

**First principles prediction of the solar cell efficiency of chalcopyrite materials  $\text{AgMX}_2$  (M=In, Al; X=S, Se, Te)**

Dongho-Nguimdo, G. M., Igumbor, E., Zambou, S. & Joubert, D. P., 1 Dec 2019, In : *Computational Condensed Matter*. 21, e00391.

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

**Automatization and stress analysis data of CoCr laser weld fatigue tests**

Kanerva, M., Besharat, Z., Pärnänen, T., Jokinen, J., Honkanen, M., Sarlin, E., Göthelid, M. & Schlenzka, D., 1 Oct 2019, In : *Data in Brief*. 26, 104374.

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

**DroneRF dataset: A dataset of drones for RF-based detection, classification and identification**

Allahham, MHD. S., Al-Sa'd, M. F., Al-Ali, A., Mohamed, A., Khattab, T. & Erbad, A., 1 Oct 2019, In : *Data in Brief*. 26, 104313.

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

**Participatory service design and community involvement in designing future-ready sustainable learning landscapes**

Sandström, N., Nevgi, A. & Nenonen, S., 2 Sep 2019, *SBE 19 - Emerging Concepts for Sustainable Built Environment 22–24 May 2019, Helsinki, Finland*. IOP Publishing, (IOP Conference Series: Earth and Environmental Science; vol. 297).

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

**Discovering collaborative and inclusive solutions to co-create multidimensional value in cross-sector collaboration**

Vuori, V., Bor, S., Polsa, P., Käpylä, J. & Helander, N., Sep 2019, *Proceedings of the 11th International Joint Conference on Knowledge Discovery, Knowledge Engineering and Knowledge Management: 17-19 September, 2019, Vienna, Austria*. SCITEPRESS, p. 364-369 6 p. (IC3K 2019 - Proceedings of the 11th International Joint Conference on Knowledge Discovery, Knowledge Engineering and Knowledge Management; vol. 3).

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

**Research-industry collaboration: a review of the literature on evaluation methods and motivations**

Solodko, A., Mäkinen, S., Lasheras, N. C., Bedolla, J. S. & Saari, U., 29 Aug 2019, *PICMET 2019 Conference: August 25-29, 2019, Portland, Oregon, USA*. Portland, 7 p. 19R0108

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

**Enabling cybersecurity incident reporting and coordinated handling for maritime sector**

Silverajan, B. & Vistiaho, P., 1 Aug 2019, *2019 14th Asia Joint Conference on Information Security, AsiaJCIS 2019*. IEEE, p. 88-95 8 p.

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

**Profile extraction and deep autoencoder feature extraction for elevator fault detection**

Mishra, K., Krogerus, T. & Huhtala, K., 28 Jul 2019, *16th International Conference on Signal Processing and Multimedia Applications: SIGMAP 2019, 26-28 July, 2019, Prague, Czech Republic*. Callegari, C. (ed.). 2019 ed. Prague, Czech Republic: SCITEPRESS, Vol. 16. p. 313-320 8 p.

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

**Empirical study of good, bad and ugly modular engineering solutions in machinery manufacturing industry**

Juuti, T., Pakkanen, J. & Lehtonen, T., 26 Jul 2019, *Proceedings of the Design Society: International Conference on Engineering Design: The 22nd International Conference on Engineering Design, ICED19, Delft, The Netherlands, 5-8 August 2019*. Cambridge University Press, p. 2981-2990 10 p. (Proceedings of the Design Society: International Conference on Engineering Design).

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

**Actors' agency in the routines of innovation project portfolio management**

Martinsuo, M. & Vuorinen, L., 26 Jun 2019, *Proceedings of the EURAM European Academy of Management Conference 2019: 26-28 June 2019, Lisbon, Portugal*. European Academy of Management, EURAM, 26 p. (EURAM conference).

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

### **Diffusion of innovation: Case of co-design of cabins in mobile work machine industry**

Ellman, A. & Tiainen, T., 1 Jun 2019, In : *Computers*. 8, 2, 39.

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

### **Knowledge management practices to overcome network-level knowledge barriers: an artificial intelligence powered literature review**

Vuori, V. & Helander, N., Jun 2019, *Proceedings of International Forum on Knowledge Asset Dynamics 2019: 5-7 June 2019, Matera, Italy*. (IFKAD Proceedings eBooks).

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

### **Normalization of deviance in the construction industry, a managerial perspective**

Hajikazemi, S., Ahola, T., Aaltonen, K., Aarseth, W. & Andersen, B., Jun 2019, *European Academy of Management Conference 2019, EURAM: 26-28 June, Lissabon, Portugal*. (European academy of management annual conference).

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

### **The circular economy of projects**

Ahola, T. & Martinsuo, M., Jun 2019, *European Academy of Management Conference EURAM 2019: 26-28 June, Lisbon, Portugal*. (European academy of management annual conference).

