

**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

**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.

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**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.

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**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

**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).

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**On the zeros of the partial Hosoya polynomial of graphs**

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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.

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

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**TinderMIX: Time-dose integrated modelling of toxicogenomics data**

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**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.

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**ICface: Interpretable and controllable face reenactment using GANs**

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**Serverless: What it Is, What to Do and What Not to Do**

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### **73-fs SESAM mode-locked Tm,Ho:CNGG laser at 2061 nm**

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### **Anthropometric clothing measurements from 3D body scans**

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

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### **Cyclic quantum walks: Photonic realization and decoherence analysis**

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### **Data augmentation approaches for improving animal audio classification**

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### **FinnForest dataset: A forest landscape for visual SLAM**

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### **Game-theoretic semantics for ATL<sup>+</sup> with applications to model checking**

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### **In-flightwind field identification and prediction of parafoil systems**

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### **Internet of Things and Sensor Networks**

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### **Lage und Zukunft des wissenschaftlichen Nachwuchses: Eine Stellungnahme des Beirats des Wissenschaftlichen Nachwuchses (WIN) der Gesellschaft für Informatik (GI e.V.)**

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

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

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### **On the diffuseness of technical debt items and accuracy of remediation time when using SonarQube**

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**Propagation dynamics of ultrabroadband terahertz beams with orbital angular momentum for wireless data transfer**  
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**Redundancy-based visual tool center point pose estimation for long-reach manipulators**

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**Safety at chimney-roof penetration: A numerical investigation**

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**Social media overload, exhaustion, and use discontinuance: Examining the effects of information overload, system feature overload, and social overload**

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

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**Who contributes what? Scrutinizing the activity data of 4.2 million Zhihu users via immersion scores**

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**Position Estimation for Drones based on Visual SLAM and IMU in GPS-denied Environment**

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**Automatic word count estimation from daylong child-centered recordings in various language environments using language-independent syllabification of speech**

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#### **DevOps in practice: A multiple case study of five companies**

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#### **Red Alert: Break-Glass Protocol to Access Encrypted Medical Records in the Cloud**

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#### **The Internet of Things and Sensor Networks**

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

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#### **Visibility-Aware Part Coding for Vehicle Viewing Angle Estimation**

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

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#### **Energy Efficiency of Multi-Radio Massive Machine-Type Communication (MR-MMTC): Applications, Challenges, and Solutions**

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

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#### **Socially inspired relaying and proactive mode selection in mmWave vehicular communications**

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**Asterism: Decentralized file sharing application for mobile devices**

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**Dense Moving Fog for Intelligent IoT: Key Challenges and Opportunities**

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**Error analysis of NOMA-based user cooperation with SWIPT**

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

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**On the complexity of restoring corrupted colorings**

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**Energy-efficient and high-precision control of hydraulic robots**

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**Employing Knowledge on Causal Relationship to Assist Multidisciplinary Design Optimization**

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**DGC-Net: Dense geometric correspondence network**

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**Digging deeper into egocentric gaze prediction**

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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).

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**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. & Ruusuvoori, 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 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

### **Additional lossless compression of JPEG images based on BPG**

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

### **Thin form-factor super multiview head-up display system**

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

### **Performance evaluation of bandwidth reservation for mmWave 5G NR systems**

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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

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

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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**

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

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#### **Customized dimensional analysis conceptual modelling framework for design optimization—a case study on the cross-flow micro turbine model**

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**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**

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#### **Switchable unidirectional second-harmonic emission through GaAs nanoantennas**

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### **Organizing for openness: six models for developer involvement in hybrid OSS projects**

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

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### **Performance Analysis of Single Carrier Coherent and Noncoherent Modulation under I/Q Imbalance**

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### **Ray-based evaluation of dual-polarized MIMO in (Ultra-)dense millimeter-wave urban deployments**

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### **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

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

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Research output: Contribution to journal > Editorial > Scientific

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

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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

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

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