

### **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

### **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).

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### **1.55-µm wavelength wafer-fused OP-VECSELs in flip-chip configuration**

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

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Research output: Contribution to journal > Article > 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

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### **Action and power efficiency in self-organization: The case for growth efficiency as a cellular objective in escherichia coli**

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**An ensemble of visual features for Gaussians of local descriptors and non-binary coding for texture descriptors**

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**An image generator platform to improve cell tracking algorithms simulation of objects of various morphologies, kinetics and clustering**

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**A Portable Microscale Cell Culture System with Indirect Temperature Control**

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

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### **A probability-based approach to modeling the risk of unauthorized propagation of information in on-line social networks**

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### **A Proxy-Based Solution for Asynchronous Telemedical Systems**

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

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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**

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**AvanTomography: A compact module for positron emission mammography**

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

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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).

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

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

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### **Biological principles for future Internet architecture design**

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

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

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### **Blind estimation of speckle variance in synthetic aperture radar images**

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### **BM3D-HVS: Content-Adaptive denoising for improved visual quality**

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### **Body area nanonetworks with molecular communications in nanomedicine**

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### **Body-touching: An embodied interaction technique for health information systems in developing regions**

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

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

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

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

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**Hand gesture-based on-line programming of industrial robot manipulators**

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**High-content screening data management for drug discovery in a small- to medium- size laboratory: Results of a collaborative pilot study focused on user expectations as indicators of effectiveness**

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**Highly dynamic spectrum management within licensed shared access regulatory framework**

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

**Highly-efficient Ho:KY(WO<sub>4</sub>)<sub>2</sub> thin-disk lasers at 2.06 μm**

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

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#### **Mixed-integer linear programming approach for global discrete sizing optimization of frame structures**

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#### **Mobility aware eMBMS management in urban 5G-oriented systems**

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

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Research output: Contribution to journal > Article > 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

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

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

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

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

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

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

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

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

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

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

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

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#### **The internet of Bio-Nano things**

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#### **Time-Dependent Energy and Resource Management in Mobility-Aware D2D-Empowered 5G Systems**

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

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#### **Two models for hydraulic cylinders in flexible multibody simulations**

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

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#### **Ultra-large mode area single frequency anisotropic MOPA with double clad Yb-doped tapered fiber**

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

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