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

### **Double-side pumped membrane external-cavity surface-emitting laser (MECSEL) with increased efficiency emitting > 3 W in the 780 nm region**

Kahle, H., Phung, H-M., Penttinen, J-P., Rajala, P., Tukiainen, A., Ranta, S. & Guina, M., 1 May 2019, *2019 Conference on Lasers and Electro-Optics, CLEO 2019 - Proceedings*. IEEE

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

### **Frequency Comb Generation in a Continuous-Wave Pumped Second-Order Nonlinear Waveguide Resonator**

Abdallah, Z., Stefszky, M., Ulvila, V., Silberhorn, C. & Vainio, M., 1 May 2019, *2019 Conference on Lasers and Electro-Optics, CLEO 2019 - Proceedings*. IEEE

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

### **High-Q resonance train in a plasmonic metasurface**

Saad-Bin-Alam, M., Reshef, O., Huttunen, M. J., Carlow, G., Sullivan, B., Menard, J. M., Dolgaleva, K. & Boyd, R. W., 1 May 2019, *2019 Conference on Lasers and Electro-Optics, CLEO 2019 - Proceedings*. IEEE

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

### **Optical Frequency Comb Photoacoustic Spectroscopy**

Sadieq, I., Mikkonen, T., Vainio, M., Toivonen, J. & Foltynowicz, A., 1 May 2019, *2019 Conference on Lasers and Electro-Optics, CLEO 2019 - Proceedings*. IEEE

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

### **A Semantic Meta-Model Repository for Lightweight M2M**

Silverajan, B., Zhao, H. & Kamath, A., 11 Apr 2019, *2018 IEEE International Conference on Communication Systems, ICCS 2018*. IEEE, p. 468-472 5 p.

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

### **Muovipäälysteisten lattioiden vaurioituminen kosteuden vaikutuksesta**

Leivo, V., Sarlin, E., Suonketo, J., Pikkuvirta, J. & Pentti, M., 14 Mar 2019, *Sisäilmastoseminaari 2019: 14.3.2019 : Sisäilmayhdistys raportti 37*. SIY SISÄILMATIETO OY, p. 383-388 6 p. (SIY Raportti; no. 37).

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

### **Large mode area double clad ytterbium tapered fiber with circular birefringency**

Rissanen, J., Fedotov, A., Noronen, T., Gumenyuk, R., Chamorovskii, Y., Kolosovskii, A., Voloshin, V., Vorobev, I., Odnoblyudov, M. & Filippov, V., 7 Mar 2019, *Proceedings of SPIE : Fiber Lasers XVI: Technology and Systems*. Carter, A. L. & Dong, L. (eds.). SPIE-INT SOC OPTICAL ENGINEERING, 8 p. (Proceedings of SPIE; vol. 10897).

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

#### **Analysis of upconversion nanoparticles as an active medium for upconversion light sources**

Fedotov, A., Pominova, D., Orlovskaya, E., Orlovskii, Y., Niemi, T. & Gumenyuk, R., 1 Mar 2019, *Proceedings of SPIE: Optical Components and Materials XVI*. S P I E - International Society for Optical Engineering, Vol. 10914. 9 p. 109140R. (Proceedings of SPIE : the International Society for Optical Engineering; vol. 10914).

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

#### **Accurate impedance model of grid-connected inverter for small-signal stability assessment in high-impedance grid**

Messo, T., Roinila, T., Aapro, A. & Luhtala, R., 1 Feb 2019, (Accepted/In press) In : *IEEE JOURNAL OF INDUSTRY APPLICATIONS*. 8, 3, 3.

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

#### **1.3µm U-bend traveling wave SOA devices for high efficiency coupling to silicon photonics**

Viherialä, 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

#### **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

#### **405-nm pumped Ce<sup>3+</sup>-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

#### **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

#### **A model for profiling information and knowledge management in the public sector**

Jääskeläinen, A., Sillanpää, V. & Helander, N., 2019, *Proceedings of 14th IFKAD 2019 conference: Matera, Italy, 5-7 June*. (Proceedings IFKAD).

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

#### **Business intelligence process model revisited**

Hellsten, P. & Myllärniemi, J., 2019, *IC3K 2019 - Proceedings of the 11th International Joint Conference on Knowledge Discovery, Knowledge Engineering and Knowledge Management*. Bernardino, J., Salgado, A. & Filipe, J. (eds.). SCITEPRESS, p. 341-348 8 p. (IC3K 2019 - Proceedings of the 11th International Joint Conference on Knowledge Discovery, Knowledge Engineering and Knowledge Management; vol. 3).

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

#### **Challenges in developing data-based value creation**

Myllärniemi, J., Helander, N. & Pekkola, S., 2019, *IC3K 2019 - Proceedings of the 11th International Joint Conference on Knowledge Discovery, Knowledge Engineering and Knowledge Management*. Bernardino, J., Salgado, A. & Filipe, J. (eds.). SCITEPRESS, p. 370-376 7 p. (IC3K 2019 - Proceedings of the 11th International Joint Conference on Knowledge

Discovery, Knowledge Engineering and Knowledge Management; vol. 3).

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

#### **Dynamics of value in technology inspired value co-creation: Case in homecare value network**

Tiitola, V., Korhonen, T., Laine, T. & Lyly-Yrjänäinen, J., 2019, *14th IFKAD 2019 Proceedings: 5-7 June 2019, Matera, Italy*. IKAM Centro Studi & Ricerche, (PROCEEDINGS IFKAD).

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

#### **Farm detection based on deep convolutional neural nets and semi-supervised green texture detection using VIS-NIR satellite image**

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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

#### **Mean and variability in RNA polymerase numbers are correlated to the mean but not the variability in size and composition of Escherichia coli cells**

Almeida, B., Chauhan, V., Kandavalli, V. & Ribeiro, A., 2019, *BIOINFORMATICS 2019 - 10th International Conference on Bioinformatics Models, Methods and Algorithms, Proceedings; Part of 12th International Joint Conference on Biomedical Engineering Systems and Technologies, BIOSTEC 2019*. De Maria, E., Gamboa, H. & Fred, A. (eds.). SCITEPRESS, p. 226-233 8 p.

