

### **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

### **0.6V threshold voltage thin film transistors with solution processable indium oxide ( $\text{In}_2\text{O}_3$ ) Channel and Anodized High- $\kappa$ $\text{Al}_2\text{O}_3$ 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

### **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 MgB<sub>2</sub> 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., Johansson, 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

### **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

### **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 Nb<sub>3</sub>Sn 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  $\alpha$ -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

**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

**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

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

Ali-Löyty, 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

**An ab initio study of PuO<sub>2±0.25</sub>, UO<sub>2±0.25</sub>, and U<sub>0.5</sub>Pu<sub>0.5</sub>O<sub>2±0.25</sub>**

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 Nb<sub>3</sub>Sn 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

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**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.

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**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

#### **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 Enhanced-Performance Flexible RFID-Enabled Embroidered Wireless Integrated Module for Sensing Applications**

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Research output: Contribution to journal › Article › 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.

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#### **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

#### **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

#### **Better understanding of the role of SiO<sub>2</sub>, P<sub>2</sub>O<sub>5</sub> and Al<sub>2</sub>O<sub>3</sub> on the spectroscopic properties of Yb<sup>3+</sup> 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

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

Rasappa, S., Borah, D., Senthamaraiannan, 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., Korpijärvi, 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.

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**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.

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

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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.

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**Capability assessment of inkjet printing for reliable RFID applications**

Putala, 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.

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**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.

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**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

**Cold test results of the LARP HQ Nb<sub>3</sub>Sn 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

**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.  
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**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**  
Vignion-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., Kapgate, 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.  
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**Composition dependent growth dynamics in molecular beam epitaxy of GaInNAs solar cells**  
Aho, A., Polojärvi, V., Korpjärvi, 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.  
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**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

**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

**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.  
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**Crystallization processes in the phase change material Ge<sub>2</sub> Sb<sub>2</sub> Te<sub>5</sub>: 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

**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  $\gamma$ -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., Tüngen, 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

**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

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**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.

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**Design of a Nb<sub>3</sub>Sn 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.

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**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.

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**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 MQXF: The Nb<sub>3</sub>Sn Low- $\beta$  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

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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 triple junction solar cells for space applications: Progress towards highest AMO 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

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

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

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Research output: Contribution to journal › Article › 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

#### **Effect of heat-treatment on the upconversion of $\text{NaYF}_4:\text{Yb}^{3+}, \text{Er}^{3+}$ 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 $\text{Al}_2\text{O}_3$ , $\text{TiO}_2$ and ZnO on the thermal, structural and luminescence properties of $\text{Er}^{3+}$ -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 TiO<sub>2</sub>/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**

Khorrandel, 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., Mettenbörger, 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.

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



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

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#### **Essential Measurements for Finite Element Simulations of Magnetostrictive Materials**

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

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#### **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.

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#### **Evaluation of crushing strength of spray-dried MgAl<sub>2</sub>O<sub>4</sub> granule beds**

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

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

#### **Exciton localization and structural disorder of GaAs<sub>1-x</sub>Bi<sub>x</sub>/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.

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#### **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.

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#### **Exploration of Two Layer Nb<sub>3</sub>Sn 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.

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

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#### **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.

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#### **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.

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#### **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.

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

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

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

Kulju, S., Riegger, L., Koltay, P., Mattila, K. & Hyv\u00e4luoma, 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

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

V\u00e4lim\u00e4ki, H., Verho, J., Kreutzer, J., Kattiparambil Rajan, D., Ryn\u00e4nen, 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.

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#### **Frequency modulation of semiconductor disk laser pulses**

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#### **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.

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#### **Fundamental gaps of quantum dots on the cheap**

Guandalini, A., Rozzi, C. A., R\u00e4s\u00e4nen, E. & Pittalis, S., 25 Mar 2019, In : Physical Review B. 99, 12, 125140.

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#### **GaInAsSb/AlGa(In)AsSb type I quantum wells emitting in 3 $\mu\text{m}$ 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**

R\u00e4is\u00e4nen, V., Suuriniemi, S. & Kettunen, L., 1 Sep 2016, In : IEEE Transactions on Magnetics. 52, 9, 8107708.

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#### **Generation of a broad IR spectrum and N-soliton compression in a longitudinally inhomogeneous dispersion-shifted fibre**

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

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**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.

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**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.

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**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

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**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.

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**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.

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**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.

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**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.

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**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**

Priimagi, 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.

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### **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.

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### **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.

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

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

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### **Highly efficient charge separation in model Z-scheme $\text{TiO}_2/\text{TiSi}_2/\text{Si}$ 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.

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### **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.

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### **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

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### **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

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### **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.

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### **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.

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### **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.

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### **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.

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

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

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#### **Influence of the P2O5/Al2O3 co-doping on the local environment of erbium ions and on the 1.5 μm quantum efficiency of Er<sup>3+</sup>-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**

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

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#### **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.  
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#### **Instability of cuboctahedral copper clusters**

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

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**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

**Laser angle-resolved photoemission as a probe of initial state kz dispersion, final-state band gaps, and spin texture of Dirac states in the Bi<sub>2</sub>Te<sub>3</sub> 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-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

**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

**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

**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. & Baino, 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

**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

**Modification of Surface States of Hematite-Based Photoanodes by Submonolayer of TiO<sub>2</sub> for Enhanced Solar Water Splitting**

Palmolahti, L., Ali-Löyty, 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

**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., Senthamaraiakanan, 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

**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.

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**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.

