

0.6V threshold voltage thin film transistors with solution processable indium oxide (In₂O₃) Channel and Anodized High-k Al₂O₃ Dielectric

Bhalerao, S. R., Lupo, D., Zangiabadi, A., Kymissis, I., Leppäniemi, J., Alastalo, A. & Berger, P. R., 1 Jul 2019, In : IEEE Electron Device Letters. 40, 7, p. 1112-1115 4 p.

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

10 kA Joints for HTS Roebel Cables

Murtomaeki, J. S., Kirby, G., van Nugteren, J., Contat, P. A., Fleiter, J., De Frutos, O. S., Pincot, F. O., DeRijk, G., Rossi, L., Ruuskanen, J., Stenvall, A. & Wolf, F., 2018, In : IEEE Transactions on Applied Superconductivity. 28, 3

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

1180 nm GaInNAs quantum well based high power DBR laser diodes

Viherialä, J., Aho, A., Virtanen, H., Dumitrescu, M. & Guina, M., 2017.

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

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

13.5 A 0.35-to-2.6GHz multilevel outphasing transmitter with a digital interpolating phase modulator enabling up to 400MHz instantaneous bandwidth

Kosunen, M., Lemberg, J., Martelius, M., Roverato, E., Nieminen, T., Englund, M., Stadius, K., Anttila, L., Pallonen, J., Valkama, M. & Ryyänen, J., 2 Mar 2017, *2017 IEEE International Solid-State Circuits Conference, ISSCC 2017*. IEEE, p. 224-225 2 p.

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

1.3 μm InAs quantum dot semiconductor disk laser

Blokhin, S. A., Bobrov, M. A., Blokhin, A. A., Kuzmenkov, A. G., Vasil'Ev, A. P., Maleev, N. A., Dudelev, V. V., Soboleva, K. K., Sokolovskii, G. S., Rantamäki, A., Okhotnikov, O. & Ustinov, V. M., 23 Aug 2016, p. R317.

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

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

2-volt Solution-Processed, Indium Oxide (In₂O₃) Thin Film Transistors on flexible Kapton

Bhalerao, S. R., Lupo, D. & Berger, P. R., 1 Aug 2019, *2019 IEEE International Flexible Electronics Technology Conference, IFETC 2019*. IEEE, 3 p.

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

3-D mechanical modeling of 20 T HTS clover leaf end coils - Good practices and lessons learned

Murtomäki, J. S., Van Nugteren, J., Stenvall, A., Kirby, G. & Rossi, L., 1 Aug 2019, In : IEEE Transactions on Applied Superconductivity. 29, 5, 8642381.

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

3-D Numerical Modeling of AC Losses in Multifilamentary MgB₂ Wires

Escamez, G., Sirois, F., Lahtinen, V., Stenvall, A., Badel, A., Tixador, P., Ramdane, B., Meunier, G., Perrin-Bit, R. & Bruzek, C. É., 1 Apr 2016, In : IEEE Transactions on Applied Superconductivity. 26, 3, 4701907.

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

3GPP LTE-assisted Wi-Fi-direct: Trial implementation of live D2D technology

Pyattaev, A., Hosek, J., Johnsson, K., Krkos, R., Gerasimenko, M., Masek, P., Ometov, A., Andreev, S., Sedy, J., Novotny, V. & Koucheryavy, Y., 1 Oct 2015, In : ETRI Journal. 37, 5, p. 877-887 11 p.

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

405-nm pumped Ce³⁺-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

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

A 0.5-6MHz Active-RC LPF with Fine Gain Steps Using Binary Interpolated Resistor Banks

Beck, S., Jeong, S., Min, S., Hwang, M. W., Kim, S. T., Lim, K. & Tentzeris, E. M., Aug 2011, In : IEICE TRANSACTIONS ON ELECTRONICS. E94-C, 8, p. 1328-1331 4 p.

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

Absorption profile and femtosecond intraband relaxation of the intense upper Davydov component in oligothiophenes

Petelenz, P. & Kulig, W., Feb 2011, In : Physica Status Solidi B: Basic Solid State Physics. 248, 2, p. 412-415 4 p.

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

Accelerator-quality HTS dipole magnet demonstrator designs for the EuCARD-2 5-T 40-mm clear aperture magnet

Kirby, G. A., Van Nugteren, J., Ballarino, A., Bottura, L., Chouika, N., Clement, S., Datskov, V., Fajardo, L., Fleiter, J., Gauthier, R., Gentini, L., Lambert, L., Lopes, M., Perez, J. C., De Rijk, G., Rijllart, A., Rossi, L., Ten Kate, H., Durante, M., Fazilleau, P., Lorin, C., Härö, E., Stenvall, A., Caspi, S., Marchevsky, M., Goldacker, W. & Kario, A., 1 Jun 2015, In : IEEE Transactions on Applied Superconductivity. 25, 3, 4000805.

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

Action recognition using the 3D dense microblock difference

Voronin, V., Pismenskova, M., Zelensky, A., Cen, Y., Nadykto, A. & Egiazarian, K., 2018, *Counterterrorism, Crime Fighting, Forensics, and Surveillance Technologies II*. SPIE, 1080200. (Proceedings of SPIE; vol. 10802).

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

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

A Database for Storing Magnet Parameters and Analysis of Quench Test Results in HL-LHC Nb₃Sn Short Model Magnets

Salmi, T., Tarhasaari, T. & Izquierdo-Bermudez, S., 2020, In : IEEE Transactions on Applied Superconductivity. 30, 4, 5 p., 4703705.

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

Adsorption and dissociation of molecular oxygen on α -Pu (0 2 0) surface: A density functional study

Wang, J. & Ray, A. K., 1 Sep 2011, In : Physica B: Condensed Matter. 406, 17, p. 3285-3294 10 p.

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

Advanced scheme of amplifier similariton laser

Korobko, D. A., Okhotnikov, O. G., Sysoliatin, A. A. & Zolotovskii, I. O., 23 Aug 2016, p. R858.

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

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

Berger, P. R., Li, M., Mattei, R. M., Niang, M. A., Talisa, N., Tripepi, M., Harris, B., Bhalerao, S. R., Chowdhury, E. A., Winter, C. H. & Lupo, D., 1 Mar 2019, *2019 Electron Devices Technology and Manufacturing Conference, EDTM 2019*. IEEE, p. 160-162 3 p.

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

Advances in implantable and wearable antennas for wireless brain-machine interface systems

Moradi, E., Koski, K., Björninen, T., Muller, R., Ledochowitsch, P., Sydänheimo, L., Alon, E., Maharbiz, M. M., Rabaey, J. M., Ukkonen, L. & Rahmat-Samii, Y., 16 Oct 2014, *2014 United States National Committee of URSI National Radio Science Meeting, USNC-URSI NRSM 2014*. Institute of Electrical and Electronics Engineers Inc., 6928137

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

A Fast Quench Protection System for High-Temperature Superconducting Magnets

van Nugteren, J., Murtomäki, J., Ruuskanen, J., Kirby, G., Hagen, P., DeRijk, G., Ten Kate, H., Bottura, L. & Rossi, L., Jan 2019, In : *IEEE Transactions on Applied Superconductivity*. 29, 1, 4700108.

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

A Finite Element Simulation Tool for Predicting Hysteresis Losses in Superconductors Using an H-Oriented Formulation with Cohomology Basis Functions

Lahtinen, V., Stenvall, A., Sirois, F. & Pellikka, M., 22 Apr 2015, In : *Journal of Superconductivity and Novel Magnetism*. 28, 8, p. 2345-2354 10 p.

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

A genetic algorithm for scheduling tasks onto dynamically reconfigurable hardware

Qu, Y., Soininen, J. P. & Nurmi, J., 2007, *2007 IEEE International Symposium on Circuits and Systems*. p. 161-164 4 p.

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

A hand-held immaterial volumetric display

Sand, A. & Rakkolainen, I., 2014, *Proceedings of SPIE-IS and T Electronic Imaging - Stereoscopic Displays and Applications XXV*. SPIE, Vol. 9011. 90110Q

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

AlGaAs/AlGaInP VECSELs with Direct Emission at 740-770 nm

Nechay, K., Kahle, H., Penttinen, J-P., Rajala, P., Tukiainen, A., Ranta, S. & Guina, M., 1 Aug 2019, In : *IEEE Photonics Technology Letters*. 31, 15, p. 1245-1248 4 p.

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

All-fiber, high-power, picosecond Yb double clad tapered fiber amplifier

Gumenyuk, R., Filippov, V., Vorotinskii, A., Okhotnikov, O. G., Chamorovskii, Y. & Golant, K., 2014, *Proceedings - 2014 International Conference Laser Optics, LO 2014*. IEEE, 6886471

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

Alpha radiation induced luminescence in solar blind spectral region

Kerst, T. & Toivonen, J., 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

Ambient-Pressure XPS Study of a Ni-Fe Electrocatalyst for the Oxygen Evolution Reaction

Ali-Löytty, H., Louie, M. W., Singh, M. R., Li, L., Sanchez Casalongue, H. G., Ogasawara, H., Crumlin, E. J., Liu, Z., Bell, A. T., Nilsson, A. & Friebel, D., 4 Feb 2016, In : *Journal of Physical Chemistry C*. 120, 4, p. 2247-2253 7 p.

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

A membrane external-cavity surface-emitting laser (MECSEL) with emission around 825 nm

Phung, H. M., Kahle, H., Penttinen, J-P., Rajala, P., Ranta, S. & Guina, M., 2020, *Vertical External Cavity Surface Emitting Lasers (VECSELs)* X. Hastie, J. E. (ed.). SPIE, 112630H. (Proceedings of SPIE - The International Society for Optical Engineering; vol. 11263).

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

A method for predicting DCT-based denoising efficiency for grayscale images corrupted by AWGN and additive spatially correlated noise

Rubel, A. S., Lukin, V. V. & Egiazarian, K., 2015, *Proceedings of SPIE - The International Society for Optical Engineering*. SPIE, Vol. 9399. 93990P

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

A multi-band WCDMA SAW-less receivers with frequency selective feedback loop

Beck, S., Kim, S. T., Lim, K., Tentzeris, M. M. & Laskar, J., 2011, *54th IEEE International Midwest Symposium on Circuits and Systems, MWSCAS 2011*. 6026387

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

An ab initio study of $\text{PuO}_{2+0.25}$, $\text{UO}_{2+0.25}$, and $\text{U}_0.5\text{Pu}_0.5\text{O}_{2+0.25}$

Ma, L. & Ray, A. K., May 2011, In : *European Physical Journal B*. 81, 1, p. 103-113 11 p.

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

Analysis of uncertainties in protection heater delay time measurements and simulations in Nb3Sn high-field accelerator magnets

Salmi, T., Chlachidze, G., Marchevsky, M., Bajas, H., Felice, H. & Stenvall, A., 1 Aug 2015, In : *IEEE Transactions on Applied Superconductivity*. 25, 4

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

Analytical and Numerical Methods to Estimate the Effective Mechanical Properties of Rutherford Cables

Zhao, J., Stenvall, A., Gao, Y. & Salmi, T., 1 Aug 2020, In : *IEEE Transactions on Applied Superconductivity*. 30, 5, 8400808.

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

Analytical computation of the demagnetizing energy of thin-film domain walls

Skaugen, A., Murray, P. & Laurson, L., 25 Sep 2019, In : *Physical Review B*. 100, 9, 094440.

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

A near-infrared optoelectronic approach to detection of road conditions

Colace, L., Santoni, F. & Assanto, G., May 2013, In : *Optics and Lasers in Engineering*. 51, 5, p. 633-636 4 p.

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

A new power-consumption optimization technique for two-stage operational amplifiers

Beck, S., Kim, S. T., Lee, M., Lim, K., Laskar, J. & Tentzeris, M. M., Jun 2011, In : *IEICE TRANSACTIONS ON ELECTRONICS*. E94-C, 6, p. 1138-1140 3 p.

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

An integrated "sense-and-communicate" broad-/narrow-band optically controlled reconfigurable antenna for cognitive radio systems

Liu, X., Fan, Y. & Tentzeris, M. M., 1 Apr 2015, In : *Microwave and Optical Technology Letters*. 57, 4, p. 1016-1023 8 p.

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

Anisotropic and strain-dependent model of magnetostriction in electrical steel sheets

Belahcen, A., Singh, D., Rasilo, P., Martin, F., Ghalamestani, S. G. & Vandeveld, L., 1 Mar 2015, In : *IEEE Transactions on Magnetics*. 51, 3, 2001204.

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

Anisotropic ultra-large mode area Yb-doped tapered double clad fiber for ultrafast amplifiers

Filippov, V., Noronen, T., Gumenyuk, R., Chamorovskii, Y., Golant, K. & Odnoblyudov, M., 2017, *Advanced Solid State Lasers 2017: Nagoya, Aichi Japan 1-5 October 2017*. The Optical Society; OSA, Vol. Part F75-ASSL 2017. JTu2A.51

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

An Optical Sensor for Volatile Amines Based on an Inkjet-Printed, Hydrogen-Bonded, Cholesteric Liquid Crystalline Film
Stumpel, J. E., Wouters, C., Herzer, N., Ziegler, J., Broer, D. J., Bastiaansen, C. W. M. & Schenning, A. P. H. J., 2014, In : *Advanced Optical Materials*. 2, 5, p. 459-464 6 p.

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

A novel 3-D printed loop antenna using flexible NinjaFlex material for wearable and IoT applications

Nate, K. & Tentzeris, M. M., 3 Dec 2015, *2015 IEEE 24th Conference on Electrical Performance of Electronic Packaging and Systems, EPEPS 2015*. Institute of Electrical and Electronics Engineers Inc., p. 171-174 4 p. 7347155

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

A Novel Enhanced-Performance Flexible RFID-Enabled Embroidered Wireless Integrated Module for Sensing Applications

Hasani, M., Vena, A., Sydänheimo, L., Tentzeris, M. M. & Ukkonen, L., 2015, In : *IEEE Transactions on Components, Packaging and Manufacturing Technology*. 5, 9, p. 1244-1252 9 p.

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

A novel strain sensor based on 3D printing technology and 3D antenna design

Le, T., Song, B., Liu, Q., Bahr, R. A., Moscato, S., Wong, C. P. & Tentzeris, M. M., 15 Jul 2015, *2015 IEEE 65th Electronic Components and Technology Conference, ECTC 2015*. Institute of Electrical and Electronics Engineers Inc., Vol. 2015-July. p. 981-986 6 p. 7159714

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

Antenna design considerations for far field and near field wireless body-centric systems

Moradi, E., Koski, K., Hasani, M., Rahmat-Samii, Y. & Ukkonen, L., 2 Mar 2015, *ICCEM 2015 - 2015 IEEE International Conference on Computational Electromagnetics*. The Institute of Electrical and Electronics Engineers, Inc., p. 59-60 2 p. 7052555

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

A perceptual quality metric for high-definition stereoscopic 3D video

Battisti, F., Carli, M., Stramacci, A., Boev, A. & Gotchev, A., 2015, *Image Processing: Algorithms and Systems XIII*. SPIE, 939916. (SPIE Conference Proceedings; vol. 9399).

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

Architectures and codecs for real-time light field streaming

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

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

Are coarse-grained models apt to detect protein thermal stability? the case of OPEP force field

Kalimeri, M., Derreumaux, P. & Sterpone, F., 1 Jan 2015, In : *Journal of Non-Crystalline Solids*. 407, p. 494-501 8 p.

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

Artificial intelligence yesterday, today and tomorrow

Jaakkola, H., Henno, J., Mäkelä, J. & Thalheim, B., 1 May 2019, *2019 42nd International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2019 - Proceedings*. Skala, K., Car, Z., Pale, P., Huljenic, D., Janjic, M., Koracic, M., Sruk, V., Ribaric, S., Grbac, T. G., Butkovic, Z., Cicin-Sain, M., Skvorc, D., Mauher, M., Babic, S., Gros, S., Vrdoljak, B. & Tijan, E. (eds.). IEEE, p. 860-867 8 p.

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

Aryl end-capped quaterthiophenes applied as anode interfacial layers in inverted organic solar cells

Heiskanen, J. P., Manninen, V. M., Pankov, D., Omar, W. A. E., Kastinen, T., Hukka, T. I., Lemmetyinen, H. J. & Hormi, O. E. O., 1 Jan 2015, In : *Thin Solid Films*. 574, p. 196-206 11 p.

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

A study of electric transport in n- and p-type modulation-doped GaInNAs/GaAs quantum well structures under a high electric field

Sarcan, F., Mutlu, S., Cokduygular, E., Donmez, O., Erol, A., Puustinen, J. & Guina, M., 4 May 2018, In : Semiconductor Science and Technology. 33, 6, 064003.

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

ATM switch for 2.488 Gbit/s CATV network on FPGA with a high-throughput buffering architecture

Kariniemi, H., Nurmi, J., Fagerlund, P., Liitola, J. & Alinikula, J., 2002, *Midwest Symposium on Circuits and Systems*. Vol. 2.

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

A Two-Stage LNA Design for 28GHz Band of 5G on 45nm CMOS

Järvenhaara, J., Filanovsky, I. M., Nevalainen, I. & Tchamov, N. T., 2020, *2020 IEEE 63rd International Midwest Symposium on Circuits and Systems, MWSCAS 2020 - Proceedings*. IEEE, p. 957-961 5 p. (Midwest Symposium on Circuits and Systems).

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

Back Reflector with Diffractive Gratings for Light-Trapping in Thin-Film III-V Solar Cells

Aho, T., Tukiainen, A., Elsehrawy, F., Ranta, S., Raappana, M., Aho, A., Isoaho, R., Cappelluti, F. & Guina, M., 2019, *2019 European Space Power Conference (ESPC)*. IEEE, 4 p.

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

Backscattering-based wireless communication and power transfer to small biomedical implants

Ukkonen, L., Sydänheimo, L., Ma, S. & Björninen, T., 2020, *Microfluidics, BioMEMS, and Medical Microsystems XVIII*. Gray, B. L. & Becker, H. (eds.). SPIE, 112350A. (Progress in Biomedical Optics and Imaging - Proceedings of SPIE; vol. 11235).

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

Better understanding of the role of SiO₂, P₂O₅ and Al₂O₃ on the spectroscopic properties of Yb³⁺ doped silica sol-gel glasses

Glorieux, B., Salminen, T., Massera, J., Lastusaari, M. & Petit, L., 2018, In : *Journal of Non-Crystalline Solids*. 482, p. 46-51

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

Bistable optical propagation in nematic liquid crystals

Piccardi, A., Alberucci, A., Kravets, N., Buchnev, O., Kaczmarek, M. & Assanto, G., 21 Jul 2014, *Nonlinear Photonics, NP 2014*. Optical Society of America OSA

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

Block copolymer lithography: Feature size control and extension by an over-etch technique

Rasappa, S., Borah, D., Sentharamaiah, R., Faulkner, C. C., Shaw, M. T., Gleeson, P., Holmes, J. D. & Morris, M. A., 1 Nov 2012, In : *Thin Solid Films*. 522, p. 318-323 6 p.