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

#### **Modelling the stressed skin effect by using shell elements with meta-material model**

Pajunen, S., Hautala, J. & Heinisuo, M., 2019, In : *Magazine of Civil Engineering*. 86, 2, p. 20-29 10 p.

Research output: Contribution to journal › Article › 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

#### **Random lasing control with optical spatial solitons in nematic liquid crystals**

Piccardi, A., Perumbilavil, S., Kauranen, M., Strangi, G. & Assanto, G., 2019, *PHOTOPTICS 2019 - Proceedings of the 7th International Conference on Photonics, Optics and Laser Technology*. Ribeiro, P., Raposo, M. & Andrews, D. (eds.). SCITEPRESS, p. 289-293 5 p.

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

#### **Revisiting gray pixel for statistical illumination estimation**

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

#### **Single exposure lensless subpixel phase imaging**

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

#### **Smartphone teleoperation for self-balancing telepresence robots**

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

#### **Teacher's Perceptions and Readiness to Teach Coding Skills: A Comparative Study Between Finland, Mainland China, Singapore, Taiwan, and South Korea**

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

#### **Experimental moment resistance of rectangular hollow section T joints**

Garifullin, M., 5 Dec 2018, In : *MATEC Web of Conferences*. 245, 08003.

Research output: Contribution to journal › Conference article › Scientific › peer-review

#### **Industrialization of hybrid and additive manufacturing-Implementation to Finnish industry (HYBRAM)**

Riipinen, T., Kujanpää, V., Komi, E., Kilpeläinen, P., Savolainen, M., Puukko, P., Vihinen, J., Coatanea, E. & Mokhtarian, H., 26 Nov 2018, VTT Technical Research Centre of Finland. 66 p. (Research Reports)

Research output: Book/Report › Commissioned report › Professional

#### **Performance Enhancement Of Optimized Link State Routing Protocol For Health Care Applications In Wireless Body Area Networks**

Chetan Kumar, V., Shiva Prakash, S. P. & Balandin, S., Nov 2018, *2018 23rd Conference of Open Innovations Association (FRUCT)*. IEEE, p. 195-203 9 p.

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

#### **Tutkimuskatsaus: Uusia menetelmiä haavan paranemisen arviointiin ja seurantaan**

Translated title of the contribution: : Scientific review: New methods for assessment and monitoring of chronic wounds

Kekonen, A., Bergelin, M. & Viik, J., 20 Oct 2018, In : *HAAVA*. 20, 3, p. 30-32 3 p.

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

#### **The Effects of Product Line Length on Firm Performance**

Kirjavainen, J., Mäkinen, S. & Sommarberg, M., 8 Oct 2018, *2018 Portland International Conference on Management of Engineering and Technology (PICMET)*. IEEE, 5 p.

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

#### **Social capital characteristics in RD project networks**

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

#### **Technopreneurial Characteristics Rising from the Ashes of Creative Destruction**

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

#### **Analysis of User Exploration Patterns during Scene Cuts in Omnidirectional Videos**

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

#### **Long-term monitoring of acute wound healing from beneath the primary wound dressings**

Kekonen, A., Bergelin, M., Eriksson, J-E., Vesa, M., Johansson, M. & Viik, J., Oct 2018, *2018 16th Biennial Baltic Electronics Conference (BEC)*. IEEE, 4 p.

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

#### **Glove-integrated slotted patch antenna for wearable UHF RFID reader**

Ahmed, S., Musfequr Rehman, S. M., Ukkonen, L. & Björninen, T., 26 Sep 2018, *2018 IEEE International Conference on RFID Technology & Application (RFID-TA)*. IEEE, 4 p.

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

#### **Referenced backscattering compression level indicator based on passive UHF RFID tags**

Qureshi, S., Björninen, T. & Virkki, J., 26 Sep 2018, *2018 IEEE International Conference on RFID Technology & Application (RFID-TA)*. IEEE, 3 p.

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

#### **RF energy harvesting system with RFID-enabled charge storage monitoring**

Pournoori, N., Khan, W., Ukkonen, L. & Björninen, T., 26 Sep 2018, *2018 IEEE International Conference on RFID Technology & Application (RFID-TA)*. IEEE, 4 p.

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#### **Constrained Long-Horizon Direct Model Predictive Control for Synchronous Reluctance Motor Drives**

Ortombina, L., Liegmann, E., Karamanakos, P., Tinazzi, F., Zigliotto, M. & Kennel, R., 10 Sep 2018, *2018 IEEE 19th Workshop on Control and Modeling for Power Electronics, COMPEL 2018*. IEEE, 8 p. 8460173

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

#### **2D Video Coding of Volumetric Video Data**

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

#### **Evaluation of Median Root Prior for Robust In-Beam PET Reconstruction**

Us, D., Brzezinski, K., Buitenhuis, T., Dendooven, P. & Ruotsalainen, U., 5 Sep 2018, In : *IEEE Transactions on Radiation and Plasma Medical Sciences*. 2, 5, p. 490-498 8 p.

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

#### **Web User Interface Implementation Technologies: An Underview**

Taivalsaari, A., Mikkonen, T., Systä, K. & Pautasso, C., 5 Sep 2018, *14th International Conference on Web Information Systems and Technologies*. SCITEPRESS, p. 127-136 10 p.