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**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

**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.

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**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., Korpijärvi, V. M. & Guina, M., 1 Aug 2018, In : Semiconductor Science and Technology. 33, 9, 094005.

Research output: Contribution to journal › Article › 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 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

**Nonlocal soliton scattering in random potentials**

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

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### **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 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.

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### **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.

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### **Observation of PT-symmetric quantum interference**

Klauck, F., Teuber, L., Ornigotti, M., Heinrich, M., Scheel, S. & Szameit, A., 16 Sep 2019, In : Nature Photonics.

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### **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 TiO<sub>2</sub> 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.

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### **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 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<sub>1-x</sub>Bi<sub>x</sub>/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.

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### **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

#### **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., Leikkala, 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

#### **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

#### **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.

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**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.

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**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

**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

**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.

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**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

**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

**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

**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 Nb<sub>3</sub>Sn 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

#### **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

#### **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.

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#### **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.

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#### **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 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

### **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.  
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### **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

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### **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**

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

### **Reversible photodoping of TiO<sub>2</sub> 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

### **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.  
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### **Self-alignment in the stacking of microchips with mist-induced water droplets**

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#### **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.

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#### **Single-source multibattery solar charger: Case study and implementation issues**

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#### **Soft graphoepitaxy for large area directed self-assembly of polystyrene-block-poly(dimethylsiloxane) block copolymer on nanopatterned poss substrates fabricated by nanoimprint lithography**

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#### **Solar Irradiation Independent Expression for Photovoltaic Generator Maximum Power Line**

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#### **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

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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**

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

#### **Strand and cable R&D for fast cycled magnets at CERN**

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#### **Structural and Electrical Characterization of Solution-Processed Electrodes for Piezoelectric Polymer Film Sensors**

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

#### **Study of quench protection for the Nb<sub>3</sub>Sn low-β quadrupole for the LHC luminosity upgrade (HiLumi-LHC)**

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#### **Sub-100 ps monolithic diamond Raman laser emitting at 573 nm**

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#### **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.

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#### **Suitability of bundle approximation in AC loss analysis of NbTi wires: Simulations and experiment**

Lyly, M., Krooshoop, E., Lübemann, R., Wessel, S., Stenvall, A., Dhalle, M. & Mikkonen, R., 1 Jun 2015, In : IEEE Transactions on Applied Superconductivity. 25, 3

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#### **Suitability of Different Quench Protection Methods for a 16 T Block-Type Nb<sub>3</sub>Sn 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.

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

### **Superfluid weight and Berezinskii-Kosterlitz-Thouless transition temperature of twisted bilayer graphene**

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

### **Surface-induced charge state conversion of nitrogen-vacancy defects in nanodiamonds**

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

### **Symmetry-broken electronic structure and uniaxial Fermi surface nesting of untwinned CaFe<sub>2</sub>As<sub>2</sub>**

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### **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., Ravaoli, 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.

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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., Fabbriatore, 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.

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### **The effect of carbon and nickel additions on the precursor synthesis of Cr<sub>3</sub>C<sub>2</sub>-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 laser patterning 10CeTZP-Al<sub>2</sub>O<sub>3</sub> 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., Dhalle, 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

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**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

**Theoretical studies of structural properties of the high-T<sub>c</sub> superconductor Y<sub>1</sub>Ba<sub>2</sub>Cu<sub>3</sub>O<sub>7-x</sub>**

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-arylcabamate 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.

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**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<sup>3+</sup> 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., SenthamaraiKannan, 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.  
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#### **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.  
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#### **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.  
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#### **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.  
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#### **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 Yb<sup>3+</sup> 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

#### **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.  
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#### **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

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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

#### **Ultrahigh-pressure form of Si O<sub>2</sub> 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

#### **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., Bălățeanu, N., Spânulescu, 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

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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

#### **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

#### **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

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Research output: Contribution to journal › Editorial › Scientific

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Research output: Contribution to journal › Editorial › Scientific

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Research output: Contribution to journal › Special issue › Scientific › peer-review

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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

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

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

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

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

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

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

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

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

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**Continuous-wave, cascaded raman laser at 1.3, 1.5, and 1.7  $\mu\text{m}$**

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



#### **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).

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#### **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.

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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).

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#### **Fluorescence bandwidth of 280nm from broadband Ce<sup>3+</sup>-doped silica fiber pumped with blue laser diode**

Yadav, A., Chichkov, N. B., Gumenyuk, R., Zherebtsov, 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

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

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#### **Highly-efficient Ho:KY(WO4)2 thin-disk lasers at 2.06 $\mu\text{m}$**

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

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

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

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

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#### **Quantum-well Laser Emitting at 1.2 μm-1.3 μm Window Monolithically Integrated on Ge Substrate**

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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**

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

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

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

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#### **SESAM mode-locked Tm: CALGO laser at 2 $\mu\text{m}$**

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

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#### **Simulation of photon-photon resonance enhanced direct modulation bandwidth of DFB lasers**

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

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

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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

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