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

Boron delta-doping dependence on Si/SiGe resonant interband tunneling diodes grown by chemical vapor deposition

Ramesh, A., Growden, T. A., Berger, P. R., Loo, R., Vandervorst, W., Douhard, B. & Caymax, M., Mar 2012, In : *IEEE Transactions on Electron Devices*. 59, 3, p. 602-609 8 p.

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

Bringing High-Performance GaInNAsSb/GaAs SOAs to True Data Applications

Giannoulis, G., Korpjärvi, V.-M., Iliadis, N., Mäkelä, J., Viheriälä, J., Apostolopoulos, D., Guina, M. & Avramopoulos, H., 15 Aug 2015, In : *IEEE Photonics Technology Letters*. 27, 16, p. 1691-1694 4 p., 7113825.

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

Broadband finite-Difference Time-Domain modeling of plasmonic organic photovoltaics

Jung, K. Y., Yoon, W. J., Park, Y. B., Berger, P. R. & Teixeira, F. L., 2014, In : ETRI Journal. 36, 4, p. 654-661 8 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Bursty magnetic friction between polycrystalline thin films with domain walls

Rissanen, I. & Laurson, L., 4 Oct 2019, In : Physical Review B. 100, 14, 9 p., 144408.
Research output: Contribution to journal > Article > Scientific > peer-review

Calculated electronic density of states and structural properties of tetrahedral amorphous carbon

Koivusaari, K. J., Rantala, T. T. & Leppävuori, S., Apr 2000, In : Diamond and Related Materials. 9, 3, p. 736-740 5 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Calculation of the scalar diffraction field from curved surfaces by decomposing the three-dimensional field into a sum of Gaussian beams

Şahin, E. & Onural, L., 2013, In : Journal of the Optical Society of America A: Optics Image Science and Vision. 30, 3, p. 527-536 10 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Capability assessment of inkjet printing for reliable RFID applications

Putaalaa, J., Niittynen, J., Hannu, J., Myllymäki, S., Kunnari, E., Mäntysalo, M., Hagberg, J. & Jantunen, H., 1 Jun 2017, In : IEEE Transactions on Device and Materials Reliability. 17, 2, p. 281-290 10 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Cascaded crystalline raman lasers for extended wavelength coverage: Continuous-wave, third-stokes operation

Casula, R., Penttinen, J-P., Guina, M., Kemp, A. J. & Hastie, J. E., 20 Nov 2018, In : Optica. 5, 11, p. 1406-1413 8 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Catalytic Activity of AuCu Clusters on MgO(100): Effect of Alloy Composition for CO Oxidation

Ma, L., Laasonen, K. & Akola, J., 25 May 2017, In : Journal of Physical Chemistry C. 121, 20, p. 10876-10886 11 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Cavity formation in split ring resonators

Caglayan, H., Bulu, I., Loncar, M. & Ozbay, E., Dec 2008, In : Photonics and Nanostructures - Fundamentals and Applications. 6, 3-4, p. 200-204 5 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Chip-by-chip configurable interconnection using digital printing techniques

Mashayekhi, M., Winchester, L., Laurila, M-M., Mäntysalo, M., Ogier, S., Terés, L. & Carrabina, J., 6 Mar 2017, In : Journal of Micromechanics and Microengineering. 27, 4, 045009.
Research output: Contribution to journal > Article > Scientific > peer-review

Coherence of Supercontinuum Light

Genty, G., Friberg, A. T. & Turunen, J., 2016, *Progress in Optics*. Elsevier, Vol. 61. (Progress in Optics).
Research output: Chapter in Book/Report/Conference proceeding > Chapter > Scientific > peer-review

Cold test results of the LARP HQ Nb₃Sn quadrupole magnet at 1.9 K

Bajas, H., Ambrosio, G., Anerella, M., Bajko, M., Bossert, R., Caspi, S., Chiuchiolo, A., Chlachidze, G., Dietderich, D., Dunkel, O., Felice, H., Ferracin, P., Feuvrier, J., Fiscarelli, L., Ghosh, A., Giloux, C., Godeke, A., Hafalia, A. R., Marchevsky, M., Russenschuck, S., Sabbi, G. L., Salmi, T., Schmalzle, J., Todesco, E., Wanderer, P., Wang, X. & Yu, M., 2013, In : IEEE Transactions on Applied Superconductivity. 23, 3, 4002606.
Research output: Contribution to journal > Article > Scientific > peer-review

Combination of E-jet and inkjet printing for additive fabrication of multilayer high-density RDL of silicon interposer

Laurila, M-M., Khorramdel, B. & Mäntysalo, M., 1 Mar 2017, In : IEEE Transactions on Electron Devices. 64, 3, p. 1217-1224 8 p.

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

Combining full-reference image visual quality metrics by neural network

Lukin, V. V., Ponomarenko, N. N., Ieremeiev, O., Egiazarian, K. & Astola, J., 2015, *Proceedings of SPIE - The International Society for Optical Engineering*. SPIE, Vol. 9394. 93940K

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

Comparative Analysis of Injection Microdisk Lasers Based on InGaAsN Quantum Wells and InAs/InGaAs Quantum Dots

Moiseev, E. I., Maximov, M. V., Kryzhanovskaya, N. V., Simchuk, O. I., Kulagina, M. M., Kadinskaya, S. A., Guina, M. & Zhukov, A. E., 1 Feb 2020, In : *Semiconductors*. 54, 2, p. 263-267 5 p.

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

Comparison of the optical, thermal and structural properties of Ge-Sb-S thin films deposited using thermal evaporation and pulsed laser deposition techniques

Musgraves, J. D., Carlie, N., Hu, J., Petit, L., Agarwal, A., Kimerling, L. C. & Richardson, K. A., Jul 2011, In : *Acta Materialia*. 59, 12, p. 5032-5039 8 p.

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

Comparison of three light doses in the photodynamic treatment of actinic keratosis using mathematical modeling

Vignon-Dewalle, A. S., Betrouni, N., Tylcz, J. B., Vermandel, M., Mortier, L. & Mordon, S., 1 May 2015, In : *JOURNAL OF BIOMEDICAL OPTICS*. 20, 5, 058001.

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

Compatibilization of natural rubber/nitrile rubber blends by sol-gel nano-silica generated by in situ method

Bansod, N. D., Kapgade, B. P., Das, C., Das, A., Basu, D. & Debnath, S. C., 2016, In : *JOURNAL OF SOL-GEL SCIENCE AND TECHNOLOGY*. 80, 2, p. 548-559 12 p.

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

Complex-domain sparse imaging in terahertz pulse time-domain holography with balance detection

Kulya, M. S., Katkovnik, V., Egiazarian, K. & Petrov, N. V., 2020, *Terahertz, RF, Millimeter, and Submillimeter-Wave Technology and Applications XIII*. Sadwick, L. P. & Yang, T. (eds.). SPIE, 1127921. (Proceedings of SPIE; vol. 11279).

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

Composition dependent growth dynamics in molecular beam epitaxy of GaInNAs solar cells

Aho, A., Polojärvi, V., Korpijärvi, V. M., Salmi, J., Tukiainen, A., Laukkanen, P. & Guina, M., May 2014, In : *Solar Energy Materials and Solar Cells*. 124, p. 150-158 9 p.

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

Compressive strain measurement using RFID patch antenna sensors

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

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

Computational super-resolution phase retrieval from multiple phase-coded diffraction patterns: Simulation study and experiments

Katkovnik, V., Shevkunov, I., Petrov, N. V. & Egiazarian, K., 20 Jul 2017, In : *Optica*. 4, 7, p. 786-794 9 p.

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

Computational wavelength resolution for in-line lensless holography: Phase-coded diffraction patterns and wavefront group-sparsity

Katkovnik, V., Shevkunov, I., Petrov, N. V. & Egiazarian, K., 2017, *Digital Optical Technologies 2017*. SPIE, 1033509. (Proceedings of SPIE; vol. 10335).

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

Computation of torque of an electrical machine with different types of finite element mesh in the air gap

Silwal, B., Rasilo, P., Perkkio, L., Oksman, M., Hannukainen, A., Eirola, T. & Arkkio, A., 1 Dec 2014, In : *IEEE Transactions on Magnetics*. 50, 12, 8105909.

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

Considerations on a Cost Model for High-Field Dipole Arc Magnets for FCC

Schoerling, D., Durante, M., Lorin, C., Martinez, T., Ruuskanen, J., Salmi, T., Sorbi, M., Tommasini, D. & Toral, F., 1 Jun 2017, In : IEEE Transactions on Applied Superconductivity. 27, 4, 4003105.

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

Construction of an Interconnected Nanostructured Carbon Black Network: Development of Highly Stretchable and Robust Elastomeric Conductors

Bhagavatheswaran, E. S., Parsekar, M., Das, A., Le, H. H., Wiessner, S., Stöckelhuber, K. W., Schmaucks, G. & Heinrich, G., 17 Sep 2015, In : Journal of Physical Chemistry C. 119, 37, p. 21723-21731 9 p.

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

Continuous-wave, cascaded raman laser at 1.3, 1.5, and 1.7 μm

Casula, R., Penttinen, J. P., Guina, M., Kemp, A. J. & Hastie, J. E., 1 Jan 2017, *The European Conference on Lasers and Electro-Optics, CLEO_Europe 2017*. OSA - The Optical Society, (Optics InfoBase Conference Papers; vol. Part F82-CLEO_Europe 2017).

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

Continuous-wave optical parametric oscillators for mid-infrared spectroscopy

Vainio, M., 2020, *Nonlinear Frequency Generation and Conversion: Materials and Devices XIX*. Schunemann, P. G. & Schepler, K. L. (eds.). SPIE, 1126419. (Proceedings of SPIE - The International Society for Optical Engineering; vol. 11264).

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

Controlling the plasmon resonance via epsilon-near-zero multilayer metamaterials

Habib, M., Briukhanova, D., Das, N., Yildiz, B. C. & Caglayan, H., 2020, In : Nanophotonics. 9, 11, 8 p., 20200245.

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

Crystallization of supercooled liquid antimony: A density functional study

Ropo, M., Akola, J. & Jones, R. O., 3 Nov 2017, In : Physical Review B. 96, 18, 184102.

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

Crystallization processes in the phase change material Ge₂ Sb₂ Te₅: Unbiased density functional/molecular dynamics simulations

Kalikka, J., Akola, J. & Jones, R. O., 17 Oct 2016, In : Physical Review B. 94, 13, 134105.

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

Cyclic quantum walks: Photonic realization and decoherence analysis

Nejadsattari, F., Zhang, Y., Jayakody, M. N., Bouchard, F., Larocque, H., Sit, A., Fickler, R., Cohen, E. & Karimi, E., 2020, *Advanced Optical Techniques for Quantum Information, Sensing, and Metrology*. Hemmer, P. R., Migdall, A. L. & Hasan, Z. U. (eds.). SPIE, 1129503. (Proceedings of SPIE - The International Society for Optical Engineering; vol. 11295).

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

Cysteine-tagged chimeric avidin forms high binding capacity layers directly on gold

Vikholm-Lundin, I., Auer, S., Paakkunainen, M., Määttä, J. A. E., Munter, T., Leppiniemi, J., Hytönen, V. P. & Tappura, K., Aug 2012, In : Sensors and Actuators B: Chemical. 171-172, p. 440-448 9 p.

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

Decreasing the extremely low-frequency electric field exposure with a Faraday cage during work tasks from a man hoist at a 400 kV substation

Pirkkalainen, H., Elovaara, J. & Korpinen, L., 2016, In : Progress In Electromagnetics Research M. 48, p. 55-66 12 p.

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

Deformation of lamellar γ -TiAl below the general yield stress

Edwards, T. E. J., Di Gioacchino, F., Goodfellow, A. J., Mohanty, G., Wehrs, J., Michler, J. & Clegg, W. J., 15 Jan 2019, In : Acta Materialia. 163, p. 122-139 18 p.

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

Demonstration of optical nonlinearity in InGaAsP/InP passive waveguides

Saeidi, S., Rasekh, P., Awan, K. M., Tüğen, A., Huttunen, M. J. & Dolgaleva, K., 1 Oct 2018, In : *Optical Materials*. 84, p. 524-530 7 p.

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

Depth map occlusion filling and scene reconstruction using modified exemplar-based inpainting

Voronin, V. V., Marchuk, V. I., Fisunov, A. V., Tokareva, S. V. & Egiazarian, K. O., 2015, *Image Processing: Algorithms and Systems XIII*. SPIE, 93990S. (SPIE Conference Proceedings; vol. 9399).

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

Design and simulation of a slotted patch antenna sensor for wireless strain sensing

Yi, X., Cho, C., Cook, B., Wang, Y., Tentzeris, M. M. & Leon, R. T., 2013, *Nondestructive Characterization for Composite Materials, Aerospace Engineering, Civil Infrastructure, and Homeland Security 2013*. Vol. 8694. 86941J

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

Design, fabrication, and testing of a low AC-loss conduction-cooled cryostat for magnetization loss measurement apparatus

Järvelä, J., Lyly, M., Stenvall, A., Juntunen, R., Souc, J. & Mikkonen, R., 1 Feb 2015, In : *IEEE Transactions on Applied Superconductivity*. 25, 1

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

Design, Fabrication, and Wireless Evaluation of a Passive 3D-printed Moisture Sensor on a Textile Substrate

Chen, X., He, H., Khan, Z., Sydänheimo, L., Ukkonen, L. & Virkki, J., 1 Jun 2019, *2019 Photonics and Electromagnetics Research Symposium - Spring, PIERS-Spring 2019 - Proceedings*. IEEE, p. 1027-1030 4 p. 9017301. (Progress in Electromagnetics Research Symposium; vol. 2019-June).

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

Designing materials with desired electromagnetic properties

Bulu, I., Caglayan, H. & Ozbay, E., Dec 2006, In : *Microwave and Optical Technology Letters*. 48, 12, p. 2611-2615 5 p.

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

Design of a Nb₃Sn 400 T/m quadrupole for the Future Circular Collider

Lorin, C., Simon, D., Felice, H., Rifflet, J. M., Salmi, T. & Schoerling, D., 2018, In : *IEEE Transactions on Applied Superconductivity*. 28, 3, 4004905.

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

Detection of 3,4-methylenedioxymethamphetamine (MDMA, ecstasy) by displacement of antibodies

Vikholm-Lundin, I., Auer, S. & Hellgren, A. C., 10 Aug 2011, In : *Sensors and Actuators B: Chemical*. 156, 1, p. 28-34 7 p.

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

Determination of beam incidence conditions based on the analysis of laser interference patterns

Wang, D., Wang, Z., Yue, Y., Yu, J., Tan, C., Li, D., Qiu, R. & Maple, C., 1 Nov 2015, In : *Optik*. 126, 21, p. 2902-2907 6 p.

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

Development of a new illumination procedure for photodynamic therapy of the abdominal cavity

Cuyon, L., Lesage, J. C., Betrouni, N. & Mordon, S., Mar 2012, In : *JOURNAL OF BIOMEDICAL OPTICS*. 17, 3, 038001.

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

Development of dust test method for motor drives

Pippola, J., Marttila, T. & Frisk, L., 26 Jul 2017, *2017 IMAPS Nordic Conference on Microelectronics Packaging, NordPac 2017*. IEEE, p. 43-46 4 p.

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

Development of efficient electrically pumped nanolasers based on InAlGaAs tunnel junction

Fang, C. Y., Vallini, F., Amili, A. E., Tukiainen, A., Lyytikäinen, J., Guina, M. & Fainman, Y., 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

Development of MQXF: The Nb₃Sn Low-β Quadrupole for the HiLumi LHC

Ferracin, P., Ambrosio, G., Anerella, M., Ballarino, A., Bajas, H., Bajko, M., Bordini, B., Bossert, R., Cheng, D. W., Dietderich, D. R., Chlachidze, G., Cooley, L., Felice, H., Ghosh, A., Hafalia, R., Holik, E., Izquierdo Bermudez, S., Fessia, P., Grosclaude, P., Guinchard, M., Juchno, M., Krave, S., Lackner, F., Marchevsky, M., Marinozzi, V., Nobrega, F., Oberli, L., Pan, H., Perez, J. C., Prin, H., Rysti, J., Rochepault, E., Sabbi, G., Salmi, T., Schmalzle, J., Sorbi, M., Sequeira Tavares, S., Todesco, E., Wanderer, P., Wang, X. & Yu, M., 1 Jun 2016, In : *IEEE Transactions on Applied Superconductivity*. 26, 4, 4000207.

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

Diffusion on aluminum-cluster surfaces and the cluster growth

Valkealahti, S. & Manninen, M., 1 Jan 1998, In : *Physical Review B - Condensed Matter and Materials Physics*. 57, 24, p. 15533-15540 8 p.

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

Dilute nitride SOAs for high-speed data processing in variable temperature conditions

Giannoulis, G., Korpijärvi, V. M., Iliadis, N., Mäkelä, J., Viheriälä, J., Apostolopoulos, D., Guina, M. & Avramopoulos, H., 13 Mar 2015, *Optical Fiber Communication Conference, OFC 2015*. OSA - The Optical Society

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

Dilute nitride triple junction solar cells for space applications: Progress towards highest AM0 efficiency

Aho, A., Isoaho, R., Tukiainen, A., Gori, G., Campesato, R. & Guina, M., Sep 2018, In : *Progress in Photovoltaics: Research and Applications*. 26, 19, p. 740-744 5 p.

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

Directional random laser by combining cavity-less lasing and spatial solitons in liquid crystals

Perumbilavil, S., Piccardi, A., Kauranen, M. & Assanto, G., 2018, *Nonlinear Photonics, NP 2018*. OSA - The Optical Society, Vol. Part F108-NP 2018.

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

Directional selectivity through the subwavelength slit in metallic gratings

Cakmakyapan, S., Caglayan, H., Serebryannikov, A. & Ozbay, E., 2011, *2011 Conference on Lasers and Electro-Optics: Laser Science to Photonic Applications, CLEO 2011*. 5951099

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

Direct measurement of vapour-metal shifts in photo- and Auger electron spectra of Zn and Cd

Kumpula, R., Vayrynen, J., Rantala, T. & Aksela, S., 1979, In : *Journal of physics c-Solid state physics*. 12, 21, 001.