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

#### **Fabrication and Practical Evaluation of Glove-integrated Passive UHF RFID Tags**

Chen, X., He, H., Ukkonen, L., Virkki, J., Xu, J., Wang, T. & Cheng, L., Sep 2018, *2018 IEEE International Conference on RFID Technology Application (RFID-TA)*. IEEE, 5 p.

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#### **Multi-site delamination analysis using virtual crack closure technique for a composite aircraft wing flap**

Jokinen, J., Kanerva, M. & Saarela, O., Sep 2018, *31st Congress of the International Council of the Aeronautical Sciences (Proceedings): Belo Horizonte, Brazil September 9-14, 2018*. ICAS Press

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

#### **Nanocellulose as a Piezoelectric Material**

Tuukkanen, S. & Rajala, S., 29 Aug 2018, *Piezoelectricity - Organic and Inorganic Materials and Applications*. InTech Open Access Publisher, p. 1-14 14 p.

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

#### **Comparison of food frequency questionnaire data and shopping records for the assessment of food intake**

Kallonen, A., Nieminen, H., Das, S. & Sallinen, R., 27 Aug 2018, *Proceedings of Seventh International Conference on Well-Being in the Information Society: Fighting Inequalities (WIS 2018)*. p. 25-30 (TUCS Lecture Notes; vol. 28).

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

#### **Effect of radiation inside square hollow section under moderate non-symmetric fire**

Baczkiewicz, J., Pajunen, S. & Heinisuo, M., 27 Jul 2018, In : *Fire Research*. 2, 1, p. 25-30 6 p., 2:42.

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

#### **Model-based cosimulation for industrial wireless networks**

Geng, J., Li, H., Liu, Y., Liu, Y., Kashef, M., Candell, R. & Bhattacharyya, S. S., 3 Jul 2018, *WFCS 2018 - 2018 14th IEEE International Workshop on Factory Communication Systems*. IEEE, p. 1-10 10 p.

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

#### **Improved modelling of electric loads for enabling demand response by applying physical and data-driven models: Project Response**

Koponen, P., Hanninen, S., Mutanen, A., Koskela, J., Rautiainen, A., Järventausta, P., Niska, H., Kolehmainen, M. & Koivisto, H., 27 Jun 2018, *2018 IEEE International Energy Conference, ENERGYCON 2018*. IEEE, p. 1-6 6 p.

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

#### **Moving toward integrated solutions in project-based firms: Changes in sales practices**

Momeni, K. & Martinsuo, M., 21 Jun 2018, *Proceedings of EURAM18 European Academy of Management conference 2018*. European Academy of Management, EURAM, 30 p. (EURAM conference).

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#### **Systematic literature review on customer emotions in social media**

Madhala, P., Jussila, J., Aramo-Immonen, H. & Suominen, A., 21 Jun 2018, *ECSSM - Proceedings of the 5th European Conference on Social Media*. Cunnane, V. & Corcoran, N. (eds.). Limerick, Ireland, 10 p.

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#### **Fabrication and reliability evaluation of passive UHF RFID T-shirts**

Chen, X., He, H., Ukkonen, L., Virkki, J., Lu, Y. & Lam, H., 8 Jun 2018, *2018 IEEE International Workshop on Antenna Technology, iWAT2018 - Proceedings*. IEEE, p. 1-4 4 p.

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

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

#### **Technical suitability of the fine fraction of municipal solid waste incineration bottom ash to the landfill capping liner**

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

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

### **Industrial customers' organizational readiness for service innovations: Adopting data-based advanced services**

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

### **Intensity Interferometry of Supercontinuum Light**

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

### **Lifecycle-oriented framing of value at the front end of infrastructure projects**

Martinsuo, M., Vuorinen, L., Killen, C. & Laiti, M., Jun 2018, *Proceedings of EURAM18 European Academy of Management conference 2018*. European Academy of Management, EURAM, 36 p. (EURAM conference).

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

### **Requirements from industrial internet for innovations in advanced industrial services**

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

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

### **Re-use of engineering design rationale in Finnish SME project based industry**

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

### **Finnish Round Robin Test on Airborne Sound Insulation**

Lietzen, J. & Kylliäinen, M., May 2018, *Proceedings of the 11th European Congress and Exposition on Noise Control Engineering, Euronoise 2018, May 27-31 2018, Hersonissos, Crete, Greece: Reduce Noise to Improve Life*. Hersonissos, Crete, Greece: European Acoustic Association EAA, p. 1677-1682 6 p. 282.162. (European Congress and Exposition on Noise Control Engineering).

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

### **Measurements of impact force excitation on wooden floors**

Lietzen, J., Miettinen, J., Kylliäinen, M. & Pajunen, S., May 2018, *Proceedings of the 11th European Congress and Exposition on Noise Control Engineering, Euronoise 2018, May 27-31 2018, Hersonissos, Crete, Greece: Reduce Noise to Improve Life, Crete, May 27-31, 2018*. Hersonissos, Crete, Greece: European Acoustic Association EAA, p. 1617-1622 6 p. 272.161. (Proceedings : European Conference on Noise Control).

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

### **Ready to sell? Requirements for promoting service selling in a manufacturing firm**

Vaittinen, E. & Martinsuo, M., May 2018, *Proceedings of the Spring Servitization Conference, Driving Competitiveness through Servitization, 14-16 May 2018*. Bigdeli, A., Frandsen, T., Raja, J. & Baines, T. (eds.). Aston University, p. 26-34 9 p.

