

Donadei V, Koivuluoto H, Sarlin E, Vuoristo P. 2020. Lubricated icephobic coatings prepared by flame spraying with hybrid feedstock injection. *Surface and Coatings Technology*. 403. <https://doi.org/10.1016/j.surfcoat.2020.126396>

Sarlin E, Honkanen M, Lindgren M, Laihonen P, Juutilainen M, Vippola M, Vuorinen J. 2020. The effect of substrate pre-treatment on durability of rubber-stainless steel adhesion. *Surfaces and Interfaces*. 21. <https://doi.org/10.1016/j.surfin.2020.100646>

Juoksukangas J, Hintikka J, Lehtovaara A, Mäntylä A, Vaara J, Frondelius T. 2020. Avoiding the initial adhesive friction peak in fretting. *Wear*. 460-461. <https://doi.org/10.1016/j.wear.2020.203353>

Haiko O, Kaikkonen P, Somanı M, Valtonen K, Kömi J. 2020. Characteristics of carbide-free medium-carbon bainitic steels in high-stress abrasive wear conditions. *Wear*. 456-457. <https://doi.org/10.1016/j.wear.2020.203386>

Ojha N, Bogdan M, Galatus R, Petit L. 2020. Effect of heat-treatment on the upconversion of  $\text{NaYF}_4:\text{Yb}^{3+}, \text{Er}^{3+}$  nanocrystals containing silver phosphate glass. *Journal of Non-Crystalline Solids*. 544. <https://doi.org/10.1016/j.jnoncrysol.2020.120243>

Olzyńska A, Kulig W, Mikkolainen H, Czerniak T, Jurkiewicz P, Cwiklik L, Rog T, Hof M, Jungwirth P, Vattulainen I. 2020. Tail-Oxidized Cholesterol Enhances Membrane Permeability for Small Solutes. *Langmuir*. 36(35):10438-10447. <https://doi.org/10.1021/acs.langmuir.0c01590>

Zahra M, Kempí I, Haarla J, Antonov Y, Khonsari Z, Miilunpalo T, Ahmed N, Inkinen J, Unnikrishnan V, Lehtovuori A, Viikari V, Anttila L, Valkama M, Kosunen M, Stadius K, Ryynänen J. 2020. A 2-5.5 GHz Beamsteering Receiver IC with 4-Element Vivaldi Antenna Array. *IEEE Transactions on Microwave Theory and Techniques*. 68(9):3852-3860. <https://doi.org/10.1109/TMTT.2020.2986754>

Waheed MZ, Korpi D, Anttila L, Kiayani A, Kosunen M, Stadius K, Campo PP, Turunen M, Allen M, Ryynänen J, Valkama M. 2020. Passive Intermodulation in Simultaneous Transmit-Receive Systems: Modeling and Digital Cancellation Methods. *IEEE Transactions on Microwave Theory and Techniques*. 68(9):3633-3652. <https://doi.org/10.1109/TMTT.2020.2996206>

Haiko O, Javaheri V, Valtonen K, Kaijalainen A, Hannula J, Kömi J. 2020. Effect of prior austenite grain size on the abrasive wear resistance of ultra-high strength martensitic steels. *Wear*. 454-455. <https://doi.org/10.1016/j.wear.2020.203336>

Truong KN, Rautiainen JM, Rissanen K, Puttreddy R. 2020. The C-I...O-N<sup>+</sup> Halogen Bonds with Tetraiodoethylene and Aromatic N-Oxides. *Crystal Growth and Design*. 20(8):5330-5337. <https://doi.org/10.1021/acs.cgd.0c00560>

Zhao J, Stenvall A, Gao Y, Salmi T. 2020. Analytical and Numerical Methods to Estimate the Effective Mechanical Properties of Rutherford Cables. *IEEE Transactions on Applied Superconductivity*. 30(5). <https://doi.org/10.1109/TASC.2020.2968924>

