, p. 47-55 9 p.
Research output: Contribution to journal › Article › Scientific › peer-review

Stability-Guaranteed Force-Sensorless Contact Force/Motion Control of Heavy-Duty Hydraulic Manipulators

Koivumäki, J. & Mattila, J., 1 Aug 2015, In : IEEE Transactions on Robotics. 31, 4, p. 918-935 18 p.
Research output: Contribution to journal › Article › Scientific › peer-review

Effective variable switching point predictive current control for ac low-voltage drives

Stolze, P., Karamanakos, P., Kennel, R., Manias, S. & Endisch, C., 3 Jul 2015, In : International Journal of Control. 88, 7, p. 1366-1378 13 p.
Research output: Contribution to journal › Article › Scientific › peer-review

Railway fastener inspection by real-time machine vision

Aytekin, C., Rezaeitabar, Y., Dogru, S. & Ulusoy, I., 1 Jul 2015, In : IEEE Transactions on Systems, Man, and Cybernetics: Systems. 45, 7, p. 1101-1107 7 p.
Research output: Contribution to journal › Article › Scientific › peer-review

A robust AMMI model for the analysis of genotype-by-environment data

Rodrigues, P. C., Monteiro, A. & Lourenço, V. M., 1 Jul 2015, In : Bioinformatics. 32, 1, p. 58-66 9 p.
Research output: Contribution to journal › Article › Scientific › peer-review

Planar monopole antennas on substrates fabricated through an additive manufacturing process

Saintsing, C. D., Yu, K., Qi, H. J. & Tentzeris, M., 19 Jun 2015, In : IEEE Radio and Wireless Symposium, RWS. 2015-June, June, p. 159-161 3 p., 7129744.

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

Long-term epileptic EEG classification via 2D mapping and textural features

Samiee, K., Kiranyaz, S., Gabbouj, M. & Saramäki, T., 8 Jun 2015, In : Expert Systems with Applications. 42, 20, p. 7175-7185 11 p.

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, R. D., Dalleau, S., Williamson, K. E. & Emmert-Streib, F., 14 May 2015, In : BMC Systems Biology. 9, 21.

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, M., Korpi, D., Huusari, T., Antonio-Rodríguez, E., Venkatasubramanian, S., Riihonen, T., Anttila, L., Icheln, C., Haneda, K., Wichman, R. & Valkama, M., 1 May 2015, In : IEEE Communications Magazine. 53, 5, p. 91-101 11 p.

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

Multistep reactions of water with small Pd_n clusters: A first principles study

Liang, Y., Ma, L., Wang, J. & Wang, G., 1 May 2015, In : Journal of Theoretical and Computational Chemistry. 14, 3, 1550017.

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

The internet of Bio-Nano things

Akyildiz, I. F., Pierobon, M., Balasubramaniam, S. & Koucheryavy, Y., 1 Mar 2015, In : IEEE Communications Magazine. 53, 3, p. 32-40 9 p.

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

Designing controllers with reduced order internal models

Paunonen, L., 1 Mar 2015, In : IEEE Transactions on Automatic Control. 60, 3, p. 775-780 6 p., 6826480.

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

Task-based information interaction evaluation: The viewpoint of program theory

Järvelin, K., Vakkari, P., Arvola, P., Baskaya, F., Järvelin, A., Kekäläinen, J., Keskustalo, H., Kumpulainen, S., Saastamoinen, M., Savolainen, R. & Sormunen, E., 1 Mar 2015, In : ACM Transactions on Information Systems. 33, 1, 3.

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

Communication challenges in high-density deployments of wearable wireless devices

Pyattaev, A., Johnsson, K., Andreev, S. & Koucheryavy, Y., 1 Feb 2015, In : IEEE Wireless Communications. 22, 1, p. 12-18 7 p.

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

Fault tolerant control architecture design for mobile manipulation in scientific facilities

M. Aref, M., Oftadeh, R., Ghabcheloo, R. & Mattila, J., 29 Jan 2015, In : international Journal of Advanced Robotic Systems. 12, 4

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

Estimation of GFP-tagged RNA numbers from temporal fluorescence intensity data

Häkkinen, A. & Ribeiro, A. S., 1 Jan 2015, In : Bioinformatics. 31, 1, p. 69-75 7 p.

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

Spectral and energy efficiency of ultra-dense networks under different deployment strategies

Yunas, S., Valkama, M. & Niemelä, J., 1 Jan 2015, In : IEEE Communications Magazine. 53, 1, p. 90-100 11 p.

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

The assessment of constructability: BIM cases

Tauriainen, M. K., Puttonen, J. A. & Saari, A. J., 1 Jan 2015, In : Journal of Information Technology in Construction. 20, p. 51-67 17 p.