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



**Ideoita kaavoituksen sisällön uudistamiseen: Kaavojen merkintöjen ja määräysten kehittäminen (KAMMI-hanke)**

Translated title of the contribution: : Ideas to reform the content of spatial plans: Developing the designations and regulations related to plans

Jama, T., Lehtovuori, P., Rajaniemi, J., Siikonen, M., Mäntynen, J., Rantanen, A., Joutsiniemi, A., Koskela, K., Kärkinen, T., Saarikoski, P. & Saarniaho, K., 26 Jan 2018, Helsinki: Ympäristöministeriö. 74 p.

Research output: Book/Report > Commissioned report > Professional

**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, Vol. 10677. 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

**Process time importance in the product properties evolvement during extrusion coating of different LDPE grades**

Suokas, E. & Kuusipalo, J., 1 Jan 2018, *15th TAPPI Advanced Coating Fundamentals Symposium 2018: Charlotte; United States; 14 April 2018 through 15 April 2018*. TAPPI Press, p. 151-159 9 p.

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

**Sub-100 fs pulse generation from a Tm,Ho: CALYO laser mode-locked by a GaSb-based SESAM at ~2043 nm**

Zhao, Y., Wang, Y., Zhang, X., Mateos, X., Pan, Z., Loiko, P., Zhou, W., Xu, X., Xu, J., Shen, D., Suomalainen, S., Härkönen, A., Guina, M., Griebner, U. & Petrov, V., 1 Jan 2018, *CLEO: Science and Innovations, CLEO\_SI 2018*. OSA - The Optical Society

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

**360 panorama super-resolution using deep convolutional networks**

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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. & Eguiazarian, 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

**Adaptive Feedback in Local Coordinates for Real-time Vision-Based Motion Control Over Long Distances**

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

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

**Analysis of outdoor and indoor propagation at 15 GHz and millimeter wave frequencies in microcellular environment**

Sheikh, M. U. & Lempiäinen, J., 2018, In : *Advances in Science, Technology and Engineering Systems*. 3, 1, p. 160-167 8 p.

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

**Architectural patterns for microservices: A systematic mapping study**

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

**A social capital perspective on gaining optimal solutions from suppliers as preferred customer**

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

**Automated pile transfer work cycles with a robotic wheel loader**

Halbach, E., Kolu, A. & Ghabcheloo, R., 2018, *17th International Conference on Computing in Civil and Building Engineering (ICCCBE): Tampere, 5-7 June 2018*. Mela, K., Pajunen, S. & Raasakka, V. (eds.). Tampere, Finland: RIL, 8 p.

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

**Beyond ic 4.0 : the future potential of bi-tool utilization in the private healthcare**

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

**Cold-formed RHS T joints with initial geometrical imperfections**

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

**Collective nonlinear optical effects in plasmonic nanohole ensembles of different rotational symmetries**

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Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Professional

**Core Project Team As a Management Entity for Construction Projects**

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

**Development of efficient electrically pumped nanolasers based on InAlGaAs tunnel junction**

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

**Digital image correlation study of the deformation and functioning of the human heart during open-heart surgery**

Soltani, A., Curtze, S., Lahti, J., Järvelä, K., Laurikka, J., Hokka, M. & Kuokkala, V. T., 2018, *Mechanics of Biological Systems, Materials and other topics in Experimental and Applied Mechanics - Proceedings of the 2017 Annual Conference on Experimental and Applied Mechanics*. Springer New York LLC, Vol. 4. p. 19-27 9 p. (Conference Proceedings of the Society for Experimental Mechanics).

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**Effect of elevated nitrate and sulfate concentrations on selenate removal by mesophilic anaerobic granular sludge bed reactors**

Tan, L. C., Nancharaiah, Y. V., van Hullebusch, E. D. & Lens, P. N. L., 2018, In : *Environmental Science: Water Research & Technology*. 4, 2, p. 303-314

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

#### **Effects of adiabatic heating estimated from tensile tests with continuous heating**

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

#### **Electro-optic steering of random laser emission in liquid crystals**

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#### **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

#### **Enhanced outdoor to indoor propagation models and impact of different ray tracing approaches at higher frequencies**

Sheikh, M. U., Hiltunen, K. & Lempiäinen, J., 2018, In : *Advances in Science, Technology and Engineering Systems*. 3, 2, p. 58-68 11 p.

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#### **Evaluating the contrast of planar periodic patterns on paper**

Raunio, J-P., Makela, I., Mäntylä, M. & Ritala, R., 2018, *Paper Conference and Trade Show, PaperCon 2018*. TAPPI Press, p. 294-302 9 p.

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

#### **Evaluation of visual object trackers on equirectangular panorama**

Kart, U., Kämäräinen, J. K., Fan, L. & Gabbouj, M., 2018, *VISIGRAPP 2018 - Proceedings of the 13th International Joint Conference on Computer Vision, Imaging and Computer Graphics Theory and Applications*. SCITEPRESS, Vol. 5. p. 25-32 8 p.

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

#### **Eye-in-Hand Manipulation for Remote Handling: Experimental Setup**

Niu, L., Suominen, O., M. Aref, M., Mattila, J., Ruiz, E. & Esque, S., 2018, *International Conference on Robotics and Mechantronics : (ICRoM 2017)*. IOP Publishing Ltd., Vol. 320. 7 p. 012007. (IOP conference series : materials science and engineering).