Nechay K, Mereuta A, Paranthoen C, Brevalle G, Levallois C, Alouini M, Chevalier N, Perrin M, Suruceanu G, Caliman A, Kapon E, Guina M. 2020. High-Power 760 nm VECSEL Based on Quantum Dot Gain Mirror. *IEEE journal of quantum electronics*. 56(4). <https://doi.org/10.1109/JQE.2020.2986770>

Brihuega A, Anttila L, Valkama M. 2020. Neural-Network-Based Digital Predistortion for Active Antenna Arrays under Load Modulation. *IEEE Microwave and Wireless Components Letters*. 30(8):843-846. <https://doi.org/10.1109/LMWC.2020.3004003>

Lahtinen V, Stenvall A. 2020. Semantics of HTS AC Loss Modeling: Theories, Models, and Experiments. *IEEE Transactions on Applied Superconductivity*. 30(5). <https://doi.org/10.1109/TASC.2020.2976619>

Lahikainen M, Zeng H, Priimagi A. 2020. Design principles for non-reciprocal photomechanical actuation. *Soft Matter*. 16(25):5951-5958. <https://doi.org/10.1039/d0sm00624f>

Sharma RO, Rantala TT, Hoggan PE. 2020. Selective hydrogen production at Pt(111) investigated by Quantum Monte Carlo methods for metal catalysis. *International Journal of Quantum Chemistry*. 120(11). <https://doi.org/10.1002/qua.26198>

Baratto C, Golovanova V, Faglia G, Hakola H, Niemi T, Tkachenko N, Nazarchuk B, Golovanov V. 2020. On the alignment of ZnO nanowires by Langmuir – Blodgett technique for sensing application. *Applied Surface Science*. 528. <https://doi.org/10.1016/j.apsusc.2020.146959>

Matikainen V, Koivuluoto H, Vuoristo P. 2020. A study of Cr<sub>3</sub>C<sub>2</sub>-based HVOF- and HVAF-sprayed coatings: Abrasion, dry particle erosion and cavitation erosion resistance. *Wear*. 446-447. <https://doi.org/10.1016/j.wear.2020.203188>

Twum K, Rautiainen JM, Yu S, Truong KN, Feder J, Rissanen K, Puttreddy R, Beyeh NK. 2020. Host-Guest Interactions of Sodiumsulfonatomethyleneresorcinarene and Quaternary Ammonium Halides: An Experimental-Computational Analysis of the Guest Inclusion Properties. *Crystal Growth and Design*. 20(4):2367-2376. <https://doi.org/10.1021/acs.cgd.9b01540>

Tainio JM, Salazar DAA, Nommeots-Nomm A, Roiland C, Bureau B, Neuville DR, Brauer DS, Massera J. 2020. Structure and in vitro dissolution of Mg and Sr containing borosilicate bioactive glasses for bone tissue engineering. *Journal of Non-Crystalline Solids*. 533. <https://doi.org/10.1016/j.jnoncrysol.2020.119893>

Moiseev EI, Maximov MV, Kryzhanovskaya NV, Simchuk OI, Kulagina MM, Kadinskaya SA, Guina M, Zhukov AE. 2020. Comparative Analysis of Injection Microdisk Lasers Based on InGaAsN Quantum Wells and InAs/InGaAs Quantum Dots. *Semiconductors*. 54(2):263-267. <https://doi.org/10.1134/S1063782620020177>

Occhiuzzi C, Virkki J. 2020. RFID Ladies: Spotlight on Recent Scientific and Industrial Advances of Women Engineers [Women in Engineering]. *IEEE Antennas and Propagation Magazine*. 62(1):55-57. <https://doi.org/10.1109/MAP.2019.2957999>

Julkku A, Peltonen TJ, Liang L, Heikkilä TT, Törmä P. 2020. Superfluid weight and Berezinskii-Kosterlitz-Thouless transition temperature of twisted bilayer graphene. *Physical Review B*. 101(6). <https://doi.org/10.1103/PhysRevB.101.060505>