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

Distant speech separation using predicted time-frequency masks from spatial features

Pertilä, P. & Nikunen, J., 2015, In : *Speech Communication*. 68, p. 97-106 10 p.

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

Extreme learning machine based supervised subspace learning

Iosifidis, A., 2015, In : *Neurocomputing*. 167, p. 158–164 7 p.

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

Hyrnsalmi, S., Seppänen, M., Aarikka-Stenroos, L., Suominen, A., Järveläinen, J. & Harkke, V., 2015, In : *Journal of Theoretical and Applied Electronic Commerce Research*. 10, 2, p. 1-18 18 p.

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

Smart home gateway system over Bluetooth low energy with wireless energy transfer capability

Galina, O., Mikhaylov, K., Andreev, S., Turlikov, A. & Koucheryavy, Y., 2015, In : *Eurasip Journal on Wireless Communications and Networking*. 2015, 1, 178.

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

Uncertainty propagation of iron loss from characterization measurements to computation of electrical machines

Belahcen, A., Rasilo, P., Nguyen, T. T. & Clénet, S., 2015, In : *COMPEL: The International Journal for Computation and Mathematics in Electrical and Electronic Engineering*. 34, 3, p. 624-636 13 p.

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

Organisational knowledge flows and structural change the case of dispersed education organizations

Laihonen, H. & Sysnummi, P., 2015, In : *International Journal of Knowledge Management Studies*. 6, 3, p. 247-260 14 p.

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

Class-Specific Reference Discriminant Analysis With Application in Human Behavior Analysis

Iosifidis, A., Tefas, A. & Pitas, I., 25 Dec 2014, In : *IEEE Transactions on Human-Machine Systems*. 45, 3, p. 315-326

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

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

Iosifidis, A., Tefas, A. & Pitas, I., 5 Dec 2014, In : *Neurocomputing*. 145, p. 250-262 13 p.

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

Comparative evaluation of gene set analysis approaches for RNA-Seq data

Rahmatallah, Y., Emmert-Streib, F. & Glazko, G., 5 Dec 2014, In : *BMC Bioinformatics*. 15, 1, 397.

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, H., Jokinen, J. P. P. & Pawlowski, J. M., 1 Oct 2014, In : *IEEE Transactions on Learning Technologies*. 7, 4, p. 388-400 13 p., 6823168.

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

Density functional theory study of transition metals doped B₈₀ fullerene

Wang, J., Ma, L., Liang, Y., Gao, M. & Wang, G., 22 Sep 2014, In : *Journal of Theoretical and Computational Chemistry*. 13, 6, 1450050.

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

Analysis of a city-region from the knowledge perspective: Tampere, Finland

Yigitcanlar, T., Lönnqvist, A. & Saloniemi, H., 5 Aug 2014, In : *VINE*. 44, 3, p. 445-466 22 p.

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

An enumeration-based model predictive control strategy for the cascaded H-bridge multilevel rectifier

Karamanakos, P., Pavlou, K. & Manias, S., Jul 2014, In : IEEE Transactions on Industrial Electronics. 61, 7, p. 3480-3489 10 p.

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

NetBioV: An R package for visualizing large network data in biology and medicine

Tripathi, S., Dehmer, M. & Emmert-Streib, F., 2 Apr 2014, In : Bioinformatics. 30, 19, p. 2834-2836 3 p.

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

The emerging application ecosystems: An introductory analysis of android ecosystem

Hyrnsalmi, S., Suominen, A., Mäkilä, T. & Knuutila, T., 1 Apr 2014, In : INTERNATIONAL JOURNAL OF E-BUSINESS RESEARCH. 10, 2, p. 61-81 21 p.

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

System integration for real-time mobile manipulation

Oftadeh, R., Aref, M. M., Ghabcheloo, R. & Mattila, J., 28 Mar 2014, In : international Journal of Advanced Robotic Systems. 11, 1, 51.

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

A computational approach to construct a multivariate complete graph invariant

Dehmer, M., Emmert-Streib, F. & Grabner, M., 1 Mar 2014, In : Information Sciences. 260, p. 200-208 9 p.

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

Gene Sets Net Correlations Analysis (GSNCA): A multivariate differential coexpression test for gene sets

Rahmatallah, Y., Emmert-Streib, F. & Glazko, G., 1 Feb 2014, In : Bioinformatics. 30, 3, p. 360-368 9 p.

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

Functional and genetic analysis of the colon cancer network.

Emmert-Streib, F., de Matos Simoes, R., Glazko, G., McDade, S., Haibe-Kains, B., Holzinger, A., Dehmer, M. & Campbell, F., 2014, In : BMC Bioinformatics. 15, Suppl 6, S6.

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

Maturity assessment for implementing and using product lifecycle management in project-oriented engineering companies

Kärkkäinen, H., Myllärniemi, J., Okkonen, J. & Silventoinen, A., 2014, In : International Journal of Electronic Business. 11, 2, p. 176-198 23 p.