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

#### **Frequency-doubled VECSEL employing a Volume Bragg Grating for linewidth narrowing**

Kantola, E., Penttinen, J-P., Leinonen, T., Ranta, S. & Guina, M., 2018, *CLEO: Applications and Technology, CLEO\_AT 2018*. OSA - The Optical Society

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

#### **Frequency-doubled wafer-fused 638 nm VECSEL with an output power of 5.6 W**

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

#### **Gibbs Dyadic Differentiation on Groups - Evolution of the Concept**

Stankovic, R. S., Astola, J. & Moraga, C., 2018, *Computer Aided Systems Theory – EUROCAST 2017 - 16th International Conference, Revised Selected Papers*. Springer Verlag, p. 229-237 9 p. (Lecture Notes in Computer Science; vol. 10672).

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#### **Hierarchical deformable part models for heads and tails**

Yancheshmeh, F. S., Chen, K. & Kämäräinen, J-K., 2018, *VISIGRAPP 2018 - Proceedings of the 13th International Joint Conference on Computer Vision, Imaging and Computer Graphics Theory and Applications*. SCITEPRESS, Vol. 5. p. 45-55 11 p.

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 $\mu\text{m}$**

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

#### **High performance GaSb superluminescent diodes for tunable light source at 2 $\mu\text{m}$ and 2.55 $\mu\text{m}$**

Zia, N., Viheriälä, J., Koivusalo, E., Aho, A., Suomalainen, S. & Guina, M., 2018, *CLEO: Applications and Technology, CLEO\_AT 2018*. OSA - The Optical Society

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

#### **High power picosecond MOPA with anisotropic ytterbium-doped tapered double-clad fiber**

Fedotov, A., Noronen, T., Rissanen, J., Gumenyuk, R., Petrov, A., Chamorovskii, Y., Golant, K., Odnoblyudov, M. & Filippov, V., 2018, *Proceedings of SPIE : Fiber Lasers and Glass Photonics: Materials through Applications*. Taccheo, S., Mackenzie, JI. & Ferrari, M. (eds.). SPIE-INT SOC OPTICAL ENGINEERING, Vol. 10683. 7 p. (Proceedings of SPIE; vol. 10683).

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

#### **High-speed manufacturing of antimicrobial paper**

Brobbey, K. J., Haapanen, J., Gunell, M., Mäkelä, J. M., Eerola, E., Saarinen, J. J. & Toivakka, M., 2018, *Paper Conference and Trade Show, PaperCon 2018*. TAPPI Press, p. 564-566 3 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., Heinilehto, N., Suomalainen, S., Zia, N., Tuorila, H., Viheriälä, J., Guina, M., Buczynski, R., Kasztelanec, 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

#### **Internal Heat Generation in Tension Tests of AISI 316 Using Full-Field Temperature and Strain Measurements**

Smith, J., Kuokkala, V-T., Seidt, J. & Gilat, A., 2018, *Advancement of Optical Methods in Experimental Mechanics, Volume 3. Conference Proceedings of the Society for Experimental Mechanics Series*. Springer New York LLC, Vol. 3. p. 97-103 7 p. ( Conference Proceedings of the Society for Experimental Mechanics).

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

#### **In vitro characterization of arylhydrazones of active methylene derivatives**

Palanivel, S., Zhurina, A., Doan, P., Chandraseelan, J. G., Khandelwal, V. K. M., Zubkov, F. I., Mahmudov, K. T., Pombeiro, A. J. L., Yli-Harja, O. & Kandhavelu, M., 2018, In : *Saudi Pharmaceutical Journal*. 26, 3, p. 430-436

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

#### **JPEG Pleno: a standard framework for representing and signaling plenoptic modalities**

Schelkens, P., Alpaslan, Z., Ebrahimi, T., Pereira, F., Pinheiro, A., Tabus, I. & Chen, Z., 2018, *SPIE Proceedings Volume 10752: Applications of Digital Image Processing XLI*. SPIE, Vol. 10752. 10 p. (SPIE Conference Proceedings).

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

#### **Kehittämistutkimus: vuorovaikutteisten Matlab-opetusohjelmien vaikutus minäpystyvyyteen ja oppimistuloksiin yliopistomatematiikassa**

Kaarakka, T. E., Ali-Löytty, S. & Huhtanen, M., 2018, In : *FMSERA Journal*. 2, 1, p. 67-77 11 p.

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

#### **Keyframe-based video summarization with human in the loop**

Ainasoja, A. E., Hietanen, A., Lankinen, J. & Kämäräinen, J-K., 2018, *VISIGRAPP 2018 - Proceedings of the 13th International Joint Conference on Computer Vision, Imaging and Computer Graphics Theory and Applications*.

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

### **Laser Scanning Tasks of Building Refurbishment Project**

Uotila, U., Saari, A. & Junnonen, J-M., 2018, *Proceedings of the 17th International Conference on Computing in Civil and Building Engineering (ICCCBE)*.

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

### **Model for efficient development of security audit criteria**

Kelo, T., Eronen, J. & Rousku, K., 2018, *Proceedings of the 17th European Conference on Cyber Warfare and Security, ECCWS 2018*. Curran Associates, p. 244-252 9 p.

