

### **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

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### **Adaptive multiresolution method for MAP reconstruction in electron tomography**

Acar, E., Peltonen, S. & Ruotsalainen, U., 1 Nov 2016, In : *Ultramicroscopy*. 170, p. 24-34 11 p.

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

### **Methods for simultaneous robot-world-hand-eye calibration: A comparative study**

Ali, I., Suominen, O., Gotchev, A. & Morales, E. R., 2 Jun 2019, In : *Sensors (Switzerland)*. 19, 12, 2837.

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

### **Sensor Fusion for Unobtrusive Respiratory Rate Estimation in Dogs**

Antink, C. H., Pirhonen, M., Väättäjä, H., Somppi, S., Tornqvist, H., Cardo, A., Teichmann, D., Vainio, O., Surakka, V. & Vehkaoja, A., 15 Aug 2019, In : *IEEE Sensors Journal*. 19, 16, p. 7072-7081 10 p.

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### **Impact of Different Concrete Types on Radio Propagation: Fundamentals and Practical RF Measurements**

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### **Routing light with nematicons: Light localization and steering in liquid crystals**

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### **Rapid and sensitive detection of norovirus antibodies in human serum with a bilayer interferometry biosensor**

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### **Coupled dictionaries for exemplar-based speech enhancement and automatic speech recognition**

Baby, D., Virtanen, T., Gemmeke, J. F. & Van hamme, H., 1 Nov 2015, In : *IEEE-Acm transactions on audio speech and language processing*. 23, 11, p. 1788-1799 12 p.

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### **Advancements in Solution Processable Devices using Metal Oxides For Printed Internet-of-Things Objects**

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

### **Secure environmental monitoring for industrial internet of things: From framework to live implementation**

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#### **Restoration of low-dose digital breast tomosynthesis**

Borges, L. R., Azzari, L., Bakic, P. R., Maidment, A. D. A., Vieira, M. A. C. & Foi, A., 19 Apr 2018, In : *Measurement Science and Technology*. 29, 6, 064003.

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#### **Theory of near-IR metatronic nanocircuits using transparent conducting oxides (TCO)**

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#### **Directional selectivity through the subwavelength slit in metallic gratings**

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#### **Measurement of the refractive index dispersion of $As_2Se_3$ bulk glass and thin films prior to and after laser irradiation and annealing using prism coupling in the near- and mid-infrared spectral range**

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

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#### **RFID-based sensors for zero-power autonomous wireless sensor networks**

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#### **Evaluating transparent liquid screen overlay as a haptic conductor: Method of enhancing touchscreen based user interaction by a transparent deformable liquid screen overlay**

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#### **Humidity passive sensors based on UHF RFID using cork dielectric slabs**

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#### **Multimode waveguides in nematic liquid crystals**

Izdebskaya, Y. V., Desyatnikov, A. S., Assanto, G. & Kivshar, Y. S., 2011, *Conference on Lasers and Electro-Optics/Pacific Rim, CLEOPR 2011*. p. 1912-1913 2 p.

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#### **Spatial solitons carrying phase singularities in nematic liquid crystals**

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#### **Today is the future of yesterday; What is the future of today?**

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

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**Bioimpedance Sensor Array for Long-Term Monitoring of Wound Healing from Beneath the Primary Dressings and Controlled Formation of H<sub>2</sub>O<sub>2</sub> Using Low-Intensity Direct Current**

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**Strain Reliability of Embroidered Passive UHF RFID Tags on 3D-printed Substrates**

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**Frequency domain penetration loss in the terahertz band**

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**Optimization of RFID-Based Tunnel Access Monitoring System Antenna Reading Areas**

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#### **Improved Session Continuity in 5G NR with Joint Use of Multi-Connectivity and Guard Bandwidth**

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#### **Circularly Polarized Textile Tag Antenna for Wearable Passive UHF RFID Systems**

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#### **Single KTiOPO4 nanocrystals for nonlinear probing of local optical fields and interaction with a metallic nanostructure**

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Ometov, A., Bezzateev, S., Davydov, V., Shchesniak, A., Masek, P., Lohan, E. S. & Koucheryavy, Y., 1 Apr 2019, In : Sensors. 19, 7, 1603.

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### Highly directive radiation and negative refraction using photonic crystals

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### Third harmonic generation enhancement in nematic liquid crystals via nonlocal solitons propagation

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