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

Transparency of intentions decreases privacy concerns in ubiquitous surveillance

Oulasvirta, A., Suomalainen, T., Hamari, J., Lampinen, A. & Karvonen, K., 2014, In : CYBERPSYCHOLOGY BEHAVIOR AND SOCIAL NETWORKING. 17, 10

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

Learning sparse representations for view-independent human action recognition based on fuzzy distances

Iosifidis, A., Tefas, A. & Pitas, I., 9 Dec 2013, In : Neurocomputing. 121, p. 344-353 10 p.

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

Netmes: Assessing gene network inference algorithms by network-based measures

Altay, G., Kurt, Z., Dehmer, M. & Emmert-Streib, F., 7 Dec 2013, In : Evolutionary Bioinformatics. 10

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

Social Network Games: Players' Perspectives

Paavilainen, J., Hamari, J., Stenros, J. & Kinnunen, J., Dec 2013, In : SIMULATION AND GAMING. 44, 6, p. 794-820 27 p.

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

[COMMODE] a large-scale database of molecular descriptors using compounds from PubChem

Dander, A., Mueller, L. A. J., Gallasch, R., Pabinger, S., Emmert-Streib, F., Graber, A. & Dehmer, M., 13 Nov 2013, In : Source Code for Biology and Medicine. 8, 22.

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, F., Nguyen, P. H., Kalimeri, M. & Derreumaux, P., 8 Oct 2013, In : Journal of Chemical Theory and Computation. 9, 10, p. 4574-4584 11 p.

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

Comparison of Saltation, Amplitude Modulation, and a Hybrid Method of Vibrotactile Stimulation

Raisamo, J., Raisamo, R. & Surakka, V., Oct 2013, In : IEEE Transactions on Haptics. 6, 4, p. 517-521 5 p., 6517847.

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

Transfer learning using a nonparametric sparse topic model

Faisal, A., Gillberg, J., Leen, G. & Peltonen, J., 18 Jul 2013, In : Neurocomputing. 112, p. 124-137 14 p.

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, J., Jul 2013, In : Electronic Commerce Research and Applications. 12, 4, p. 236-245 10 p.

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, S., Sallisalimi, M., Pettilä, V., Oksala, N. & Tenhunen, J., Apr 2013, In : Computer Methods and Programs in Biomedicine. 110, 1, p. 38-47 10 p.

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

Using building simulation to model the drying of flooded building archetypes

Taylor, J., Biddulph, P., Davies, M., Ridley, I., Mavrogianni, A., Oikonomou, E. & Lai, K. M., 1 Mar 2013, In : JOURNAL OF BUILDING PERFORMANCE SIMULATION. 6, 2, p. 119-140 22 p.

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

Magnetomechanical coupled FE simulations of rotating electrical machines

Belahcen, A., Fonteyn, K., Kouhia, R., Rasilo, P. & Arkkio, A., 2013, In : COMPEL: The International Journal for Computation and Mathematics in Electrical and Electronic Engineering. 32, 5, p. 1484-1499 16 p., 17095978.

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

Multidimensional sequence classification based on fuzzy distances and discriminant analysis

Iosifidis, A., Tefas, A. & Pitas, I., 2013, In : IEEE Transactions on Knowledge and Data Engineering. 25, 11, p. 2564-2575 12 p.

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

On the optimal class representation in linear discriminant analysis

Iosifidis, A., Tefas, A. & Pitas, I., 2013, In : IEEE Transactions on Neural Networks and Learning Systems. 24, 9, p. 1491-1497 7 p.

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, Z., Le, T., Song, X., Yao, Y., Li, Z., Moon, K. S., Tentzeris, M. M. & Wong, C. P., 2013, In : Journal of Electronic Packaging. 135, 1, 011001.

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

Inkjet printing of radio frequency electronics: Design methodologies and application of novel nanotechnologies

Le, T., Lin, Z., Vyas, R., Lakafosis, V., Yang, L., Traille, A., Tentzeris, M. M. & Wong, C. P., 2013, In : Journal of Electronic Packaging. 135, 1, 011007.

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

Bio-inspired service management framework: Green data-centres case study

Carroll, R., Balasubramaniam, S., Suzuki, J., Lee, C., Donnelly, W. & Botvich, D., 2013, In : International Journal of Grid and Utility Computing. 4, 4, p. 278-292 15 p.

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., Dec 2012, In : Bioinformatics. 28, 23, p. 3073-3080 8 p.

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

Implementation of a direct procedure for critical point computations using preconditioned iterative solvers

Kouhia, R., Tuma, M., Mäkinen, J., Fedoroff, A. & Marjamäki, H., Oct 2012, In : Computers & Structures. 108-109, p. 110-117 8 p.

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