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

### **Non-resonant enhancement of second-harmonic generation from metal nanoislands coated with dielectric layers**

Koskinen, K., Scherbak, S., Chervinskii, S., Lipovskii, A. & Kauranen, M., 2018, *CLEO: QELS\_Fundamental Science 2018*. OSA, 2 p. JTU2A.134

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Professional

### **Proceedings of the 1st Transdisciplinary Workplace Research Conference**

Nenonen, S. (ed.), Salmisto, A. (ed.) & Petrulaitiene, V. (ed.), 2018, Tampere University of Technology. Department of Civil Engineering. 64 p. (Tampereen teknillinen yliopisto. Rakennustekniikan laboratorio. Rakennustuotanto ja -talous. Raportti; no. 26)

Research output: Book/Report › Anthology › Scientific › peer-review

### **Projektiyöskentelyn kehittäminen yläkoulun matematiikan opetuksessa**

Viro, I. E. & Joutsenlahti, J., 2018, In : *FMSERA Journal* . 2, 1, p. 90-99 10 p.

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

### **Real-time human pose estimation with convolutional neural networks**

Linna, M., Kannala, J. & Rahtu, E., 2018, *VISIGRAPP 2018 - Proceedings of the 13th International Joint Conference on Computer Vision, Imaging and Computer Graphics Theory and Applications*. SCITEPRESS, Vol. 5. p. 335-342 8 p.

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

### **Real-time measurements of nonlinear instabilities in optical fibers**

Ryczkowski, P., Närhi, M., Billet, C., Merolla, J. M., Dudley, J. M. & Genty, G., 2018, *CLEO: Applications and Technology, CLEO\_AT 2018*. OSA - The Optical Society

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

### **Resonant harmonic generation in AlGaAs nanoantennas using cylindrical vector beams**

Camacho-Morales, R., Bautista, G., Zang, X., Xu, L., Turquet, L., Miroshnichenko, A., Lamprianidis, A., Rahmani, M., Neshev, D. N. & Kauranen, M., 2018, *CLEO: QELS\_Fundamental Science 2018*. The Optical Society; OSA, 2 p. FF1E.6

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Professional

### **Sub-parts-per-trillion sensitivity in trace gas detection by cantilever-enhanced photo-acoustic spectroscopy**

Tomberg, T., Vainio, M., Hieta, T. & Halonen, L., 2018, *CLEO: Applications and Technology, CLEO\_AT 2018*. OSA - The Optical Society

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

### **Underpinning Interrelated Factors of Physical, Virtual, and Social Learning Environments**

Kangas, J. & Poutanen, J., 2018, *ICERI2018 Proceedings*. p. 8087-8096 (ICERI proceedings).

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

#### **What's inside a rubble pile asteroid? DiSCUS - A tomographic twin radar Cubesat to find out**

Bambach, P., Deller, J., Martel, J., Vilenius, E., Goldberg, H., Sorsa, L.-I., Pursiainen, S., Takala, M., Wurster, A., Braun, H. M., Lentz, H., Jutzi, M., Wittig, M., Chitu, C. C., Ritter, B. & Karatekin, O., 2018, *69th International Astronautical Congress, IAC 2018*. (Proceedings of the International Astronautical Congress, IAC).

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

#### **Yliopistomatematiikan sähköisten tehtävien ja matemaattisen ajattelun kehittäminen**

Myllykoski, T. J., Mattila, P., Ali-Löytty, S., Kaarakka, T. & Viro, E., 2018, In : *FMSERA Journal* . 2, 1, p. 46-56 11 p.

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

#### **基于相位旋转的SCMA码本优化方法**

Translated title of the contribution: : SCMA codebook optimization method based on phase rotation

Shao, K., Zhou, B., Wang, G. & Yu, B., 2018, In : *Xi Tong Gong Cheng Yu Dian Zi Ji Shu/Systems Engineering and Electronics*. 40, 10, p. 2354-2362 9 p.

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

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Saari, U., Aarikka-Stenroos, L., Boedeker, S., Köppä, L. & Langwaldt, J., 22 Dec 2017, In : *CERN IdeaSquare Journal of Experimental Innovation*. 1, 2, p. 3-8 6 p.

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

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Sommarberg, M. & Mäkinen, S., 1 Dec 2017, *Proceedings in 2017 Portland International Conference in Management and Engineering (PICMET): (PICMET) 9-13 July 2017*. IEEE, p. 1-10 10 p.

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

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Translated title of the contribution: : One hundred years of water services in Finland

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

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

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

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

#### **Wearable e-textile split ring passive UHF RFID tag: Body-worn performance evaluation**

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

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

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

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#### **Direct Measurement of Temporal Rogue Waves Generated by Spontaneous Modulation Instability**

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

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#### **Functional model for organisational and safety culture**

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

**High Dynamic Range Single-Shot Spectral Measurements of Spontaneous Modulation Instability**

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**High-power 1550 nm tapered DBR lasers fabricated using soft UV-nanoimprint lithography**

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**High-temperature sliding wear behaviour of thermally sprayed Cr<sub>3</sub>C<sub>2</sub>-based coatings**

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**Institutional development is the key for sustainable water services in the built environment**

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#### **Need of Services and Understanding of Service Providers in Water and Sanitation: A Case of Ethiopia**

Behailu, B. M. & Mattila, H., 2016, *Proceedings of the CIB World Building Congress 2016 Volume IV: Understanding impacts and functioning of different solutions*. Nenonen, S. & Junnonen, J-M. (eds.). Tampere University of Technology, p. 431-440 10 p.