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

Dissolution behavior of the bioactive glass S53P4 when sodium is replaced by potassium, and calcium with magnesium or strontium

Hupa, L., Fagerlund, S., Massera, J. & Björkvik, L., 2016, In : *Journal of Non-Crystalline Solids*. p. 41-46 6 p.

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

Dots-on-the-fly electron beam lithography

Isotalo, T. J. & Niemi, T., 2016, *SPIE Proceedings: Alternative Lithographic Technologies VIII*. Bencher, C. (ed.). SPIE, Vol. 9777. 7 p. 97771E. (Proceedings of SPIE).

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

Double-asymmetric-structure 1.5 μ m high power laser diodes

Hallman, L., Ryykin, B. S., Avrutin, E. A., Aho, A. T., Viheriälä, J., Guina, M. & Kostamovaara, J. T., 1 Oct 2019, *Proceedings of the 2019 IEEE High Power Diode Lasers and Systems Conference, HPD 2019 - Co-located with Photonex 2019*. IEEE, p. 19-20 2 p.

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

Dynamic laser speckle metrology with binarization of speckle patterns

Stoykova, E., Nazarova, D., Berberova, N., Gotchev, A., Ivanov, B. & Mateev, G., 2017, *19th International Conference and School on Quantum Electronics: Laser Physics and Applications*. SPIE, 102260R. (Proceedings of SPIE; vol. 10226).

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

Dynamics of photovoltaic-generator-interfacing voltage-controlled buck power stage

Sitbon, M., Leppäaho, J., Suntio, T. & Kuperman, A., 1 Mar 2015, In : *IEEE Journal of Photovoltaics*. 5, 2, p. 633-640 8 p.

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

Dynamic speckle analysis with smoothed intensity-based activity maps

Stoykova, E., Berberova, N., Kim, Y., Nazarova, D., Ivanov, B., Gotchev, A., Hong, J. & Kang, H., 1 Jun 2017, In : *Optics and Lasers in Engineering*. 93, p. 55-65 11 p.

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

Eco-friendly flexible wireless platforms by 3D printing pen

Mehmood, A., Chen, X., He, H., Ukkonen, L. & Virkki, J., 1 Dec 2019, *2019 Photonics and Electromagnetics Research Symposium - Fall, PIERS - Fall 2019 - Proceedings*. IEEE, p. 2422-2425 4 p. 9021887. (2019 Photonics and Electromagnetics Research Symposium - Fall, PIERS - Fall 2019 - Proceedings).

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

Effect of Epoxy Flux Underfill on Thermal Cycling Reliability of Sn-8Zn-3Bi Lead-Free Solder in a Sensor Application

Mostofizadeh, M., Najari, M., Das, D., Pecht, M. & Frisk, L., 16 Aug 2016, *Proceedings - ECTC 2016: 66th Electronic Components and Technology Conference*. IEEE, p. 2169-2175 7 p.

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

Effect of heat-treatment on the upconversion of NaYF₄:Yb³⁺, Er³⁺ nanocrystals containing silver phosphate glass

Ojha, N., Bogdan, M., Galatus, R. & Petit, L., 15 Sep 2020, In : *Journal of Non-Crystalline Solids*. 544, 120243.

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

Effect of Hole Transporting Material on Charge Transfer Processes in Zinc Phthalocyanine Sensitized ZnO Nanorods

Hakola, H., Sariola-Leikas, E., Efimov, A. & Tkachenko, N. V., 21 Apr 2016, In : *Journal of Physical Chemistry C*. 120, 13, p. 7044-7051 8 p.

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

Effect of incorporation of CdS NPs on performance of PTB7: PCBM organic solar cells

Sharma, R., Bhalerao, S. & Gupta, D., 1 Jun 2016, In : *Organic Electronics: physics, materials, applications*. 33, p. 274-280 7 p.

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

Effect of sol-gel derived in situ silica on the morphology and mechanical behavior of natural rubber and acrylonitrile butadiene rubber blends

Kapgate, B. P., Das, C., Das, A., Basu, D., Reuter, U. & Heinrich, G., Sep 2012, In : *JOURNAL OF SOL-GEL SCIENCE AND TECHNOLOGY*. 63, 3, p. 501-509 9 p.

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

Effect of the addition of Al₂O₃, TiO₂ and ZnO on the thermal, structural and luminescence properties of Er³⁺-doped phosphate glasses

Lopez-Iscoa, P., Petit, L., Massera, J., Janner, D., Boetti, N. G., Pugliese, D., Fiorilli, S., Novara, C., Giorgis, F. & Milanese, D., 15 Mar 2017, In : *Journal of Non-Crystalline Solids*. 460, p. 161-168 8 p.

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

Effect of the glass melting condition on the processing of phosphate-based glass-ceramics with persistent luminescence properties

Massera, J., Gaussiran, M., Gluchowski, P., Lastusaari, M., Petit, L., Hölsä, J. & Hupa, L., 1 Feb 2016, In : *Optical Materials*. 52, p. 56-61 6 p.

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

Effects of insertion of strain-engineering Ga(In)NAs layers on optical properties of InAs/GaAs quantum dots for high-efficiency solar cells

Pavelescu, E.-M., Polojärvi, V., Schramm, A., Tukiainen, A., Aho, A., Zhang, W., Puustinen, J., Salmi, J. & Guina, M., 1 Feb 2016, In : *Optical Materials*. 52, p. 177-180 4 p.

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

Effects of thinning and heating for TiO₂/AlInP junctions

Mäkelä, J., Tuominen, M., Yasir, M., Polojärvi, V., Aho, A., Tukiainen, A., Kuzmin, M., Punkkinen, M. P. J., Laukkanen, P., Kokko, K. & Guina, M., 24 Aug 2015, In : *Journal of Electron Spectroscopy and Related Phenomena*. 205, p. 6-9 4 p.

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

Efficient photon upconversion at remarkably low annihilator concentrations in a liquid polymer matrix: when less is more

Durandin, N. A., Isokuortti, J., Efimov, A., Vuorimaa-Laukkanen, E., Tkachenko, N. V. & Laaksonen, T., 2018, In : *Chemical Communications*. 54, 99, p. 14029-14032 4 p.

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

Electrical Contacts in SOI MEMS Using Aerosol Jet Printing

Khorrarnadel, B., Torkkeli, A. & Mäntysalo, M., 2017, In : *IEEE Journal of the Electron Devices Society*. 6, p. 34-40

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

Electronic transport in n-type modulation-doped AlGaAs/GaAsBi quantum well structures: Influence of Bi and thermal annealing on electron effective mass and electron mobility

Donmez, O., Aydin, M., Ardali, Yildirim, S., Tiraş, E., Nutku, F., Cetinkaya, C., okduygulular, E., Puustinen, J., Hilska, J., Guina, M. & Erol, A., 2020, In : *Semiconductor Science and Technology*. 35, 2, 025009.

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

Electro-optic steering of nematicons

Assanto, G., Piccardi, A., Barboza, R. & Alberucci, A., 2012, In : *Photonics Letters of Poland*. 4, 1, p. 2-4 3 p.

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

Electro-optic steering of random laser emission in liquid crystals

Assanto, G., Perumbilavil, S., Piccardi, A. & Kauranen, M., 2018, In : *Photonics Letters of Poland*. 10, 4, p. 103-105 3 p.

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

Electrospun Black Titania Nanofibers: Influence of Hydrogen Plasma-Induced Disorder on the Electronic Structure and Photoelectrochemical Performance

Lepcha, A., Maccato, C., Mettenböcker, A., Andreu, T., Mayrhofer, L., Walter, M., Olthof, S., Ruoko, T. P., Klein, A., Moseler, M., Meerholz, K., Morante, J. R., Barreca, D. & Mathur, S., 20 Aug 2015, In : *Journal of Physical Chemistry C*. 119, 33, p. 18835-18842 8 p.

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

Embroidered and e-textile conductors embedded inside 3D-printed structures

Khan, Z., He, H., Chen, X., Ukkonen, L. & Virkki, J., 1 Dec 2019, *2019 Photonics and Electromagnetics Research Symposium - Fall, PIERS - Fall 2019 - Proceedings*. IEEE, p. 1675-1680 6 p. 9021681

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

Energy density-method: An approach for a quick estimation of quench temperatures in high-field accelerator magnets

Salmi, T. & Schoerling, D., Jun 2019, In : *IEEE Transactions on Applied Superconductivity*. 29, 4

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

Engineering of Chern insulators and circuits of topological edge states

Minarelli, E. L., Pojhönen, K., Van Dalum, G. A. R., Ojanen, T. & Fritz, L., 10 Apr 2019, In : *Physical Review B*. 99, 16, 165413.

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

Enhanced-performance wireless conformal "smart skins" utilizing inkjet-printed carbon-nanostructures

Le, T., Lin, Z., Wong, C. P. & Tentzeris, M. M., 11 Sep 2014, *Proceedings - Electronic Components and Technology Conference*. Institute of Electrical and Electronics Engineers Inc., p. 769-774 6 p. 6897372

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

ESD qualification data used as the basis for building electrostatic discharge protected areas

Tamminen, P., Viheriäkösä, T., Sydänheimo, L. & Ukkonen, L., 1 Oct 2015, In : *Journal of Electrostatics*. 77, p. 174-181 8 p., 3024.

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

Essential Measurements for Finite Element Simulations of Magnetostrictive Materials

Poutala, A., Kovanen, T. & Kettunen, L., 2018, In : *IEEE Transactions on Magnetics*. 54, 1, 7200107.

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

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

Farooq, A., Evreinov, G., Raisamo, R. & Takahata, D., 31 Dec 2015, *2015 IEEE SENSORS - Proceedings*. Institute of Electrical and Electronics Engineers Inc., 7370186

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

Evaluation of Aerosol, Superfine Inkjet, and Photolithography Printing Techniques for Metallization of Application Specific Printed Electronic Circuits

Mashayekhi, M., Winchester, L., Evans, L., Pease, T., Laurila, M-M., Mäntysalo, M., Ogier, S., Teres, L. & Carrabina, J., 1 Mar 2016, In : *IEEE Transactions on Electron Devices*. 63, 3, p. 1246-1253 8 p.

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

Evaluation of crushing strength of spray-dried MgAl₂O₄ granule beds

Kanerva, U., Suhonen, T., Lagerbom, J. & Levänen, E., 1 Aug 2015, In : *Ceramics International*. 41, 7, p. 8494-8500 7 p.

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

Evaluation of screen printed silver trace performance and long-term reliability against environmental stress on a low surface energy substrate

Mikkonen, R. & Mäntysalo, M., 1 Jul 2018, In : *Microelectronics Reliability*. 86, p. 54-65 12 p.

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

Exciton localization and structural disorder of GaAs_{1-x}Bi_x/GaAs quantum wells grown by molecular beam epitaxy on (311)B GaAs substrates

Prando, G. A., Orsi Gordo, V., Puustinen, J., Hilska, J., Alghamdi, H. M., Som, G., Gunes, M., Akyol, M., Souto, S., Rodrigues, A. D., Galeti, H. V. A., Henini, M., Gobato, Y. G. & Guina, M., 17 Jul 2018, In : *Semiconductor Science and Technology*. 33, 8, 084002.

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

Experimental realization of wave-packet dynamics in cyclic quantum walks

Nejadsattari, F., Zhang, Y., Bouchard, F., Larocque, H., Sit, A., Cohen, E., Fickler, R. & Karimi, E., 20 Feb 2019, In : *Optica*. 6, 2, p. 174-180 7 p.

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

Exploration of Two Layer Nb₃Sn Designs of the Future Circular Collider Main Quadrupoles

Lorin, C., Fleiter, J., Salmi, T. & Schoerling, D., 1 Aug 2019, In : *IEEE Transactions on Applied Superconductivity*. 29, 5, 4001005.

Fabrication and characterization of broadband superluminescent diodes for 2 μm wavelength

Zia, N., Viheriälä, J., Koskinen, R., Koskinen, M., Suomalainen, S. & Guina, M., 2016, *Light-Emitting Diodes: Materials, Devices, and Applications for Solid State Lighting XX*. SPIE, 97680Q. (Proceedings of SPIE; vol. 9768).

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

Fabrication and performance evaluation of 3D-printed graphene passive UHF RFID tags on cardboard

He, H., Akbari, M., Chen, X., Nommeots-Nomm, A., Chen, L., Ukkonen, L. & Virkki, J., 22 May 2017, *2017 Progress in Electromagnetics Research Symposium - Spring, PIERS 2017*. IEEE, p. 3322-3325 4 p.

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

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

Fabrication Challenges in Embedding of Components and Embroidered Conductors into 3D-printed Textile Electronics Structures

Khan, Z., He, H., Chen, X., Ukkonen, L. & Virkki, J., 1 Jun 2019, *2019 Photonics and Electromagnetics Research Symposium - Spring, PIERS-Spring 2019 - Proceedings*. IEEE, p. 1372-1377 6 p. 9017223. (Progress in Electromagnetics Research Symposium; vol. 2019-June).

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

Fabrication of ssDNA/Oligo(ethylene glycol) monolayers and patterns by exchange reaction promoted by ultraviolet light irradiation

Khan, M. N. & Zharnikov, M., 27 Nov 2013, In : *Journal of Physical Chemistry C*. 117, 47, p. 24883-24893 11 p.

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

Fabrication of ssDNA/oligo(ethylene glycol) monolayers by promoted exchange reaction with thiol and disulfide substituents

Khan, M. N. & Zharnikov, M., 13 Feb 2014, In : *Journal of Physical Chemistry C*. 118, 6, p. 3093-3101 9 p.

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

Features of correlation measurements of the parameters of pulsed hyperspectral optical fields using an asymmetric interferometer

Kulya, M. S., Katkovnik, V. Y., Egiazarian, K. & Petrov, N. V., 2020, In : *Quantum Electronics*. 50, 7, p. 679-682 4 p.

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

FEM for directly coupled magneto-mechanical phenomena in electrical machines

Fonteyn, K., Belahcen, A., Kouhia, R., Rasilo, P. & Arkkio, A., Aug 2010, In : *IEEE Transactions on Magnetics*. 46, 8, p. 2923-2926 4 p.

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

Finite element method incorporating coupled magneto-elastic model for magneto-mechanical energy harvester

Ahmed, U., Harju, J., Poutala, J., Ruuskanen, P., Rasilo, P. & Kouhia, R., 19 Jun 2017. 2 p.

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

First Cold Powering Test of REBCO Roebel Wound Coil for the EuCARD2 Future Magnet Development Project

Kirby, G. A., Van Nugteren, J., Bajas, H., Benda, V., Ballarino, A., Bajko, M., Bottura, L., Broekens, K., Canale, M., Chiuchio, A., Gentini, L., Peray, N., Perez, J. C., De Rijk, G., Rijllart, A., Rossi, L., Murtomaeki, J., Mazet, J., Pincot, F. O., Volpini, G., Durante, M., Fazilleau, P., Lorin, C., Stenvall, A., Goldacker, W., Kario, A. & Usoskin, A., 1 Jun 2017, In : *IEEE Transactions on Applied Superconductivity*. 27, 4, 4003307.

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

First principles prediction of the solar cell efficiency of chalcopyrite materials 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

Fluid flow simulations meet high-speed video: Computer vision comparison of droplet dynamics

Kulju, S., Riegger, L., Koltay, P., Mattila, K. & Hyväluoma, J., 15 Jul 2018, In : Journal of Colloid and Interface Science. 522, p. 48-56 9 p.

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

Fluorescence bandwidth of 280nm from broadband Ce^{3+} -doped silica fiber pumped with blue laser diode

Yadav, A., Chichkov, N. B., Gumenyuk, R., Zhrebtsov, E., Melkumov, M. A., Yashkov, M. V., Dianov, E. M. & Rafailov, E. U., 13 Aug 2018, *2018 International Conference Laser Optics (ICLO)*. IEEE, p. 133-133 1 p. 8435861

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

Fluorimetric oxygen sensor with an efficient optical read-out for in vitro cell models

Välimäki, H., Verho, J., Kreutzer, J., Kattiparambil Rajan, D., Ryyänen, T., Pekkanen-Mattila, M., Ahola, A., Tappura, K., Kallio, P. & Lekkala, J., 1 Oct 2017, In : Sensors and Actuators B: Chemical. 249, p. 738-746 9 p.

Research output: Contribution to journal > Article > 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

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

Kantola, E., Leinonen, T., Rantamäki, A., Guina, M., Sirbu, A. & Iakovlev, V., 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 modulation of semiconductor disk laser pulses

Zolotovskii, I. O., Korobko, D. A. & Okhotnikov, O. G., 2015, In : Quantum Electronics. 45, 7, p. 628-634 7 p.

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

Full-field mode sorter using two optimized phase transformations for high-dimensional quantum cryptography

Fickler, R., Bouchard, F., Giese, E., Grillo, V., Leuchs, G. & Karimi, E., 2020, In : Journal of Optics (United Kingdom). 22, 2, 7 p., 024001.

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

Fundamental gaps of quantum dots on the cheap

Guandalini, A., Rozzi, C. A., Räsänen, E. & Pittalis, S., 25 Mar 2019, In : Physical Review B. 99, 12, 125140.

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

GaInAsSb/AlGa(In)AsSb type I quantum wells emitting in 3µm range for application in superluminescent diodes

Kurka, M., Dyksik, M., Suomalainen, S., Koivusalo, E., Guina, M. & Motyka, M., 1 May 2019, In : Optical Materials. 91, p. 274-278 5 p.

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

Generalized slip transformations and air-gap harmonics in field models of electrical machines

Räsänen, V., Suuriniemi, S. & Kettunen, L., 1 Sep 2016, In : IEEE Transactions on Magnetics. 52, 9, 8107708.

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

Generation of a broad IR spectrum and N-soliton compression in a longitudinally inhomogeneous dispersion-shifted fibre
Zolotovskii, I. O., Korobko, D. A., Okhotnikov, O. G., Stolyarov, D. A. & Sysolyatin, A. A., 2015, In : *Quantum Electronics*. 45, 9, p. 844-852 9 p.

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

Generation of bound states of pulses in a soliton laser with complex relaxation of a saturable absorber

Zolotovskii, I. O., Korobko, D. A., Gumenyuk, R. V. & Okhotnikov, O. G., 2015, In : *Quantum Electronics*. 45, 1, p. 26-34 9 p.

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

Generation of Sub-100 ps Pulses at 532, 355, and 266 nm Using a SESAM Q-Switched Microchip Laser

Nikkinen, J., Härkönen, A., Leino, I. & Guina, M., 1 Nov 2017, In : *IEEE Photonics Technology Letters*. 29, 21, p. 1816-1819 4 p.