Yıldız BC, Bek A, Tasgin ME. 2020. Plasmon lifetime enhancement in a bright-dark mode coupled system. *Physical Review B*. 101(3). <https://doi.org/10.1103/PhysRevB.101.035416>

Wang Y, Zhao Y, Pan Z, Suomalainen S, Härkönen A, Guina M, Griebner U, Wang L, Loiko P, Mateos X, Chen W, Petrov V. 2020. 73-fs SESAM mode-locked Tm,Ho:CNGG laser at 2061 nm. Clarkson WA, Shori RK, Toimittajat. teoksessa Solid State Lasers XXIX: Technology and Devices. SPIE. (Proceedings of SPIE - The International Society for Optical Engineering). <https://doi.org/10.1117/12.2548180>

Salmi T, Tarhasaari T, Izquierdo-Bermudez S. 2020. A Database for Storing Magnet Parameters and Analysis of Quench Test Results in HL-LHC Nb<sub>3</sub>Sn Short Model Magnets. *IEEE Transactions on Applied Superconductivity*. 30(4). <https://doi.org/10.1109/TASC.2020.2981304>

Phung HM, Kahle H, Penttinen J-P, Rajala P, Ranta S, Guina M. 2020. A membrane external-cavity surface-emitting laser (MECSEL) with emission around 825 nm. Hastie JE, Toimittaja. teoksessa Vertical External Cavity Surface Emitting Lasers (VECSELs) X. SPIE. (Proceedings of SPIE - The International Society for Optical Engineering). <https://doi.org/10.1117/12.2545980>

Kulya MS, Katkovnik V, Egiazarian K, Petrov NV. 2020. Complex-domain sparse imaging in terahertz pulse time-domain holography with balance detection. Sadwick LP, Yang T, Toimittajat. teoksessa Terahertz, RF, Millimeter, and Submillimeter-Wave Technology and Applications XIII. SPIE. (Proceedings of SPIE). <https://doi.org/10.1117/12.2549001>

Evans DM, Holstad TS, Mosberg AB, Småbråten DR, Vullum PE, Dadlani AL, Shapovalov K, Yan Z, Bourret E, Gao D, Akola J, Torgersen J, van Helvoort ATJ, Selbach SM, Meier D. 2020. Conductivity control via minimally invasive anti-Frenkel defects in a functional oxide. *Nature Materials*. <https://doi.org/10.1038/s41563-020-0765-x>

Vainio M. 2020. Continuous-wave optical parametric oscillators for mid-infrared spectroscopy. Schunemann PG, Schepler KL, Toimittajat. teoksessa Nonlinear Frequency Generation and Conversion: Materials and Devices XIX. SPIE. (Proceedings of SPIE - The International Society for Optical Engineering). <https://doi.org/10.1117/12.2548711>

Jokiah T, Santa-aho S, Peura P, Vippola M. 2020. Cracking and Failure Characteristics of Flame Cut Thick Steel Plates. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*. 51:1744-1754. <https://doi.org/10.1007/s11661-020-05639-x>

Nejadsattari F, Zhang Y, Jayakody MN, Bouchard F, Larocque H, Sit A, Fickler R, Cohen E, Karimi E. 2020. Cyclic quantum walks: Photonic realization and decoherence analysis. Hemmer PR, Migdall AL, Hasan ZU, Toimittajat. teoksessa Advanced Optical Techniques for Quantum Information, Sensing, and Metrology. SPIE. (Proceedings of SPIE - The International Society for Optical Engineering). <https://doi.org/10.1117/12.2546566>

Donmez O, Aydin M, Ardali, Yildirim S, Tiraş E, Nutku F, Cetinkaya C, okduyugular E, Puustinen J, Hilska J, Guina M, Erol A. 2020. 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. *Semiconductor Science and Technology*. 35(2). <https://doi.org/10.1088/1361-6641/ab5d8d>