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

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

#### **New value chains to construction: advancing products and services**

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### **Probabilistic Framework for Modelling the Evolution of Geomorphic Features in 10,000-Year Time Scale: The Eurajoki River Case**

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### **Proceedings of the 26th International Conference on Information Modelling and Knowledge Bases - EJC 2016: June 6-10, 2016, Tampere, Finland.**

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### **Real Time Measurements of Temporal Rogue Waves and Spontaneous Modulation Instability in Optical Fiber**

Narhi, M., Wetzell, B., Billet, C., Merolla, J-M., Toenger, S., Sylvestre, T., Morandotti, R., Genty, G., Dias, F. & Dudley, J. M., 2016, *CLEO: QELS\_Fundamental Science 2016*. Optical Society of America, 2 p. FF2A.7

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### **Relations between civil engineering students' approaches to learning, perceptions of the development of professional skills and perceived workload**

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### **Roadmap towards the vision of the future power system and electricity market**

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### **Role of Power and Sense Making in the Briefing of a Small Renovation Project**

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### **Spatial borders and affordances of a temporary school building – Enhancing the school engagement and learning experience**

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

### **STACK assignments in university mathematics education**

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### **Tag suggestions from social media profiles**

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

### **Target tracking via combination of particle filter and optimisation techniques**

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### **The role of the purchasing function in non-financial value creation**

Jääskeläinen, A., Thitz, O. & Heikkilä, J., 2016, *25th Proceedings of IPSERA 2016 conference, : 20-23.3.2016, Dortmund, Germany*.  
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### **The Workplace for Researchers – Enhancing Concentration and Face-to-face Interaction**

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

### **Towards responsive workspaces - identification of service paths for time-and-place independent work**

Petrolaitiene, V., Rytönen, E. & Nenonen, S., 2016, *Proceedings of the 20th CIB World Building Congress 2016: May 30 – June 3, 2016 Tampere Finland*. Achour, N. (ed.). Tampere University of Technology, Vol. V. p. 1141-1151 11 p.  
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › 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).  
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### **Use of high-order beams to calibrate spatial light modulators for microscopy**

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### **Validation of the method to evaluate the corrosion propagation stage by hygrothermal simulation**

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### **Ventilation rates and CO2-levels before and after energy retrofit in Finnish apartment buildings**

Leivo, V., Aaltonen, A., Turunen, M., Du, L., Kiviste, M. & Haverinen-Shaughnessy, U., 2016, *CLIMA 2016 - Proceedings of the 12th REHVA World Congress. Aalborg. Aalborg University. Department of Civil Engineering. : Volume 1. Building Retrofit*. Kvols Heiselberg, P. (ed.). Aalborg: Aalborg university, Department of Civil Engineering, Vol. 1. 192 (in vol 1)

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#### **Visual narratives in the value chain of new management accounting knowledge**

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

#### **Обзор параметрических методов позиционирования на основе концепции отпечатка пальца**

Translated title of the contribution: : A Survey of Parametric Fingerprint-Positioning Methods

Müller, P., Raitoharju, M., Ali-Löytty, S., Wirola, L. & Piche, R., 2016, In : *Giroskopiya I Navigatsiya*. 24, 1, p. 3-35

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

#### **Turvallisuuden johtajat - Esimiesten johtajuus, osaaminen ja sitoutuminen**

Translated title of the contribution: : Leaders of safety - managers' leadership, skills and commitment

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Research output: Book/Report › Commissioned report › Professional

#### **Bispectrum-based demodulation technique using triple-channel heterodyning of triplet-signal**

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

#### **HVS-based local analysis of denoising efficiency for DCT-based filters**

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#### **Preparation and antimicrobial characterization of silver-containing packaging materials for meat**

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

#### **LTCC-Based Multi-Electrode Arrays for 3D in Vitro Cell Cultures**

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#### **Time-resolved characterization of primary and secondary particle emissions of a modern gasoline passenger car**

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### **SimpleTree: An Efficient Open Source Tool to Build Tree Models from TLS Clouds**

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Research output: [Contribution to journal](#) › [Article](#) › [Scientific](#) › [peer-review](#)

### **Organic Chromophores in Self-Assembled Monolayers and Supramolecular Arrays**

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Research output: [Book/Report](#) › [Doctoral thesis](#) › [Collection of Articles](#)

### **What Engineering Scientists Know and How They Know It: Towards Understanding the Philosophy of Engineering Science in Finland**

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Research output: [Book/Report](#) › [Doctoral thesis](#) › [Monograph](#)

### **MYSTERY SHOPPERS RECOGNISING KNOWLEDGE SHARING BARRIERS IN HIGHER EDUCATION**

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Research output: [Chapter in Book/Report/Conference proceeding](#) › [Conference contribution](#) › [Scientific](#) › [peer-review](#)

### **University Students' Perceptions of Academic Writing: An Academic Literacies Perspective**

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Research output: [Chapter in Book/Report/Conference proceeding](#) › [Conference contribution](#) › [Scientific](#) › [peer-review](#)

### **Markov Chain Monte Carlo Estimation of Stochastic Volatility Models with Finite and Infinite Activity Lévy Jumps: Evidence for Efficient Models and Algorithms**

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Research output: [Book/Report](#) › [Doctoral thesis](#) › [Monograph](#)

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Research output: [Book/Report](#) › [Doctoral thesis](#) › [Monograph](#)