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

Geometric Structure and Chemical Ordering of Large AuCu Clusters: A Computational Study

Goh, J-Q., Akola, J. & Ferrando, R., 25 May 2017, In : *Journal of Physical Chemistry C*. 121, 20, p. 10809-10816 8 p.

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

Geometry Analysis in Screen-Printed Stretchable Interconnects

Mosallaei, M., Jokinen, J., Honkanen, M., Iso-Ketola, P., Vippola, M., Vanhala, J., Kanerva, M. & Mantysalo, M., Aug 2018, In : *IEEE Transactions on Components, Packaging and Manufacturing Technology*. 8, 8, p. 1344-1352

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

Germanium-on-glass solar cells: Fabrication and characterization

Sorianello, V., Colace, L., Maragliano, C., Fulgoni, D., Nash, L. & Assanto, G., 2013, In : *Optical Materials Express*. 3, 2, p. 216-228 13 p.

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

Germanium-on-glass solar cells

Colace, L., Sorianello, V., Maragliano, C., Assanto, G., Fulgoni, D., Nash, L. & Palmer, M., 2011, *8th IEEE International Conference on Group IV Photonics, GFP 2011*. p. 255-257 3 p. 6053781

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

Ghost imaging in the time domain

Ryczkowski, P., Barbier, M., Friberg, A. T., Dudley, J. M. & Genty, G., 1 Feb 2016, In : *Nature Photonics*. 10, p. 167-170 4 p.

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

Goos-Hänchen and Imbert-Fedorov shifts for epsilon-near-zero materials

Nieminen, A., Marini, A. & Ornigotti, M., 28 Jan 2020, In : *Journal of Optics*. 22, 3, 035601.

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

Graphene-based tunable plasmon induced transparency in gold strips

Habib, M., Rashed, A. R., Ozbay, E. & Caglayan, H., 1 Apr 2018, In : *Optical Materials Express*. 8, 4, p. 1069-1074 6 p.

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

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

Ledentsov, N. N., Shchukin, V. A., Lyytikäinen, J., Okhotnikov, O., Cherkashin, N. A., Shernyakov, Y. M., Payusov, A. S., Gordeev, N. Y., Maximov, M. V., Schlichting, S., Nippert, F. & Hoffmann, A., 2015, *Proceedings of SPIE: Light-Emitting Diodes: Materials, Devices, and Applications for Solid State Lighting XIX*. SPIE, Vol. 9383. 93830E

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

>8W GaInNAs VECSEL emitting at 615 nm

Leinonen, T., Penttinen, J. P., Korpijärvi, V. M., Kantola, E. & Guina, M., 2015, *Proceedings of SPIE: Vertical External Cavity Surface Emitting Lasers (VECSELs)* V. SPIE, Vol. 9349. 934909

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

Hafnium oxide thin films as a barrier against copper diffusion in solar absorbers

Kotilainen, M., Krumpolec, R., Franta, D., Souček, P., Homola, T., Cameron, D. C. & Vuoristo, P., 1 Jul 2017, In : *Solar Energy Materials and Solar Cells*. 166, p. 140-146 7 p.

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

Halogen bonding stabilizes a cis-azobenzene derivative in the solid state: A crystallographic study

Saccone, M., Siiskonen, A., Fernandez-Palacio, F., Priimägi, A., Terraneo, G., Resnati, G. & Metrangolo, P., 1 Apr 2017, In : *ACTA CRYSTALLOGRAPHICA SECTION B : STRUCTURAL SCIENCE, CRYSTAL ENGINEERING AND MATERIALS*. 73, 2, p. 227-233 7 p.

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

Halogen bonding versus hydrogen bonding in driving self-assembly and performance of light-responsive supramolecular polymers

Priimägi, A., Cavallo, G., Forni, A., Gorynsztejn-Leben, M., Kaivola, M., Metrangolo, P., Milani, R., Shishido, A., Pilati, T., Resnati, G. & Terraneo, G., 20 Jun 2012, In : *Advanced Functional Materials*. 22, 12, p. 2572-2579 8 p.

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

Harmonic mode-locking fiber ring laser with a pulse repetition rate up to 12 GHz

Korobko, D. A., Stoliarov, D. A., Itrin, P. A., Odnoblyudov, M. A., Petrov, A. B. & Gumenyuk, R. V., 2020, In : *Optics and laser technology*. 133, 6 p., 106526.

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

Hematite Surface Modification toward Efficient Sunlight-Driven Water Splitting Activity: The Role of Gold Nanoparticle Addition

Tofanello, A., Freitas, A. L. M., Carvalho, W. M., Salminen, T., Niemi, T. & Souza, F. L., 2020, In : *Journal of Physical Chemistry C*.

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

High-dimensional quantum gates using full-field spatial modes of photons

Brandt, F., Hiekkämäki, M., Bouchard, F., Huber, M. & Fickler, R., 20 Feb 2020, In : *Optica*. 7, 2, p. 98-107 10 p.

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

Highly efficient charge separation in model Z-scheme TiO₂/TiSi₂/Si photoanode by micropatterned titanium silicide interlayer

Hannula, M., Ali-Löyty, H., Lahtonen, K., Saari, J., Tukiainen, A. & Valden, M., 1 Aug 2019, In : *Acta Materialia*. 174, p. 237-245 9 p.

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

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

Mateos, X., Loiko, P., Lamrini, S., Scholle, K., Fuhrberg, P., Suomalainen, S., Härkönen, A., Guina, M., Vatnik, S., Vedin, I., Aguiló, M., Díaz, F., Wang, Y., Griebner, U. & Petrov, V., 2018, *Pacific-Rim Laser Damage 2018: Optical Materials for High-Power Lasers*. SPIE, IEEE, 107130J. (Proceedings of SPIE; vol. 10713).

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

High performance corrosion resistant coatings by novel coaxial cold- and hot-wire laser cladding methods

Pajukoski, H., Näkki, J., Thieme, S., Tuominen, J., Nowotny, S. & Vuoristo, P., 2016, In : *Journal of Laser Applications*. 28, 1, 012011.

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

High performance GaSb superluminescent diodes for tunable light source at 2 μm and 2.55 μm

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

Viherialä, J., Aho, A. T., Mäkelä, J., Salmi, J., Virtanen, H., Leinonen, T., Dumitrescu, M. & Guina, M., 2016, *High-Power Diode Laser Technology and Applications XIV*. SPIE, 7 p. 97330Q. (SPIE Conference Proceedings; vol. 9733).

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

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

High-resolution coded-aperture design for compressive X-ray tomography using low resolution detectors

Mojica, E., Pertuz, S. & Arguello, H., 2017, In : *Optics Communications*. 404, p. 103-109

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

Hot pen and laser writable photonic polymer films

Moirangthem, M., Stumpel, J. E., Alp, B., Teunissen, P., Bastiaansen, C. W. M. & Schenning, A. P. H. J., 2016, *Emerging Liquid Crystal Technologies XI*. SPIE, Vol. 9769. 97690Y

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

Hot spot temperature in an HTS Coil: Simulations with MITs and finite element method

Härö, E., Stenvall, A., Van Nugteren, J. & Kirby, G., 1 Apr 2015, In : *IEEE Transactions on Applied Superconductivity*. 25, 2

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

How well can we predict cluster fragmentation inside a mass spectrometer?

Passananti, M., Zapadinsky, E., Zanca, T., Kangasluoma, J., Myllys, N., Rissanen, M. P., Kurtén, T., Ehn, M., Attoui, M. & Vehkamäki, H., 2019, In : *Chemical Communications*. 55, 42, p. 5946-5949 4 p.

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

Hyperspectral phase imaging based on denoising in complex-valued eigensubspace

Shevkunov, I., Katkovnik, V., Claus, D., Pedrini, G., Petrov, N. V. & Egiazarian, K., 1 Apr 2020, In : *Optics and Lasers in Engineering*. 127, 10 p., 105973.

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

ICED - Inductively Coupled Energy Dissipater for Future High Field Accelerator Magnets

Murtomäki, J. S., van Nugteren, J., Kirby, G., DeRijk, G., Rossi, L. & Stenvall, A., Dec 2018, In : *IEEE Transactions on Applied Superconductivity*. 28, 8, 4009015.

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

Identification of synchronous machine magnetization characteristics from calorimetric core-loss and no-load curve measurements

Rasilo, P., Abdallah, A. A. E., Belahcen, A., Arkkio, A. & Dupré, L., 1 Mar 2015, In : *IEEE Transactions on Magnetics*. 51, 3, 2001304.

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

Importance of iron-loss modeling in simulation of wound-field synchronous machines

Rasilo, P., Belahcen, A. & Arkkio, A., 2012, In : *IEEE Transactions on Magnetics*. 48, 9, p. 2495-2504 10 p.

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

Improvements in the electromechanical properties of stretchable interconnects by locally tuning the stiffness

Mosallaei, M., Di Vito, D., Khorramdel, B. & Mäntysalo, M., 2020, In : *Flexible and Printed Electronics*. 5, 1, 015004.

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

Influence of As/group-III flux ratio on defects formation and photovoltaic performance of GaInNAs solar cells

Polojärvi, V., Aho, A., Tukiainen, A., Raappana, M., Aho, T., Schramm, A. & Guina, M., 1 May 2016, In : *Solar Energy Materials and Solar Cells*. 149, p. 213-220 8 p.

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

Influence of environmental conditions on EMF levels in a span of overhead transmission lines

Okun, O., Kravchenko, Y. & Korpinen, L., 2016, In : *Progress in Electromagnetics Research C*. 63, p. 163-171 9 p.

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

Influence of temperature-induced copper diffusion on degradation of selective chromium oxy-nitride solar absorber coatings

Kotilainen, M., Honkanen, M., Mizohata, K. & Vuoristo, P., 2016, In : *Solar Energy Materials and Solar Cells*. 145, p. 323-332 10 p.

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

Influence of the P2O5/Al2O3 co-doping on the local environment of erbium ions and on the 1.5 μm quantum efficiency of Er³⁺-borosilicate glasses

Bourhis, K., Boetti, N. G., Koponen, J., Milanese, D. & Petit, L., Mar 2014, In : *Optical Materials*. 36, 5, p. 926-931 6 p.

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

Influence of the phosphate glass melt on the corrosion of functional particles occurring during the preparation of glass-ceramics

Ojha, N., Laihinne, T., Salminen, T., Lastusaari, M. & Petit, L., Jun 2018, In : *Ceramics International*. 44, 10, p. 11807-11811

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

Inkjet catalyst printing and electroless copper deposition for low-cost patterned microwave passive devices on paper

Cook, B. S., Fang, Y., Kim, S., Le, T., Goodwin, W. B., Sandhage, K. H. & Tentzeris, M. M., Sep 2013, In : *Electronic Materials Letters*. 9, 5, p. 669-676 8 p.

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

Inkjet-printed dual microfluidic-based sensor integrated system

Su, W., Cooper, J. R., Cook, B. S., Tentzeris, M. M., Mariotti, C. & Roselli, L., 31 Dec 2015, *2015 IEEE SENSORS - Proceedings*. Institute of Electrical and Electronics Engineers Inc., 7370300

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

Inkjet-printed graphene-based wireless gas sensor modules

Le, T., Lakafosis, V., Lin, Z., Wong, C. P. & Tentzeris, M. M., 2012, *2012 IEEE 62nd Electronic Components and Technology Conference, ECTC 2012*. p. 1003-1008 6 p. 6248958

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

Inkjet printed single layer high-density circuitry for a MEMS device

Laurila, M-M., Soltani, A. & Mäntysalo, M., 15 Jul 2015, *2015 IEEE 65th Electronic Components and Technology Conference (ECTC)*. IEEE, p. 968-972 5 p.

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

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

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

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

Instability of cuboctahedral copper clusters

Valkealahti, S. & Manninen, M., 1 Jan 1992, In : *Physical Review B*. 45, 16, p. 9459-9462 4 p.

Research output: Contribution to journal › Article › 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., Kasztelanic, R., Salo, T., Virtanen, S., Kluczynski, P., Borgen, L., Ratajczyk, M. & Kalinowski, P., 2018, *Next-Generation Spectroscopic Technologies XI*. SPIE, IEEE, 106570A. (SPIE Conference Proceedings; vol. 10657).

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

Integrating III-V, Si, and polymer waveguides for optical interconnects: RAPIDO

Aalto, T., Harjanne, M., Offrein, B. J., Caër, C., Neumeyr, C., Malacarne, A., Guina, M., Sheehan, R. N., Peters, F. H. & Melanen, P., 2016, *Optical Interconnects XVI*. SPIE, 97530D. (Proceedings of SPIE; vol. 9753).

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

Intelligent data service for farmers

Linna, P., Narra, N. & Grönman, J., 1 May 2019, *2019 42nd International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2019 - Proceedings*. Skala, K., Car, Z., Pale, P., Huljenic, D., Janjic, M., Koracic, M., Sruk, V., Ribaric, S., Grbac, T. G., Butkovic, Z., Cicin-Sain, M., Skvorc, D., Mauher, M., Babic, S., Gros, S., Vrdoljak, B. & Tijan, E. (eds.). IEEE, p. 1072-1075 4 p.

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

Interfacial design and structure of protein/polymer films on oxidized AlGaN surfaces

Gupta, S. K., Wu, H. H., Kwak, K. J., Casal, P., Nicholson, T. R., Wen, X., Anisha, R., Bhushan, B., Berger, P. R., Lu, W., Brillson, L. J. & Lee, S. C., 26 Jan 2011, In : *Journal of Physics D: Applied Physics*. 44, 3, 34010.

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

Interstitial photodynamic therapy and glioblastoma: Light fractionation study on a preclinical model: Preliminary results

Leroy, H. A., Vermandel, M., Tétard, M. C., Lejeune, J. P., Mordon, S. & Reyns, N., 2015, *Optical Techniques in Neurosurgery, Neurophotonics, and Optogenetics II*. SPIE, Vol. 9305. 93050D

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

Investigating human skin using deep learning enhanced multiphoton microscopy

Huttunen, M. J., Hristu, R., Dumitru, A., Costache, M. & Stanciu, S. G., 1 Jul 2019, *21st International Conference on Transparent Optical Networks, ICTON 2019*. IEEE, (International Conference on Transparent Optical Networks).

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

Investigating solvent effects on aggregation behaviour, linear and nonlinear optical properties of silver nanoclusters

Bhavitha, K. B., Nair, A. K., Perumbilavil, S., Joseph, S., Kala, M. S., Saha, A., Narayanan, R. A., Hameed, N., Thomas, S., Oluwafemi, O. S. & Kalarikkal, N., 1 Nov 2017, In : *Optical Materials*. 73, p. 695-705 11 p.

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

Investigating the metallic behavior of Na clusters using site-specific polarizabilities

Ma, L., Jackson, K. A., Wang, J., Horoi, M. & Jellinek, J., 24 Jan 2014, In : *Physical Review B*. 89, 3, 035429.

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

Investigation of long-term chemical stability of structured ZnO films in aqueous solutions of varying conditions

Heinonen, S., Nikkanen, J-P., Huttunen-Saarivirta, E. & Levänen, E., 30 Sep 2017, In : *Thin Solid Films*. 638, p. 410-419 10 p.

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

Investigation of REBCO Roebel Cable Irreversible Critical Current Degradation Under Transverse Pressure

Murtomäki, J. S., Kouhia, R., Stenvall, A., Bottura, L., Kirby, G., van Nugteren, J., DeRijk, G. & Rossi, L., Jun 2018, In : *IEEE Transactions on Applied Superconductivity*. 28, 4, 4802506.

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

Iron losses, magnetoelasticity and magnetostriction in ferromagnetic steel laminations

Rasilo, P., Singh, D., Belahcen, A. & Arkkio, A., 2013, In : *IEEE Transactions on Magnetics*. 49, 5, p. 2041-2044 4 p.

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

Irradiation promoted exchange reaction with disulfide substituents

Khan, M. N. & Zharnikov, M., 18 Jul 2013, In : *Journal of Physical Chemistry C*. 117, 28, p. 14534-14543 10 p.

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

Labyrinth based left-handed metamaterials and sub-wavelength focusing of electromagnetic waves

Ozbay, E., Bulu, I. & Caglayan, H., 2006, *Photonic Crystal Materials and Devices IV*. Vol. 6128. 612813. (Proceedings of SPIE; vol. 6128).

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

Laser angle-resolved photoemission as a probe of initial state kz dispersion, final-state band gaps, and spin texture of Dirac states in the Bi₂Te₃ topological insulator

Ärrälä, M., Hafiz, H., Mou, D., Wu, Y., Jiang, R., Riedemann, T., Lograsso, T. A., Barbiellini, B., Kaminski, A., Bansil, A. & Lindroos, M., 27 Oct 2016, In : *Physical Review B*. 94, 15, 7 p., 155144.

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

Light propagation analysis in nervous tissue for wireless optogenetic nanonetworks

Wiradatmadja, S., Johari, P., Balasubramaniam, S., Bae, Y., Stachowiak, M. K. & Jornet, J. M., 2018, *Optogenetics and Optical Manipulation 2018*. SPIE, 104820R

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

Light-trapping enhanced thin-film III-V quantum dot solar cells fabricated by epitaxial lift-off

Cappelluti, F., Kim, D., van Eerden, M., Cédola, A. P., Aho, T., Bissels, G., Elsehrawy, F., Wu, J., Liu, H., Mulder, P., Bauhuis, G., Schermer, J., Niemi, T. & Guina, M., 2018, In : *Solar Energy Materials and Solar Cells*. 181, p. 83-92

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

Linear and nonlinear light beam propagation in chiral nematic liquid crystal waveguides

Laudyn, U. A., Kwaśny, M., Jung, P. S., Trippenbach, M., Assanto, G. & Karpierz, M. A., 2016, In : *Photonics Letters of Poland*. 8, 1, p. 11-13 3 p.

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

Liquid crystal light valves: A versatile platform for nematicons

Assanto, G., Piccardi, A., Alberucci, A., Residori, S. & Bertolozzo, U., 2009, In : *Photonics Letters of Poland*. 1, 4, p. 151-153 3 p.

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

Localization of light at vanishingly small disorder-levels with heavy photons

Baron, A., Faggiani, R., Zang, X., Lalouat, L., Schulz, S. A., Vynck, K., O'Regan, B., Cluzel, B., De Fornel, F., Krauss, T. F. & Lalanne, P., 10 Aug 2015, *2015 Conference on Lasers and Electro-Optics, CLEO 2015*. Optical Society of America OSA, Vol. 2015-August. 7183319

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

Localized surface plasmon resonance in silver nanoparticles: Atomistic first-principles time-dependent density-functional theory calculations

Kuisma, M., Sakko, A., Rossi, T. P., Larsen, A. H., Enkovaara, J., Lehtovaara, L. & Rantala, T. T., 24 Mar 2015, In : *Physical Review B*. 91, 11, 8 p., 115431.

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

Long-Range Observation of Exciplex Formation and Decay Mediated by One-Dimensional Bridges

Baek, J., Umeyama, T., Stranius, K., Yamada, H., Tkachenko, N. V. & Imahori, H., 29 Jun 2017, In : *Journal of Physical Chemistry C*. 121, 25, p. 13952-13961 10 p.

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

Low-temperature germanium thin films on silicon

Sorianello, V., Colace, L., Armani, N., Rossi, F., Ferrari, C., Lazzarini, L. & Assanto, G., 1 Sep 2011, In : *Optical Materials Express*. 1, 5, p. 856-865 10 p.

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

Luminescent (Er,Ho)₂O₃ thin films by ALD to enhance the performance of silicon solar cells

Ghazy, A., Safdar, M., Lastusaari, M., Aho, A., Tukiainen, A., Savin, H., Guina, M. & Karppinen, M., 2020, In : Solar Energy Materials and Solar Cells. 219, 5 p., 110787.

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

Machine learning for adaptive bilateral filtering

Frosio, I., Egiazarian, K. & Pulli, K., 2015, *Image Processing: Algorithms and Systems XIII*. SPIE, Vol. 9399. 939908. (Proceedings of SPIE - The International Society for Optical Engineering).

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

Magnetic and mechanical design of a 16 T common coil dipole for FCC

Toral, F., Munilla, J. & Salmi, T., 2018, In : IEEE Transactions on Applied Superconductivity. 28, 3, 4004305.

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

Magnetic non-contact friction from domain wall dynamics actuated by oscillatory mechanical motion

Rissanen, I. & Laurson, L., 13 Aug 2019, In : Journal of Physics D: Applied Physics. 52, 44, 445002.

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

Maintenance-free moisture sensor on dishcloth substrate

Chen, X., He, H., Yang, Y., Gou, M., Sydanheimo, L., Ukkonen, L. & Virkki, J., 1 Dec 2019, *2019 Photonics and Electromagnetics Research Symposium - Fall, PIERS - Fall 2019 - Proceedings*. IEEE, p. 2418-2421 4 p. 9021487

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

Measuring bend losses in large-mode-area fibers

Ye, C., Koponen, J., Aallos, V., Kokki, T., Petit, L. & Kimmelma, O., 2015, *Fiber Lasers XII: Technology, Systems, and Applications*. SPIE, Vol. 9344. 934425

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

Measuring optical anisotropy in poly(3,4-ethylene dioxythiophene): poly(styrene sulfonate) films with added graphene

Isoniemi, T., Tuukkanen, S., Cameron, D. C., Simonen, J. & Toppari, J. J., 9 Jul 2015, In : Organic Electronics. 25, p. 317-323 7 p.

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

Mechanical behavior of a 16 T FCC dipole magnet during a quench

Zhao, J., Stenvall, A., Salmi, T., Gao, Y. & Lorin, C., 2017, In : IEEE Transactions on Applied Superconductivity. 27, 6, 4004407.

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

Mechanical characterization of pore-graded bioactive glass scaffolds produced by robocasting

Barberi, J., Nommeots-Nomm, A., Fiume, E., Verné, E., Massera, J. & Bairo, F., 2019, In : Biomedical Glasses. 5, 1, p. 140-147 8 p.

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

Mechanical Effects of the Nonuniform Current Distribution on HTS Coils for Accelerators Wound With REBCO Roebel Cable

Murtomaki, J. S., Van Nugteren, J., Kirby, G., Rossi, L., Ruuskanen, J. & Stenvall, A., 1 Jun 2017, In : IEEE Transactions on Applied Superconductivity. 27, 4, 4100405.

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

Mechanical stress analysis during a quench in CLIQ protected 16 T dipole magnets designed for the future circular collider

Zhao, J., Prioli, M., Stenvall, A., Salmi, T., Gao, Y., Caiffi, B., Lorin, C., Marinozzi, V., Farinon, S. & Sorbi, M., 15 Jul 2018, In : Physica C: Superconductivity and its Applications. 550, p. 27-34 8 p.

Research output: Contribution to journal › Article › 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

Membrane bound COMT isoform is an interfacial enzyme: General mechanism and new drug design paradigm

Magarkar, A., Parkkila, P., Viitala, T., Lajunen, T., Mobarak, E., Licari, G., Cramariuc, O., Vauthey, E., Róg, T. & Bunker, A., 11 Apr 2018, In : *Chemical Communications*. 54, 28, p. 3440-3443 4 p.

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

Micro-Raman characterization of Germanium thin films evaporated on various substrates

Sorianello, V., Colace, L., Assanto, G. & Nardone, M., Apr 2011, In : *Microelectronic Engineering*. 88, 4, p. 492-495 4 p.

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

Mining tailings as raw materials for reaction-sintered aluminosilicate ceramics: Effect of mineralogical composition on microstructure and properties

Karhu, M., Lagerbom, J., Solismaa, S., Honkanen, M., Ismailov, A., Räisänen, M. L., Huttunen-Saarivirta, E., Levänen, E. & Kivikytö-Reponen, P., Mar 2019, In : *Ceramics International*. 45, 4, p. 4840-4848

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

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

Ye, C., Koponen, J., Aallos, V., Petit, L., Kimmelma, O. & Kokki, T., 2014, *Fiber Lasers XI: Technology, Systems, and Applications*. SPIE, Vol. 8961. 89612W

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

Modification of Surface States of Hematite-Based Photoanodes by Submonolayer of TiO₂ for Enhanced Solar Water Splitting

Palmolahti, L., Ali-Löytty, H., Khan, R., Saari, J., Tkachenko, N. V. & Valden, M., 2020, In : *Journal of Physical Chemistry C*. 124, 24, p. 13094-13101 8 p.

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

Molecular dynamics simulations for Xe absorbed in zeolites

Kantola, J. H., Vaara, J., Rantala, T. T. & Jokisaari, J., 1996, *Materials Research Society Symposium - Proceedings*. Kaxiras, E., Joannopoulos, J., Vashishta, P. & Kalia, R. K. (eds.). MATERIALS RESEARCH SOCIETY, Vol. 408. p. 599-604 6 p.

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

Monolithic GaInNAsSb/GaAs VECSEL emitting at 1550 nm

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

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

Morphology evolution of PS-b-PDMS block copolymer and its hierarchical directed self-assembly on block copolymer templates

Rasappa, S., Schulte, L., Borah, D., Hulkkonen, H., Ndoni, S., Salminen, T., Senthamarayanan, R., Morris, M. A. & Niemi, T., 15 May 2018, In : *Microelectronic Engineering*. 192, p. 1-7 7 p.

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

Multicolor nonlinear pulse compression by consecutive optical parametric amplification in quasi-phase matched structures

Sapaev, U. K., Yusupov, D. B. & Assanto, G., 2011, *ICONO 2010: International Conference on Coherent and Nonlinear Optics*. Vol. 7993. 79930Q

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

Multisoliton complexes in fiber lasers

Korobko, D. A., Gumenyuk, R., Zolotovskii, I. O. & Okhotnikov, O. G., Dec 2014, In : *Optical Fiber Technology*. 20, 6, p. 593-609 17 p.

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

Multistep Bloch-line-mediated Walker breakdown in ferromagnetic strips

Hütner, J., Herranen, T. & Laurson, L., 24 May 2019, In : *Physical Review B*. 99, 17, 174427.

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

Multiwavelength surface contouring from phase-coded diffraction patterns

Katkovnik, V., Shevkunov, I., Petrov, N. V. & Eguiazarian, K., 1 Jan 2018, *Unconventional Optical Imaging 2018. Strasbourg, France*. SPIE, 106771B. (Proceedings of SPIE - The International Society for Optical Engineering; vol. 10677).

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

Nanoparticles in optical waveguides: A toolbox to promote lasers, amplifiers and sensors

Blanc, W., Vermillac, M., Petit, L., Lukowiak, A., Lu, Z., Mady, F., Benabdesselam, M., Chaussedent, S., Mehdi, A. & Ferrari, M., 1 Jul 2019, *21st International Conference on Transparent Optical Networks, ICTON 2019*. IEEE, (International Conference on Transparent Optical Networks).

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

Narrow Bandgap Dilute Nitride Materials for 6-junction Space Solar Cells

Isoaho, R., Aho, A., Tukiainen, A., Aho, T., Raappana, M., Salminen, T., Reuna, J. & Guina, M., 2019, *2019 European Space Power Conference (ESPC)*. IEEE, 3 p.

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

Narrow-linewidth 780 nm DFB lasers fabricated using nanoimprint lithography

Virtanen, H., Uusitalo, T., Karjalainen, M., Ranta, S., Viheriala, J. & Dumitrescu, M., 2018, In : *IEEE Photonics Technology Letters*. 30, 1, p. 51-54

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

Narrow-linewidth operation of folded VECSEL cavity with twist-mode configuration

Kaneda, Y., Hart, M. L., Warner, S. H., Penttinen, J. P. & Guina, M., 2018. 2 p.

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

Near-infrared photodetectors in evaporated ge: Characterization and TCAD simulations

Sorianello, V., De Iacovo, A., Colace, L. & Assanto, G., 2013, In : *IEEE Transactions on Electron Devices*. 60, 6, p. 1995-2000 6 p., 6515586.

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

Near-surface defect profiling with slow positrons: Argon-sputtered Al(110)

Vehanen, A., Mäkinen, J., Hautajarvi, P., Huomo, H., Lahtinen, J., Nieminen, R. M. & Valkealahti, S., 1 Jan 1985, In : *Physical Review B*. 32, 11, p. 7561-7563 3 p.

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

Near-threshold high spin amplification in a 1300 nm GaInNAs spin laser

Cemlyn, B., Adams, M., Harbord, E., Li, N., Henning, I. D., Oulton, R., Korpjärvi, V. M. & Guina, M., 1 Aug 2018, In : *Semiconductor Science and Technology*. 33, 9, 094005.

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

New multisoliton complex in Bi-doped fiber laser operated at 1450 nm

Gumenyuk, R., Rissanen, J., Korobko, D. A., Zolotovskiy, I. O., Melkumov, M. & Khopin, V. F., 2017, *European Quantum Electronics Conference 2017*. The Optical Society; OSA, Vol. Part F81-EQEC 2017. EF_5_4

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

Noise characterization of Ge/Si photodetectors

Colace, L., Scacchi, A. & Assanto, G., 2011, *8th IEEE International Conference on Group IV Photonics, GFP 2011*. p. 290-292 3 p. 6053793

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

Noise measurements from reconstructed digital breast tomosynthesis

Vimieiro, R. B., Borges, L. R., Caron, R. F., Barufaldi, B., Bakic, P. R., Maidment, A. D. A. & Vieira, M. A. C., 1 Mar 2019, *Medical Imaging 2019: Physics of Medical Imaging*. Schmidt, T. G., Chen, G-H. & Bosmans, H. (eds.). SPIE, IEEE, 109480C. (Progress in Biomedical Optics and Imaging - Proceedings of SPIE; vol. 10948).

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

Non-destructive and wireless monitoring of biodegradable polymers

Salpavaara, T., Hänninen, A., Antniemi, A., Lekkala, J. & Kellomäki, M., 2017, In : *Sensors and Actuators B: Chemical*. 251, p. 1018-1025

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

Nonlinear guided waves: Preface

Assanto, G. & Smyth, N. F., 1 Dec 2016, In : *Journal of Nonlinear Optical Physics and Materials*. 25, 4, 1650041.

Research output: Contribution to journal > Article > Scientific

Nonlinear optical activity effects in complex anisotropic three-dimensional media

Huttunen, M. J., Partanen, M., Bautista, G., Chu, S-W. & Kauranen, M., 2015, In : *Optical Materials Express*. 5, 1, p. 11-21 11 p.

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

Nonlinear optics applications: In memory of George I. Stegeman

Assanto, G., 2016, In : *Photonics Letters of Poland*. 8, 1, p. 1 1 p.

Research output: Contribution to journal > Editorial > Scientific

Nonlocal soliton scattering in random potentials

Piccardi, A., Residori, S. & Assanto, G., 1 Jul 2016, In : *Journal of Optics*. 18, 7, 5 p., 07LT01.

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

No-reference visual quality assessment for image inpainting

Voronin, V. V., Frantc, V. A., Marchuk, V. I., Sherstobitov, A. I. & Egiazarian, K., 2015, *Image Processing: Algorithms and Systems XIII*. SPIE, 93990U. (SPIE Conference Proceedings; vol. 9399).

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

Novel borosilicate bioactive scaffolds with persistent luminescence

Del Cerro, P. R., Teittinen, H., Norrbo, I., Lastusaari, M., Massera, J. & Petit, L., 2020, In : *Biomedical Glasses*. 6, 1, p. 1-9 9 p.

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

Novel enhancement techniques for ultra-high-performance conformal wireless sensors and 'smart skins' utilizing inkjet-printed graphene

Le, T., Lin, Z., Wong, C. P. & Tentzeris, M. M., 2013, *2013 IEEE 63rd Electronic Components and Technology Conference, ECTC 2013*. p. 1640-1643 4 p. 6575792

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

Novel Er³⁺ doped phosphate glass-ceramics for photonics

Petit, L., Nguyen, H., Hongisto, M., Salminen, T., Hakkarainen, T., Lopez-Iscoa, P., Pugliese, D., Boetti, N. G. & Milanese, D., 1 Sep 2017, *ICTON 2017 - 19th International Conference on Transparent Optical Networks*. IEEE COMPUTER SOCIETY PRESS

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

Novel highly-efficient and misalignment insensitive wireless power transfer systems utilizing Strongly Coupled Magnetic Resonance principles

Daerhan, D., Jonah, O., Hu, H., Georgakopoulos, S. V. & Tentzeris, M. M., 11 Sep 2014, *Proceedings - Electronic Components and Technology Conference*. Institute of Electrical and Electronics Engineers Inc., p. 759-762 4 p. 6897370
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Novel optical and photonic devices based on 2D materials: Feature issue introduction

Luo, Z., Bao, Q., Caglayan, H., Jia, B. & Zhang, H., 2020, In : *Optical Materials Express*. 10, 6, p. 1344-1345 2 p.
Research output: Contribution to journal > Editorial > Scientific

Novel oxyfluorophosphate glasses and glass-ceramics

Cui, S., Massera, J., Lastusaari, M., Hupa, L. & Petit, L., 1 Aug 2016, In : *Journal of Non-Crystalline Solids*. 445-446, p. 40-44 5 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Observation of cavity structures in composite metamaterials

Caglayan, H. & Özbay, E., 2010, In : *Journal of Nanophotonics*. 4, 1, 041790.
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

Observation of off-axis directional beaming via subwavelength asymmetric metallic gratings

Caglayan, H., Bulu, I. & Ozbay, E., 2009, In : *Journal of Physics D: Applied Physics*. 42, 4, 045105.
Research output: Contribution to journal > Article > Scientific > peer-review

Observation of PT-symmetric quantum interference

Klauck, F., Teuber, L., Ornigotti, M., Heinrich, M., Scheel, S. & Szameit, A., 16 Sep 2019, In : *Nature Photonics*.
Research output: Contribution to journal > Article > Scientific > peer-review

Observation of unusual metal-semiconductor interaction and metal-induced gap states at an oxide-semiconductor interface: The case of epitaxial BaO/Ge(100) junction

Kuzmin, M., Laukkanen, P., Yasir, M., Mäkelä, J., Tuominen, M., Dahl, J., Punkkinen, M. P. J., Kokko, K., Hedman, H. P., Moon, J., Punkkinen, R., Polojärvi, V., Korpijärvi, V. M. & Guina, M., 20 Oct 2015, In : *Physical Review B*. 92, 16, 165311.
Research output: Contribution to journal > Article > Scientific > peer-review

On the limit of superhydrophobicity: Defining the minimum amount of TiO₂ nanoparticle coating

Haapanen, J., Aromaa, M., Teisala, H., Juuti, P., Tuominen, M., Sillanpää, M., Stepien, M., Saarinen, J. J., Toivakka, M., Kuusipalo, J. & Mäkelä, J. M., 2019, In : *Materials Research Express*. 6, 3, 035004.
Research output: Contribution to journal > Article > Scientific > peer-review

Open Material Property Library With Native Simulation Tool Integrations - MASTO

Stenvall, A. & Lahtinen, V., 2018, In : *IEEE Transactions on Applied Superconductivity*.
Research output: Contribution to journal > Article > Scientific > peer-review

Optical and topographic changes in water-responsive patterned cholesteric liquid crystalline polymer coatings

Stumpel, J. E., Broer, D. J., Bastiaansen, C. W. M. & Schenning, A. P. H. J., 2014, *Proceedings of SPIE: Organic Photonics VI*. SPIE, Vol. 9137. 91370U. (Proceedings of SPIE: the International Society for Optical Engineering).
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Optical fiber amplifier with spectral compression elements for high-power laser pulse generation

Fotiadi, A. A., Korobko, D. A., Okhotnikov, O. G. & Zolotovskii, I. O., 2016, *Nonlinear Optics and its Applications IV*. SPIE, Vol. 9894. 989411. (Proceedings of SPIE; vol. 9894).

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

Optical Frequency Comb Photoacoustic Spectroscopy

Sadiq, 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

Optical power monitors in Ge monolithically integrated on SOI chips

Colace, L., Sorianello, V., Romagnoli, M., Socci, L. & Assanto, G., Apr 2011, In : *Microelectronic Engineering*. 88, 4, p. 514-517 4 p.

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

Optical properties of GaAs_{1-x}Bi_x/GaAs quantum well structures grown by molecular beam epitaxy on (100) and (311)B GaAs substrates

Gunes, M., Ukelge, M. O., Donmez, O., Erol, A., Gumus, C., Alghamdi, H., Galeti, H. V. A., Henini, M., Schmidbauer, M., Hilska, J., Puustinen, J. & Guina, M., 13 Nov 2018, In : *Semiconductor Science and Technology*. 33, 12, 124015.

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

Optimization of an E3SPreSSO Energy-Extraction System for High-Field Superconducting Magnets

Ruuskanen, J., Stenvall, A., Van Nugteren, J. & Lahtinen, V., 1 Apr 2018, In : *IEEE Transactions on Applied Superconductivity*. 28, 3, 4700805.

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

Optimization of convectively cooled heat sinks

Lampio, K. & Karvinen, R., 2017, In : *Microelectronics Reliability*. 79, p. 473-479

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

Parametric conversion in micrometer and submicrometer structured ferroelectric crystals by surface poling

Busacca, A. C., Stivala, S., Curcio, L. & Assanto, G., 2012, In : *International Journal of Optics*. 2012, 606892.

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

Paraxial light beams in structured anisotropic media

Jisha, C. P. & Alberucci, A., 1 Nov 2017, In : *Journal of the Optical Society of America A: Optics and Image Science, and Vision*. 34, 11, p. 2019-2024 6 p.

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

Passive resonance sensor based method for monitoring particle suspensions

Salpavaara, T., Järveläinen, M., Seppälä, S., Yli-Hallila, T., Verho, J., Vilkkio, M., Lekkala, J. & Levänen, E., 8 Jun 2015, In : *Sensors and Actuators B: Chemical*. 219, p. 324-330 7 p.

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

Passive UHF RFID-based user interface on a wooden surface

Mehmood, A., Vianto, V., He, H., Chen, X., Buruk, O. O., Ukkonen, L. & Virkki, J., 1 Dec 2019, *2019 Photonics and Electromagnetics Research Symposium - Fall, PIERS - Fall 2019 - Proceedings*. IEEE, p. 1760-1763 4 p. 9021441

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

Perfect magnetic mirror and simple perfect absorber in the visible spectrum

Valagiannopoulos, C. A., Tukiainen, A., Aho, T., Niemi, T., Guina, M., Tretyakov, S. A. & Simovski, C. R., 11 Mar 2015, In : *Physical Review B*. 91, 11, 115305.

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

Performance enhancement of the RFID EPC Gen2 protocol by exploiting collision re-recovery

De Donno, D., Tarricone, L., Catarinucci, L., Lakafosis, V. & Tentzeris, M. M., 2012, In : *Progress in Electromagnetics Research B*. 43, p. 53-72 20 p.

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

Performance of Solar Cell Grids based on Ag, Au, and Al for Cost-Effective Manufacturing

Raappana, M., Aho, A., Aho, T., Isoaho, R., Anttola, E., Kajas, N., Polojärvi, V., Tukiainen, A. & Guina, M., Oct 2019, *2019 European Space Power Conference (ESPC)*. IEEE

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

Persistent luminescent glasses prepared using the direct doping method

Aryal, U., Ojha, N., Trautvetter, T., Lastusaari, M., Ueda, J., Mueller, R., Veber, A. & Petit, L., 1 Jul 2019, *21st International Conference on Transparent Optical Networks, ICTON 2019*. IEEE, (International Conference on Transparent Optical Networks).

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

Phase-coded computational imaging for depth of field extension

Sahin, E., Akpınar, U. & Gotchev, A., 13 May 2019, *Proceedings - Digital Holography and Three-Dimensional Imaging 2019*. Optical Society of America

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

Phosphate glasses with blue persistent luminescence prepared using the direct doping method

Ojha, N., Tuomisto, M., Lastusaari, M. & Petit, L., Jan 2019, In : *Optical Materials*. 87, p. 151-156

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

Photocatalytic and antibacterial properties of ZnO films with different surface topographies on stainless steel substrate

Heinonen, S., Kannisto, M., Nikkanen, J-P., Huttunen-Saarivirta, E., Karp, M. & Levänen, E., 1 Oct 2016, In : *Thin Solid Films*. 616, p. 842-849 8 p.

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

Photoinduced bending upon pulsed irradiation in azobenzene-containing crosslinked liquid-crystalline polymers

Shimamura, A., Priimagi, A., Mamiya, J. I., Kinoshita, M., Ikeda, T. & Shishido, A., Sep 2011, In : *Journal of Nonlinear Optical Physics and Materials*. 20, 4, p. 405-413 9 p.

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

Photoinduced Electron Injection from Zinc Phthalocyanines into Zinc Oxide Nanorods: Aggregation Effects

Virkki, K., Hakola, H., Urbani, M., Tejerina, L., Ince, M., Martínez-Díaz, M. V., Torres, T., Golovanova, V., Golovanov, V. & Tkachenko, N. V., 4 May 2017, In : *Journal of Physical Chemistry C*. 121, 17, p. 9594-9605 12 p.

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

Photoinduced Electron Transfer in CdSe/ZnS Quantum Dot-Fullerene Hybrids

Virkki, K., Demir, S., Lemmetyinen, H. & Tkachenko, N. V., 23 Jul 2015, In : *Journal of Physical Chemistry C*. 119, 31, p. 17561-17572 12 p.

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

Photoinduced surface patterning of azobenzene-containing supramolecular dendrons, dendrimers and dendronized polymers

Vapaavuori, J., Priimagi, A., Soininen, A. J., Canilho, N., Kasëmi, E., Ruokolainen, J., Kaivola, M. & Ikkala, O., 2013, In : *Optical Materials Express*. 3, 6, p. 711-722 12 p.

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

Photophysical properties of porphyrin dimer-single-walled carbon nanotube linked systems

Baek, J., Umeyama, T., Mizuno, S., Tkachenko, N. V. & Imahori, H., 2017, In : *Journal of Physical Chemistry C*. 121, 39

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

Photovoltaic properties of low-bandgap (0.7–0.9eV) lattice-matched GaInNAsSb solar junctions grown by molecular beam epitaxy on GaAs

Isoaho, R., Aho, A., Tukiainen, A., Aho, T., Raappana, M., Salminen, T., Reuna, J. & Guina, M., 15 Jun 2019, In : *Solar Energy Materials and Solar Cells*. 195, p. 198-203 6 p.

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

Physics and applications of photonic crystals

Ozbay, E., Bulu, I., Aydin, K., Caglayan, H. & Guven, K., Oct 2004, In : *Photonics and Nanostructures - Fundamentals and Applications*. 2, 2, p. 87-95 9 p.

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

Physisorption of benzene on a tin dioxide surface: Van der Waals interaction

Viitala, M., Kuisma, M. & Rantala, T. T., 8 Feb 2012, In : *Physical Review B*. 85, 8, p. 1-5 5 p., 085412.

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

Picosecond MOPA with ytterbium doped tapered double clad fiber

Filippov, V., Vorotynskii, A., Noronen, T., Gumenyuk, R., Chamorovskii, Y. & Golant, K., 2017, *Fiber Lasers XIV: Technology and Systems*. SPIE, Vol. 10083. 6 p. 100831H. (Proceedings of SPIE; no. 10083).

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

Piezoresistive natural rubber-multiwall carbon nanotube nanocomposite for sensor applications

Selvan, N. T., Eshwaran, S. B., Das, A., Stöckelhuber, K. W., Wießner, S., Pötschke, P., Nando, G. B., Chervanyov, A. I. & Heinrich, G., 1 Mar 2016, In : *Sensors and Actuators, A: Physical*. 239, p. 102-113 12 p.

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

Pipeline for effective denoising of digital mammography and digital breast tomosynthesis

Borges, L. R., Bakic, P. R., Foi, A., Maidment, A. D. A. & Vieira, M. A. C., 2017, *Medical Imaging 2017: Physics of Medical Imaging*. SPIE, 1013206. (Progress in biomedical optics and imaging).

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

Plasma etch technologies for the development of ultra-small feature size transistor devices

Borah, D., Shaw, M. T., Rasappa, S., Farrell, R. A., O'Mahony, C., Faulkner, C. M., Bosea, M., Gleeson, P., Holmes, J. D. & Morris, M. A., 4 May 2011, In : *Journal of Physics D: Applied Physics*. 44, 17, 174012.

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

Plasmon lifetime enhancement in a bright-dark mode coupled system

Yildiz, B. C., Bek, A. & Tasgin, M. E., 16 Jan 2020, In : *Physical Review B*. 101, 3, 8 p., 035416.

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

Polymer stabilization enhances the orientational optical nonlinearity of oligothiophene-doped nematic liquid crystals

Aihara, Y., Kinoshita, M., Wang, J., Mamiya, J. I., Priimagi, A. & Shishido, A., Nov 2013, In : *Advanced Optical Materials*. 1, 11, p. 787-791 5 p.

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

Power and wavelength scaling using semiconductor disk laser - bismuth fiber MOPA systems

Heikkinen, J., Gumenyuk, R., Rantamäki, A., Lyytikäinen, J., Leinonen, T., Zolotovskii, I., Melkumov, M., Dianov, E. M. & Okhotnikov, O. G., 2015, *Vertical External Cavity Surface Emitting Lasers (VECSELS)* V. Guina, M. (ed.). BELLINGHAM: SPIE, 7 p. 93490E. (Proceedings of SPIE; vol. 9349).

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

Power loss mechanisms in n-type modulation-doped AlGaAs/GaAsBi quantum well heterostructures

Donmez, O., Aydin, M., Ardali, Yildirim, S., Tıraş, E., Erol, A., Puustinen, J., Hilska, J. & Guina, M., 2020, In : *Semiconductor Science and Technology*. 35, 9, 095038.

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

Precipitate formation in aluminium alloys: Multi-scale modelling approach

Kleiven, D. & Akola, J., 15 Aug 2020, In : *Acta Materialia*. 195, p. 123-131 9 p.

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

Preparation of water-based carbon nanotube inks and application in the inkjet printing of carbon nanotube gas sensors
Lin, Z., Le, T., Song, X., Yao, Y., Li, Z., Moon, K. S., Tentzeris, M. M. & Wong, C. P., 2013, In : Journal of Electronic Packaging. 135, 1, 011001.

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

Preserving natural scene lighting by strobe-lit video

Suominen, O. & Gotchev, A., 2015, *Image Processing: Algorithms and Systems XIII*. SPIE, 939919. (SPIE Conference Proceedings; vol. 9399).

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

Printable and flexible macroporous organosilica film with high protein adsorption capacity

Heikkinen, J. J., Kivimäki, L., Hytönen, V. P., Kulomaa, M. S. & Hormi, O. E. O., 1 Jan 2012, In : Thin Solid Films. 520, 6, p. 1934-1937 4 p.

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

Processing and Characterization of Bioactive Borosilicate Glasses and Scaffolds with Persistent Luminescence

Del Cerro, P. R., Saarinen, M., Massera, J., Norrbo, I., Lastusaari, M. & Petit, L., 26 Sep 2018, *2018 20th International Conference on Transparent Optical Networks, ICTON 2018*. IEEE COMPUTER SOCIETY PRESS, Vol. 2018-July. 5 p. 8473916. (Conference proceedings : International Conference on Transparent Optical Networks).

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

Processing of printed silver patterns on an ETFE substrate

Mikkonen, R., Lahokallio, S., Frisk, L. & Mäntysalo, M., 31 Jul 2018, *Proceedings - 2018 IMAPS Nordic Conference on Microelectronics Packaging, NORDPAC 2018*. IEEE, p. 1-7 7 p. 8423860

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

Processor core for 32 kbit/s G.726 ADPCM codecs

Vehviläinen, J. & Nurmi, J., 1995, *1995 IEEE International Symposium on Circuits and Systems. ISCAS '95*. IEEE, Vol. 3. p. 1932-1935 4 p.

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

Programming Photoresponse in Liquid Crystal Polymer Actuators with Laser Projector

Wani, O. M., Zeng, H., Wasylczyk, P. & Priimagi, A., 2018, In : Advanced Optical Materials. 6, 1, 1700949.

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

Progress on HL-LHC Nb₃Sn Magnets

Todesco, E., Annarella, M., Ambrosio, G., Apollinari, G., Ballarino, A., Bajas, H., Bajko, M., Bordini, B., Bossert, R., Bottura, L., Cavanna, E., Cheng, D., Chlachidze, G., De Rijk, G., Dimarco, J., Ferracin, P., Fleiter, J., Guinchard, M., Hafalia, A., Holik, E., Izquierdo Bermudez, S., Lackner, F., Marchevsky, M., Loeffler, C., Nobrega, A., Perez, J. C., Prestemon, S., Ravaioli, E., Rossi, L., Sabbi, G., Salmi, T., Savary, F., Schmalzle, J., Stoynev, S., Strauss, T., Tartaglia, M., Vallone, G., Velev, G., Wanderer, P., Wang, X., Willering, G. & Yu, M., 1 Jun 2018, In : IEEE Transactions on Applied Superconductivity. 28, 4, 4008809.

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

Propagation dynamics of ultrabroadband terahertz beams with orbital angular momentum for wireless data transfer

Kulya, M. S., Sokolenko, B., Gorodetsky, A. & Petrov, N. V., 2020, *Broadband Access Communication Technologies XIV*. Dingel, B. B., Tsukamoto, K. & Mikroulis, S. (eds.). SPIE, 113070J. (Proceedings of SPIE - The International Society for Optical Engineering; vol. 11307).

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

Properties of nematicons in low-birefringence nematic liquid crystals

Kwaśny, M., Laudyn, U. A., Sala, F. A., Piccardi, A., Alberucci, A., Karpierz, M. A. & Assanto, G., 2013, In : Photonics Letters of Poland. 5, 1, p. 8-10 3 p.

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

Protection Heater Design Validation for the LARP Magnets Using Thermal Imaging

Marchevsky, M., Turqueti, M., Cheng, D. W., Felice, H., Sabbi, G., Salmi, T., Stenvall, A., Chlachidze, G., Ambrosio, G., Ferracin, P., Izquierdo Bermudez, S., Perez, J. C. & Todesco, E., 1 Jun 2016, In : IEEE Transactions on Applied

Superconductivity. 26, 4, 4003605.

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

Pulsed high-power yellow-orange VECSEL

Kantola, E., Leinonen, T., Ranta, S., Tavast, M. & Guina, M., 2014, *Photonics Europe 2014, Semiconductor Lasers and Laser Dynamics VI, April 14-17, 2014, Brussels, Belgium. Proceedings of SPIE*. SPIE, Vol. 9134. 91340Z. (SPIE Conference Proceedings; vol. 9134).

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

Quantum-well Laser Emitting at 1.2 μm -1.3 μm Window Monolithically Integrated on Ge Substrate

Guina, M., Isoaho, R., Viheriälä, J., Aho, A., Aho, A. & Tukiainen, A., 24 Apr 2018, *43rd European Conference on Optical Communication, ECOC 2017*. IEEE, p. 1-3 3 p.

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

Quench Protection Study of the Eurocircol 16 T $\cos\theta$ Dipole for the Future Circular Collider (FCC)

Marinozzi, V., Bellomo, G., Caiffi, B., Fabbriatore, P., Farinon, S., Salmi, T., Sorbi, M., Stenvall, A. & Volpini, G., 1 Jun 2017, In : *IEEE Transactions on Applied Superconductivity*. 27, 4, 4702505.

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

Quench Protection Study of the Updated MQXF for the LHC Luminosity Upgrade (HiLumi LHC)

Marinozzi, V., Ambrosio, G., Ferracin, P., Izquierdo Bermudez, S., Rysti, J., Salmi, T., Sorbi, M. & Todesco, E., 1 Jun 2016, In : *IEEE Transactions on Applied Superconductivity*. 26, 4, 4001805.

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

Radiation properties of sources inside photonic crystals

Bulu, I., Caglayan, H. & Ozbay, E., 15 May 2003, In : *Physical Review B - Condensed Matter and Materials Physics*. 67, 20

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

Rapid and facile synthesis of graphene oxide quantum dots with good linear and nonlinear optical properties

Sakho, E. H. M., Oluwafemi, O. S., Perumbilavil, S., Philip, R., Kala, M. S., Thomas, S. & Kalarikkal, N., 2016, In : *Journal of Materials Science: Materials in Electronics*. 27, 10, p. 10926–10933

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

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

Auer, S., Koho, T., Uusi-Kerttula, H., Vesikari, T., Blazevic, V. & Hytönen, V. P., 31 Dec 2015, In : *Sensors and Actuators B: Chemical*. 221, p. 507-514 8 p.

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

Rational design of a printable, highly conductive silicone-based electrically conductive adhesive for stretchable radio-frequency antennas

Li, Z., Le, T., Wu, Z., Yao, Y., Li, L., Tentzeris, M., Moon, K. S. & Wong, C. P., 21 Jan 2015, In : *Advanced Functional Materials*. 25, 3, p. 464-470 7 p.

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

Realization of Free-Space Long-Distance Self-Healing Bessel Beams

Vetter, C., Steinkopf, R., Bergner, K., Ornigotti, M., Nolte, S., Gross, H. & Szameit, A., 1 Oct 2019, In : *Laser and Photonics Reviews*. 13, 10, 1900103.

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

Real-time depth image-based rendering with layered dis-occlusion compensation and aliasing-free composition

Smirnov, S. & Gotchev, A., 2015, *Proceedings of SPIE - The International Society for Optical Engineering*. SPIE, 93990T. (SPIE Conference Proceedings; vol. 9399).

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

Real-time full-field characterization of transient dissipative soliton dynamics in a mode-locked laser

Ryczkowski, P., Närhi, M., Billet, C., Merolla, J. M., Genty, G. & Dudley, J. M., 2018, In : *Nature Photonics*. 12, p. 221–227 7 p.

Research output: Contribution to journal › Article › 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

Real-time measurements of ultrafast instabilities in nonlinear fiber optics: Recent advances

Dudley, J. M., Ryczkowski, P., Närhi, M., Billet, C., Merolla, J. M., Lapre, C., Meng, F., Lacourt, P. A. & Genty, G., 1 Jul 2019, *21st International Conference on Transparent Optical Networks, ICTON 2019*. IEEE, (International Conference on Transparent Optical Networks).

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

Refraction of nonlinear light beams in nematic liquid crystals

Assanto, G., Smyth, N. F. & Xia, W., Sep 2012, In : *Journal of Nonlinear Optical Physics and Materials*. 21, 3, 1250033.

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

Relaxation behavior of densified sodium aluminoborate glass

Veber, A., Smedskjaer, M. M. & de Ligny, D., 1 Oct 2020, In : *Acta Materialia*. 198, p. 153-167 15 p.

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

Reliability of ACA interconnections on microvia HDI PCBs in thermal cycling conditions

Frisk, L., Lahokallio, S. & Kiilunen, J., 5 Jun 2016, *IMAPS Nordic Annual Conference 2016 Proceedings*. Kutilainen, J. (ed.). IMAPS-International Microelectronics and Packaging Society

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

Residual stress development in cold sprayed Al, Cu and Ti coatings

Suhonen, T., Varis, T., Dosta, S., Torrell, M. & Guilemany, J. M., Oct 2013, In : *Acta Materialia*. 61, 17, p. 6329-6337 9 p.

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

Resolving unoccupied electronic states with laser ARPES in bismuth-based cuprate superconductors

Miller, T. L., Ärrälä, M., Smallwood, C. L., Zhang, W., Hafiz, H., Barbiellini, B., Kurashima, K., Adachi, T., Koike, Y., Eisaki, H., Lindroos, M., Bansil, A., Lee, D. H. & Lanzara, A., 13 Feb 2015, In : *Physical Review B*. 91, 8, 5 p., 085109.

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

Restoring Integral Images from Focal Stacks Using Compressed Sensing Techniques

Trujillo-Sevilla, J. M., Katkovnik, V., Javidi, B. & Rodríguez-Ramos, J. M., 1 Jul 2016, In : *Journal of Display Technology*. 12, 7, p. 701-706 6 p.

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

Reversible photodoping of TiO₂ nanoparticles

Joost, U., Sutka, A., Oja, M., Smits, K., Doebelin, N., Loot, A., Järvekülg, M., Hirsimäki, M., Valden, M. & Nommiste, E., 26 Dec 2018, In : *Chemistry of Materials*. 30, 24, p. 8968-8974

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

RFDNA: A wireless authentication system on flexible substrates

Dejean, G., Lakafosis, V., Traille, A., Lee, H., Gebara, E., Tenzleris, M. & Kirovski, D., 2011, *2011 IEEE 61st Electronic Components and Technology Conference, ECTC 2011*. p. 1332-1337 6 p. 5898684

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

RF measurements to pinpoint defects in inkjet-printed, thermally and mechanically stressed coplanar waveguides

Myllymäki, S., Putaala, J., Hannu, J., Kunnari, E. & Mäntysalo, M., 1 Oct 2016, In : *Microelectronics Reliability*. 65, p. 142-150 9 p.

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

Roadmap on optical rogue waves and extreme events

Akhmediev, N., Kibler, B., Baronio, F., Belić, M., Zhong, W. P., Zhang, Y., Chang, W., Soto-Crespo, J. M., Vouzas, P., Grelu, P., Lecaplain, C., Hammani, K., Rica, S., Picozzi, A., Tlidi, M., Panajotov, K., Mussot, A., Bendahmane, A., Szriftgiser, P., Genty, G., Dudley, J., Kudlinski, A., Demircan, A., Morgner, U., Amiranashvili, S., Bree, C., Steinmeyer, G., Masoller, C., Broderick, N. G. R., Runge, A. F. J., Erkintalo, M., Residori, S., Bortolozzo, U., Arecchi, F. T., Wabnitz, S., Tiofack, C. G., Coulibaly, S. & Taki, M., 1 Jun 2016, In : *Journal of Optics*. 18, 6, 063001.

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

Scalar diffraction field calculation from curved surfaces via Gaussian beam decomposition

Şahin, E. & Onural, L., 1 Jul 2012, In : *Journal of the Optical Society of America A: Optics Image Science and Vision*. 29, 7, p. 1459-1469 11 p.

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

Screen-Printed Stretchable Interconnects

Suikkola, J., Kankkunen, T., Iso-Ketola, P., Vanhala, J. & Mäntysalo, M., 16 Aug 2016, *Proceedings - ECTC 2016: 66th Electronic Components and Technology Conference*. IEEE, p. 1650-1655 6 p.

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

Screen printed temporary tattoos for skin-mounted electronics

Tuominen, S. & Mäntysalo, M., 1 May 2019, *IEEE 69th Electronic Components and Technology Conference, ECTC 2019*. IEEE, p. 1252-1257 6 p.

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

Segregation of iron losses from rotational field measurements and application to electrical machine

Belahcen, A., Rasilo, P. & Arkkio, A., Feb 2014, In : *IEEE Transactions on Magnetics*. 50, 2, 7022104.

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

Self-alignment in the stacking of microchips with mist-induced water droplets

Chang, B., Sariola, V., Jääskeläinen, M. & Zhou, Q., Jan 2011, In : *Journal of Micromechanics and Microengineering*. 21, 1, 015016.

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

Self-alignment of RFID dies on four-pad patterns with water droplet for sparse self-assembly

Chang, B., Routa, I., Sariola, V. & Zhou, Q., Sep 2011, In : *Journal of Micromechanics and Microengineering*. 21, 9, 095024.

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

Self-orienting liquid crystal doped with polymer-azo-dye complex

Ouskova, E., Vapaavuori, J. & Kaivola, M., 1 Dec 2011, In : *Optical Materials Express*. 1, 8, p. 1463-1470 8 p.

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

Semantics of HTS AC Loss Modeling: Theories, Models, and Experiments

Lahtinen, V. & Stenvall, A., 1 Aug 2020, In : *IEEE Transactions on Applied Superconductivity*. 30, 5, 5900809.

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

Sensitivity Analysis of Inverse Thermal Modeling to Determine Power Losses in Electrical Machines

Nair, D. G., Rasilo, P. & Arkkio, A., Nov 2018, In : *IEEE Transactions on Magnetics*. 54, 11, 8109405.

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

SESAM mode-locked Tm: CALGO laser at 2 μm

Wang, Y., Xie, G., Xu, X., Di, J., Qin, Z., Suomalainen, S., Guina, M., Härkönen, A., Agnesi, A., Griebner, U., Mateos, X., Loiko, P. & Petrov, V., 2015, *Advanced Solid State Lasers, ASSL 2015*. Optical Society of America OSA, AW1A.2

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

Short-range supercontinuum based lidar for combustion diagnostics

Saleh, A., Ryczkowski, P., Genty, G. & Toivonen, J., 2019, *SPIE Future Sensing Technologies*. Kimata, M. & Valenta, C. R. (eds.). SPIE, IEEE, 111970Y. (Proceedings of SPIE; vol. 11197).

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

Silver sulfide nanoclusters and the superatom model

Goh, J-Q., Malola, S., Häkkinen, H. & Akola, J., 22 Jan 2015, In : *Journal of Physical Chemistry C*. 119, 3, p. 1583-1590 8 p.

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

Simulation of cluster growth using a lattice gas model

Valkealahti, S. & Manninen, M., 1 Jan 1994, In : *Physical Review B*. 50, 23, p. 17564-17574 11 p.

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

Simulation of photon-photon resonance enhanced direct modulation bandwidth of DFB lasers

Dumitrescu, M., Uusitalo, T., Virtanen, H., Laakso, A., Bardella, P. & Montrosset, I., 17 Aug 2016, *16th International Conference on Numerical Simulation of Optoelectronic Devices, NUSOD 2016*. IEEE, p. 147-148 2 p.

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

Simulation studies of DFB laser longitudinal structures for narrow linewidth emission

Virtanen, H., Uusitalo, T. & Dumitrescu, M., 17 Aug 2016, *16th International Conference on Numerical Simulation of Optoelectronic Devices, NUSOD 2016*. IEEE, p. 153-154 2 p.

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

Simulation studies of DFB laser longitudinal structures for narrow linewidth emission

Virtanen, H., Uusitalo, T. & Dumitrescu, M., 23 Mar 2017, In : *Optical and Quantum Electronics*. 49, 4, 13 p., 160.

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

Simultaneous binary hash and features learning for image retrieval

Frantc, V. A., Makov, S. V., Voronin, V. V., Marchuk, V. I., Semenishchev, E. A., Egiazarian, K. O. & Agaian, S., 2016, *Mobile Multimedia/Image Processing, Security, and Applications 2016*. SPIE, 986902. (SPIE Conference Proceedings; vol. 9869).

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

Single exposure lensless subpixel phase imaging

Kocsis, P., Shevkunov, I., Katkovnik, V. & Egiazarian, K., 2019, *Digital Optical Technologies 2019*. Kress, B. C. & Schelkens, P. (eds.). SPIE, IEEE, 9 p. (Proceedings of SPIE - The International Society for Optical Engineering; vol. 11062).

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

Single KTIPO4 nanocrystals for nonlinear probing of local optical fields and interaction with a metallic nanostructure

Slablab, A., Le Xuan, L., Zhou, C., Chauvat, D., De Wilde, Y., Perruchas, S., Tard, C., Gacoin, T., Villeval, P. & Roch, J. F., 2009, *CLEO/Europe - EQEC 2009 - European Conference on Lasers and Electro-Optics and the European Quantum Electronics Conference*. 5192089

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

Single-source multibattery solar charger: Case study and implementation issues

Gadelovits, S., Sitbon, M., Suntio, T. & Kuperman, A., 25 Nov 2015, In : *Progress in Photovoltaics: Research and Applications*. 23, 12, p. 1916-1928 13 p.

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

Site-controlled InAs Quantum Dots for Plasmonics

Hakkarainen, T., Tommila, J., Schramm, A., Simonen, J., Niemi, T., Strelow, C., Kipp, T., Kontio, J. & Guina, M., 2016, *Conference on Lasers and Electro-Optics 2016: QELS_Fundamental Science*. OSA - The Optical Society, FM1B.3

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

Soft graphoepitaxy for large area directed self-assembly of polystyrene-block-poly(dimethylsiloxane) block copolymer on nanopatterned poss substrates fabricated by nanoimprint lithography

Borah, D., Rasappa, S., Salaun, M., Zellsman, M., Lorret, O., Lontos, G., Ntetsikas, K., Avgeropoulos, A. & Morris, M. A., 1 Jun 2015, In : *Advanced Functional Materials*. 25, 22, p. 3425-3432 8 p.

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

Solar Irradiation Independent Expression for Photovoltaic Generator Maximum Power Line

Kolesnik, S., Sitbon, M., Lineykin, S., Batzelis, E., Papathanassiou, S., Suntio, T. & Kuperman, A., 2017, In : *IEEE Journal of Photovoltaics*. 7, 5, p. 1416-1420

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

Soliton enhancement of spontaneous symmetry breaking

Alberucci, A., Piccardi, A., Kravets, N., Buchnev, O. & Assanto, G., 2015, In : *Optica*. 2, 9, p. 783-789 7 p.

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

Special Issue: Mid-infrared optical materials and their device applications

Hu, J. (ed.), Mawst, L. (ed.), Moss, S. (ed.), Petit, L. (ed.) & Ting, D. (ed.), 2018, In : *Optical Materials Express*. 8, 7

Research output: Contribution to journal › Special issue › Scientific › peer-review

Special Issue: Novel Optical and Photonic Devices based on 2D Materials

Luo, Z. (ed.), Bao, Q. (ed.), Caglayan, H. (ed.), Jia, B. (ed.) & Zhang, H. (ed.), 2020, In : *Optical Materials Express*. 10, 6

Research output: Contribution to journal › Special issue › Scientific › peer-review

Stable blue phase polymeric Langmuir-Schaefer films based on unsymmetrical hydroxyalkadiynyl N-arylcarbamate derivatives

Alekseev, A., Ihalainen, P., Ivanov, A., Domnin, I., Rosqvist, E., Lemmetyinen, H., Vuorimaa-Laukkanen, E., Peltonen, J. & Vyaz'min, S., 2018, In : *Thin Solid Films*. 645, p. 108-118 11 p.

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

State of polarization in anisotropic tapered fiber with extremely large core diameter

Ustimchik, V. E., Vyatkin, M. Y., Popov, S. M., Chamorovskii, Y. K., Filippov, V. N. & Nikitov, S. A., 23 Aug 2016, p. S123.

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

Statistical analysis of E-jet print parameter effects on Ag-nanoparticle ink droplet size

Laurila, M. M., Khorramdel, B., Dastpak, A. & Mäntysalo, M., 2 Aug 2017, In : *Journal of Micromechanics and Microengineering*. 27, 9, 095005.

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

Status of the Demonstrator Magnets for the EuCARD-2 Future Magnets Project

Kirby, G., Rossi, L., Badel, A., Bajko, M., Ballarino, A., Bottura, L., Dhalle, M., Durante, M., Fazilleau, P., Fleiter, J., Goldacker, W., Härö, E., Himbele, J., Kario, A., Langeslag, S., Lorin, C., Murtzomaki, J., Van Nugteren, J., De Rijk, G., Salmi, T., Senatore, C., Stenvall, A., Tixador, P., Usoskin, A., Volpini, G., Yang, Y. & Zangenberg, N., 1 Apr 2016, In : *IEEE Transactions on Applied Superconductivity*. 26, 3, 4003307.

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

Stimuli-Responsive Materials Based on Interpenetrating Polymer Liquid Crystal Hydrogels

Stumpel, J. E., Gil, E. R., Spoelstra, A. B., Bastiaansen, C. W. M., Broer, D. J. & Schenning, A. P. H. J., 2015, In : *Advanced Functional Materials*. 25, 22, p. 3314-3320

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

Stimuli-responsive photonic polymer coatings

Stumpel, J. E., Broer, D. J. & Schenning, A. P. H. J., 28 Dec 2014, In : *Chemical Communications*. 50, 100, p. 15839-15848 10 p.

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

Strand and cable R&D for fast cycled magnets at CERN

Bottura, L., Bonasia, A., Borgnolutti, F., Gaertner, W., Le Naour, S., Oberli, L., Peiro, G., Richter, D., Salmi, T., Sikler, G. & Willering, G., Jun 2011, In : IEEE Transactions on Applied Superconductivity. 21, 3 PART 2, p. 2354-2358 5 p.

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

Strong localization in unintentional disordered photonics crystal waveguides

Zang, X. & Lalanne, P., 2013, *2013 7th International Congress on Advanced Electromagnetic Materials in Microwaves and Optics, METAMATERIALS 2013*. IEEE COMPUTER SOCIETY PRESS, p. 322-324 3 p.

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

Structural and Electrical Characterization of Solution-Processed Electrodes for Piezoelectric Polymer Film Sensors

Rajala, S., Mettänen, M. & Tuukkanen, S., 15 Mar 2016, In : IEEE Sensors Journal. 16, 6, p. 1692-1699 8 p.

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

Structure and in vitro dissolution of Mg and Sr containing borosilicate bioactive glasses for bone tissue engineering

Tainio, J. M., Salazar, D. A. A., Nommets-Nomm, A., Roiland, C., Bureau, B., Neuville, D. R., Brauer, D. S. & Massera, J., 1 Apr 2020, In : Journal of Non-Crystalline Solids. 533, 10 p., 119893.

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

Study of quench protection for the Nb₃Sn low-β quadrupole for the LHC luminosity upgrade (HiLumi-LHC)

Marinozzi, V., Ambrosio, G., Bellomo, G., Chlachidze, G., Felice, H., Marchevsky, M., Salmi, T., Sorbi, M. & Todesco, E., 1 Jun 2015, In : IEEE Transactions on Applied Superconductivity. 25, 3, 4002905.

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

Study of second-harmonic generation from CdS nanostructured thin film

Mathew, S., Koskinen, K., Czaplicki, R., Pradeep, C., Kailasnath, M., GVallabhan, C. P., Kauranen, M. & Radhakrishnan, P., 19 Dec 2014, *12th International Conference on Fiber Optics and Photonics*. Optical Society of America (OSA), 4 p. M4A.46

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

Sub-100 ps monolithic diamond Raman laser emitting at 573 nm

Nikkinen, J., Savitski, V., Reilly, S., Dziechciarzyk, L., Härkönen, A., Kemp, A. & Guina, M., 2018, In : IEEE Photonics Technology Letters. 30, 11, p. 981-984

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

Sub-10 optical-cycle mode-locked Tm:(Lu₂/3Sc₁/3)2O₃ mixed ceramic laser at 2057 nm

Wang, Y., Jing, W., Loiko, P., Zhao, Y., Huang, H., Suomalainen, S., Härkönen, A., Guina, M., Mateos, X., Griebner, U. & Petrov, V., 2017, *Advanced Solid State Lasers 2017: Nagoya, Aichi Japan 1–5 October 2017*. The Optical Society; OSA, 3 p. ATu6A.4

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

Sub-microwatt direct laser writing of fluorescent gold nanoclusters in polymer films

Bitarafan, M. H., Suomala, S. & Toivonen, J., 2020, In : Optical Materials Express. 10, 1, p. 138-148 11 p.

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

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

Suitability of bundle approximation in AC loss analysis of NbTi wires: Simulations and experiment

Lyly, M., Krooshoop, E., Lübke, R., Wessel, S., Stenvall, A., Dhalle, M. & Mikkonen, R., 1 Jun 2015, In : IEEE Transactions on Applied Superconductivity. 25, 3

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

Suitability of Different Quench Protection Methods for a 16 T Block-Type Nb₃Sn Accelerator Dipole Magnet

Salmi, T., Prioli, M., Stenvall, A., Ruuskanen, J., Verweij, A. P., Auchmann, B. & Marinozzi, V., 1 Jun 2017, In : IEEE Transactions on Applied Superconductivity. 27, 4, 4702305.

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

Superatom Model for Ag-S Nanocluster with Delocalized Electrons

Goh, J. Q. & Akola, J., 10 Sep 2015, In : Journal of Physical Chemistry C. 119, 36, p. 21165-21172 8 p.

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

Supercontinuum generation as a signal amplifier

Orsila, L., Sand, J., Närhi, M., Genty, G. & Steinmeyer, G., 2015, In : Optica. 2, 8, p. 757-764 8 p.

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

Superfluid weight and Berezinskii-Kosterlitz-Thouless transition temperature of twisted bilayer graphene

Julku, A., Peltonen, T. J., Liang, L., Heikkilä, T. T. & Törmä, P., 1 Feb 2020, In : Physical Review B. 101, 6, 060505.

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

Surface-induced charge state conversion of nitrogen-vacancy defects in nanodiamonds

Rondin, L., Dantelle, G., Slablab, A., Grosshans, F., Treussart, F., Bergonzo, P., Perruchas, S., Gacoin, T., Chaigneau, M., Chang, H. C., Jacques, V. & Roch, J. F., 28 Sep 2010, In : Physical Review B. 82, 11, 115449.

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

Surface-relief gratings and stable birefringence inscribed using light of broad spectral range in supramolecular polymer-bisazobenzene complexes

Koskela, J. E., Vapaavuori, J., Hautala, J., Priimagi, A., Faul, C. F. J., Kaivola, M. & Ras, R. H. A., 26 Jan 2012, In : Journal of Physical Chemistry C. 116, 3, p. 2363-2370 8 p.

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

Surface topography studied by off-axis digital holography

Achimova, E., Abaskin, V., Cazac, V., Meshalkin, A., Pedrini, G., Claus, D., Shevkunov, I. & Katkovnik, V., 2018, *Novel Optical Materials and Applications, NOMA 2018*. OSA - The Optical Society, Vol. Part F107-NOMA 2018.

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

Switchable unidirectional second-harmonic emission through GaAs nanoantennas

Xu, L., Saerens, G., Timofeeva, M., Miroshnichenko, A. E., Camacho-Morales, R., Volkovskaya, I., Smirnova, D. A., Lysevych, M., Huang, L., Cai, M., Karouta, F., Hoe Tan, H., Kauranen, M., Jagadish, C., Grange, R., Neshev, D. N. & Rahmani, M., 2019, *AOS Australian Conference on Optical Fibre Technology, ACOFT 2019 and Australian Conference on Optics, Lasers, and Spectroscopy, ACOFT 2019*. Mitchell, A. & Rubinsztein-Dunlop, H. (eds.). SPIE, 112000J. (Proceedings of SPIE - The International Society for Optical Engineering; vol. 11200).

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

Symmetry-broken electronic structure and uniaxial Fermi surface nesting of untwinned CaFe₂As₂

Wang, Q., Sun, Z., Rotenberg, E., Ronning, F., Bauer, E. D., Lin, H., Markiewicz, R. S., Lindroos, M., Barbiellini, B., Bansil, A. & Dessau, D. S., 26 Dec 2013, In : Physical Review B. 88, 23, 235125.

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

System-level design for partially reconfigurable hardware

Qu, Y., Tiensyrjä, K., Soininen, J. P. & Nurmi, J., 2007, *2007 IEEE International Symposium on Circuits and Systems*. p. 2738-2741 4 p.

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

Tailoring directional scattering of second-harmonic generation from (111)-GaAs nanoantennas

Sautter, J., Xu, L., Miroshnichenko, A., Lysevych, M., Volkovskaya, I., Smirnova, D., Camacho Morales, M., Zangeneh Kamali, K., Karouta, F., Vora, K., Tan, H. H., Kauranen, M., Staude, I., Jagadish, C., Neshev, D. N. & Rahmani, M., 2019, *AOS Australian Conference on Optical Fibre Technology, ACOFT 2019 and Australian Conference on Optics, Lasers, and Spectroscopy, ACOLS 2019*. Mitchell, A. & Rubinsztein-Dunlop, H. (eds.). SPIE, 112000H. (Proceedings of SPIE - The International Society for Optical Engineering; vol. 11200).

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

Teaching for virtual work

Henno, J., Jaakkola, H. & Mäkelä, J., 1 May 2019, *2019 42nd International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2019 - Proceedings*. Skala, K., Car, Z., Pale, P., Huljenic, D., Janjic, M., Koracic, M., Sruk, V., Ribaric, S., Grbac, T. G., Butkovic, Z., Cicin-Sain, M., Skvorc, D., Mauher, M., Babic, S., Gros, S., Vrdoljak, B. & Tijan, E. (eds.). IEEE, p. 818-826 9 p.

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

Temporal ghost imaging using wavelength conversion and two-color detection

Wu, H., Ryczkowski, P., Friberg, A. T., Dudley, J. M. & Genty, G., 20 Jul 2019, In : *Optica*. 6, 7, p. 902-906 5 p.

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

Test results of the LARP HQ02b magnet at 1.9 K

Bajas, H., Ambrosio, G., Anerella, M., Bajko, M., Bossert, R., Bottura, L., Caspi, S., Cheng, D., Chiuchiolo, A., Chlachidze, G., Dietderich, D., Felice, H., Ferracin, P., Feuvrier, J., Ghosh, A., Giloux, C., Godeke, A., Hafalia, A. R., Marchevsky, M., Ravaioli, E., Sabbi, G. L., Salmi, T., Schmalzle, J., Todesco, E., Wanderer, P., Wang, X. & Yu, M., 1 Jun 2015, In : *IEEE Transactions on Applied Superconductivity*. 25, 3, 4003306.

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

Test Results of the LARP Nb₃Sn Quadrupole HQ03a

DiMarco, J., Ambrosio, G., Anerella, M., Bajas, H., Chlachidze, G., Borgnolutti, F., Bossert, R., Cheng, D., Dietderich, D., Felice, H., Holik, T., Pan, H., Ferracin, P., Ghosh, A., Godeke, A., Hafalia, A. R., Marchevsky, M., Orris, D., Ravaioli, E., Sabbi, G., Salmi, T., Schmalzle, J., Stoynev, S., Strauss, T., Sylvester, C., Tartaglia, M., Todesco, E., Wanderer, P., Wang, X. & Yu, M., 1 Jun 2016, In : *IEEE Transactions on Applied Superconductivity*. 26, 4, 4005105.

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

The 16 T Dipole Development Program for FCC

Tommasini, D., Auchmann, B., Bajas, H., Bajko, M., Ballarino, A., Bellomo, G., Benedikt, M., Bermudez, S. I., Bordini, B., Bottura, L., Buzio, M., Dhalle, M., Durante, M., De Rijk, G., Fabbricatore, P., Farinon, S., Ferracin, P., Gao, P., Lackner, F., Lorin, C., Marinozzi, V., Martinez, T., Munilla, J., Ogitsu, T., Ortwein, R., Perez, J., Prioli, M., Rifflet, J. M., Rochepault, E., Russenschuck, S., Salmi, T., Savary, F., Schoerling, D., Segreti, M., Senatore, C., Sorbi, M., Stenvall, A., Todesco, E., Toral, F., Verweij, A. P., Volpini, G., Wessel, S. & Wolf, F., 1 Jun 2017, In : *IEEE Transactions on Applied Superconductivity*. 27, 4, 4000405.

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

The effect of carbon and nickel additions on the precursor synthesis of Cr₃C₂-Ni nanopowder

Kaunisto, K., Kotilainen, M., Karhu, M., Lagerbom, J., Vuorinen, T., Honkanen, M., Vippola, M. & Turunen, E., 1 Jun 2018, In : *Ceramics International*. 44, 8, p. 9338-9346

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

The effects of I/Q imbalance on wireless communications: A survey

Selim, B., Sofotasios, P. C., Muhaidat, S. & Karagiannidis, G. K., 2 Mar 2017, *2016 IEEE 59th International Midwest Symposium on Circuits and Systems (MWSCAS)*. IEEE

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

The effects of laser patterning 10CeTZP-Al₂O₃ nanocomposite disc surfaces: Osseous differentiation and cellular arrangement in vitro

Goyos-Ball, L., Prado, C., Díaz, R., Fernández, E., Ismailov, A., Kumpulainen, T., Levänen, E., Torrecillas, R. & Fernández, A., Jun 2018, In : *Ceramics International*. 44, 8, p. 9472-9478

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

The EuCARD-2 future magnets European collaboration for accelerator-quality HTS magnets

Rossi, L., Badel, A., Bajko, M., Ballarino, A., Bottura, L., Dhallé, M. M. J., Durante, M., Fazilleau, P., Fleiter, J., Goldacker, W., Härö, E., Kario, A., Kirby, G., Lorin, C., Van Nugteren, J., De Rijk, G., Salmi, T., Senatore, C., Stenvall, A., Tixador, P., Usoskin, A., Volpini, G., Yang, Y. & Zangenberg, N., 1 Jun 2015, In : IEEE Transactions on Applied Superconductivity. 25, 3, 4001007.

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

The EuCARD2 Future Magnets Program for particle accelerator high field dipoles: review of results and next steps

Rossi, L., Badel, A., Bajas, H., Bajko, M., Ballarino, A., Barth, C., Betz, U., Bottura, L., Broggi, F., Chiuchiolo, A., Dhallé, M., Durante, M., Fazilleau, P., Fleiter, J., Gao, P., Goldacker, W., Kario, A., Kirby, G., Lorin, C., Murtomaeki, J. S., van Nugteren, J., Petrone, C., DeRijk, G., Senatore, C., Statera, M., Stenvall, A., Tixador, P., Yang, Y., Usoskin, A. & Zangenberg, N., Apr 2018, In : IEEE Transactions on Applied Superconductivity. 28, 3

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

The Impact of Protection Heater Delays Distribution on the Hotspot Temperature in a High-Field Accelerator Magnet

Salmi, T. & Stenvall, A., 1 Jun 2016, In : IEEE Transactions on Applied Superconductivity. 26, 4, 4001405.

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

The magical world of metamaterials

Caglayan, H. & Ozbay, E., 2009, *Photonic Materials, Devices, and Applications III*. Vol. 7366. 73660X. (Proceedings of SPIE; vol. 7366).

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

Theoretical studies of structural properties of the high- T_c superconductor $Y_1Ba_2Cu_3O_{7-x}$

Valkealahti, S. & Welch, D. O., 1 Jan 1989, In : Physica C: Superconductivity and its Applications. 162-164, PART 1, p. 540-541 2 p.

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

The red, purple and blue modifications of polymeric unsymmetrical hydroxyalkadiynyl-N-arylcarbamate derivatives in Langmuir-Schaefer films

Alekseev, A., Ihalainen, P., Ivanov, A., Domnin, I., Klechkovskaya, V., Orekhov, A., Lemmetyinen, H., Vuorimaa-Laukkanen, E., Peltonen, J. & Vyaz'min, S., 1 Aug 2016, In : Thin Solid Films. 612, p. 463-471 9 p.

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

Thermal effects on a passive wireless antenna sensor for strain and crack sensing

Yi, X., Vyas, R., Cho, C., Fang, C. H., Cooper, J., Wang, Y., Leon, R. T. & Tentzeris, M. M., 2012, *Sensors and Smart Structures Technologies for Civil, Mechanical, and Aerospace Systems 2012*. Vol. 8345. 83450F

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

Thermal effects on the Wigner localization and Friedel oscillations in many-electron nanowires

Kylänpää, I., Cavaliere, F., Ziani, N. T., Sassetti, M. & Räsänen, E., 13 Sep 2016, In : Physical Review B. 94, 11, 115417.

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

Thermal evaporation of Ge on Si for near infrared detectors: Material and device characterization

Sorianello, V., Colace, L., Assanto, G., Notargiacomo, A., Armani, N., Rossi, F. & Ferrari, C., Apr 2011, In : Microelectronic Engineering. 88, 4, p. 526-529 4 p.

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

Thermally evaporated single-crystal Germanium on Silicon

Sorianello, V., Colace, L., Nardone, M. & Assanto, G., 1 Sep 2011, In : Thin Solid Films. 519, 22, p. 8037-8040 4 p.

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

Thermal, structural and optical properties of Er^{3+} doped phosphate glasses containing silver nanoparticles

Soltani, I., Hraiech, S., Horchani-Naifer, K., Massera, J., Petit, L. & Férid, M., 15 Apr 2016, In : Journal of Non-Crystalline Solids. 438, p. 67-73 7 p.

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

The sensitivity of random polymer brush-lamellar polystyrene-b-polymethylmethacrylate block copolymer systems to process conditions

Borah, D., Rasappa, S., Senthamarikannan, R., Shaw, M. T., Holmes, J. D. & Morris, M. A., 1 Mar 2013, In : *Journal of Colloid and Interface Science*. 393, 1, p. 192-202 11 p.

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

Thickness variation study of RFID-based folded patch antennas for strain sensing

Yi, X., Wu, T., Lantz, G., Wang, Y., Leon, R. T. & Tentzeris, M. M., 2011, *Sensors and Smart Structures Technologies for Civil, Mechanical, and Aerospace Systems 2011*. Vol. 7981. 79811H

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

Third order nonlinear optical response of TTF-based molecular corners

Iliopoulos, K., Czaplicki, R., Ouazzani, H. E., Balandier, J-Y., Chas, M., Goeb, S., Sallé, M., Gindre, D. & Sahraoui, B., 2012, In : *Nonlinear Optics, Quantum Optics*. 43, 1-4, p. 205-212 8 p.

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

Three-color vector nematicon

Laudyn, U. A., Kwaśny, M., Karpierz, M. A. & Assanto, G., 2017, In : *Photonics Letters of Poland*. 9, 2, p. 36-38 3 p.

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

Toward Graphene-Based Passive UHF RFID Textile Tags: A Reliability Study

Akbari, M., Virkki, J., Sydänheimo, L. & Ukkonen, L., 1 Sep 2016, In : *IEEE Transactions on Device and Materials Reliability*. 16, 3, p. 429-431 3 p.

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

Towards efficient nonlinear plasmonic metasurfaces

Huttunen, M. J., Stolt, T., Reshef, O., Kiviniemi, A., Czaplicki, R., Zang, X., Vartiainen, I., Butet, J., Kuittinen, M., Martin, O. J. F., Dolgaleva, K., Boyd, R. W. & Kauranen, M., 1 Jul 2019, *21st International Conference on Transparent Optical Networks, ICTON 2019*. IEEE, (International Conference on Transparent Optical Networks).

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

Towards REBCO 20T+ Dipoles for Accelerators

van Nugteren, J., Kirby, G., Murtomaki, J., DeRijk, G., Rossi, L. & Stenvall, A., Jun 2018, In : *IEEE Transactions on Applied Superconductivity*. 28, 4, 4008509.

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

Towards universal enrichment nanocoating for IR-ATR waveguides

Giammarco, J., Zdyrko, B., Petit, L., Musgraves, J. D., Hu, J., Agarwal, A., Kimerling, L., Richardson, K. & Luzinov, I., 28 Aug 2011, In : *Chemical Communications*. 47, 32, p. 9104-9106 3 p.

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

Transmission, refraction, and focusing properties of labyrinth based left-handed metamaterials

Özbay, E., Bulu, I. & Caglayan, H., Apr 2007, In : *Physica Status Solidi (B) Basic Research*. 244, 4, p. 1202-1210 9 p.

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

Transparent Yb³⁺ doped phosphate glass-ceramics

Hongisto, M., Veber, A., Boetti, N. G., Danto, S., Jubera, V. & Petit, L., 1 Jan 2020, In : *Ceramics International*.

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

Transverse deformation of a lamellar TiAl alloy at high temperature by in situ microcompression

Edwards, T. E. J., Di Gioacchino, F., Goodfellow, A. J., Mohanty, G., Wehrs, J., Michler, J. & Clegg, W. J., 1 Mar 2019, In : *Acta Materialia*. 166, p. 85-99 15 p.

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

Transverse structure optimization of laterally-coupled ridge waveguide DFB lasers

Uusitalo, T., Virtanen, H. & Dumitrescu, M., 17 Aug 2016, *16th International Conference on Numerical Simulation of Optoelectronic Devices, NUSOD 2016*. IEEE, p. 79-80 2 p. 7547038

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

Tunable Reflection Type Plasmon Induced Transparency with Graphene

Habib, M., Ozbay, E. & Caglayan, H., 13 Nov 2018, *2018 12th International Congress on Artificial Materials for Novel Wave Phenomena, METAMATERIALS 2018*. IEEE, p. 170-172 3 p.

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

Tuneable topological domain wall states in engineered atomic chains

Huda, M. N., Kezilebieke, S., Ojanen, T., Drost, R. & Liljeroth, P., 2020, In : *npj Quantum Materials*. 5, 1, 5 p., 17.

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

Tuning electronic properties of graphene heterostructures by amorphous-to-crystalline phase transitions

Kulju, S., Akola, J., Prendergast, D. & Jones, R. O., 31 May 2016, In : *Physical Review B*. 93, 19, 8 p., 195443.

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

Two cations, two mechanisms: Interactions of sodium and calcium with zwitterionic lipid membranes

Javanainen, M., Melcrová, A., Magarkar, A., Jurkiewicz, P., Hof, M., Jungwirth, P. & Martinez-Seara, H., 2017, In : *Chemical Communications*. 53, 39, p. 5380-5383 4 p.

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

Two-part stretchable passive UHF RFID textile tags

Chen, X., He, H., Chen, L., Raunonen, P., Ukkonen, L. & Virkki, J., 22 May 2017, *2017 Progress in Electromagnetics Research Symposium - Spring, PIERS 2017*. Electromagnetics Academy, p. 3318-3321 4 p.

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

Two-time coherence of pulse trains and the integrated degree of temporal coherence

Dutta, R., Friberg, A. T., Genty, G. & Turunen, J., 2015, In : *Journal of the Optical Society of America A: Optics Image Science and Vision*. 32, 9, p. 1631-1637 7 p.

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

Ultrafast picosecond MOPA with Yb-doped tapered double clad fiber

Noronen, T., Gumenyuk, R., Chamorovskii, Y., Golant, K., Odnoblyudov, M. & Filippov, V., 2017, *The European Conference on Lasers and Electro-Optics 2017: Munich Germany 25-29 June 2017*. The Optical Society; OSA, Vol. Part F82-CLEO_Europe 2017. CJ_9_4

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

Ultra-high-pressure form of Si O₂ glass with dense pyrite-type crystalline homology

Murakami, M., Kohara, S., Kitamura, N., Akola, J., Inoue, H., Hirata, A., Hiraoka, Y., Onodera, Y., Obayashi, I., Kalikka, J., Hirao, N., Musso, T., Foster, A. S., Idemoto, Y., Sakata, O. & Ohishi, Y., 29 Jan 2019, In : *Physical Review B*. 99, 4, 045153.

Research output: Contribution to journal > Article > 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

Unveiling and controlling the electronic structure of oxidized semiconductor surfaces: Crystalline oxidized InSb(100)(1 × 2)-O: Crystalline oxidized InSb(100)(1 × 2)-O

Lång, J. J. K., Punkkinen, M. P. J., Tuominen, M., Hedman, H. P., Vähä-Heikkilä, M., Polojärvi, V., Salmi, J., Korpjärvi, V. M., Schulte, K., Kuzmin, M., Punkkinen, R., Laukkanen, P., Guina, M. & Kokko, K., 29 Jul 2014, In : *Physical Review B*. 90, 4, p. 1-9 9 p., 045312.

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

Utilizing triangular mesh with MMEV to study hysteresis losses of round superconductors obeying critical state model
Ruuskanen, J., Stenvall, A. & Lahtinen, V., 1 Jun 2015, In : IEEE Transactions on Applied Superconductivity. 25, 3, 8200405.

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

Very high dose electron irradiation effects on photoluminescence from GaInNAs/GaAs quantum wells grown by molecular beam epitaxy

Pavelescu, E. M., Bălăţeanu, N., Spănulescu, S. I. & Arola, E., 1 Feb 2017, In : Optical Materials. 64, p. 361-365 5 p.

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

Vortex stabilization by means of spatial solitons in nonlocal media

Izdebskaya, Y., Krolikowski, W., Smyth, N. F. & Assanto, G., 1 May 2016, In : Journal of Optics. 18, 5, 054006.

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

Walking anisotropic spatial solitons and their steering in nematic liquid crystals

Peccianti, M., Alberucci, A., Assanto, G., De Luca, A., Coschignano, G. & Umetsu, C., 1 Jan 2005, *Nonlinear Guided Waves and Their Applications, NLGW 2005*. Optical Society of America OSA

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

Wetting hysteresis induced by temperature changes: Supercooled water on hydrophobic surfaces

Heydari, G., Sedighi Moghaddam, M., Tuominen, M., Fielden, M., Haapanen, J., Mäkelä, J. M. & Claesson, P. M., 15 Apr 2016, In : Journal of Colloid and Interface Science. 468, p. 21-33 13 p.

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