Okonkwo O, Papirio S, Trably E, Escudie R, Lakaniemi A-M, Esposito G. 2020. Enhancing thermophilic dark fermentative hydrogen production at high glucose concentrations via bioaugmentation with *Thermotoga neapolitana*. *International Journal of Hydrogen Energy*. 45(35):17241-17249. <https://doi.org/10.1016/j.ijhydene.2020.04.231>

Varis T, Suhonen T, Laakso J, Jokipii M, Vuoristo P. 2020. Evaluation of Residual Stresses and Their Influence on Cavitation Erosion Resistance of High Kinetic HVOF and HVAF-Sprayed WC-CoCr Coatings. *Journal of Thermal Spray Technology*. <https://doi.org/10.1007/s11666-020-01037-2>

Eklund A, Zhang H, Zeng H, Priimägi A, Ikkala O. 2020. Fast Switching of Bright Whiteness in Channeled Hydrogel Networks. *Advanced Functional Materials*. <https://doi.org/10.1002/adfm.202000754>

Jowett GM, Norman MDA, Yu TTL, Rosell Arévalo P, Hoogland D, Lust ST, Read E, Hamrud E, Walters NJ, Niazi U, Chung MWH, Marciano D, Omer OS, Zabinski T, Danovi D, Lord GM, Hilborn J, Evans ND, Dreiss CA, Bozec L, Oommen OP, Lorenz CD, da Silva RMP, Neves JF, Gentleman E. 2020. ILC1 drive intestinal epithelial and matrix remodelling. *Nature Materials*. <https://doi.org/10.1038/s41563-020-0783-8>

Varis T, Suhonen T, Jokipii M, Vuoristo P. 2020. Influence of powder properties on residual stresses formed in high-pressure liquid fuel HVOF sprayed WC-CoCr coatings. *Surface and Coatings Technology*. 388. <https://doi.org/10.1016/j.surfcoat.2020.125604>

Vitola V, Lahti V, Bite I, Spustaka A, Millers D, Lastusaari M, Petit L, Smits K. 2020. Low temperature afterglow from SrAl<sub>2</sub>O<sub>4</sub>: Eu, Dy, B containing glass. *Scripta Materialia*. 190:86-90. <https://doi.org/10.1016/j.scriptamat.2020.08.023>

Nommeots-Nomm A, Houaoui A, Pradeepan Packiyanathar A, Chen X, Hokka M, Hill R, Pauthe E, Petit L, Boissière M, Massera J. 2020. Phosphate/oxyfluorophosphate glass crystallization and its impact on dissolution and cytotoxicity. *Materials Science and Engineering C*. 117. <https://doi.org/10.1016/j.msec.2020.111269>

Donmez O, Aydin M, Ardali, Yildirim S, Tiraş E, Erol A, Puustinen J, Hilska J, Guina M. 2020. Power loss mechanisms in n-type modulation-doped AlGaAs/GaAsBi quantum well heterostructures. *Semiconductor Science and Technology*. 35(9). <https://doi.org/10.1088/1361-6641/ab94d9>

Kulya MS, Sokolenko B, Gorodetsky A, Petrov NV. 2020. Propagation dynamics of ultrabroadband terahertz beams with orbital angular momentum for wireless data transfer. Dingel BB, Tsukamoto K, Mikroulis S, Toimittajat. teoksessa Broadband Access Communication Technologies XIV. SPIE. (Proceedings of SPIE - The International Society for Optical Engineering). <https://doi.org/10.1117/12.2547695>

Chronopoulos A, Thorpe SD, Cortes E, Lachowski D, Rice AJ, Mykuliak VV, Rog T, Lee DA, Hytönen VP, del Río Hernández AE. 2020. Syndecan-4 tunes cell mechanics by activating the kindlin-integrin-RhoA pathway. *Nature Materials*. <https://doi.org/10.1038/s41563-019-0567-1>

Saarimaa V, Kaleva A, Nikkanen JP, Levänen E, Väisänen P, Markkula A. 2020. Time-of-flight secondary ion mass spectrometry study of zinc carbonation in the presence of stable oxygen-18 and deuterium isotopes. *Materials Chemistry and Physics*. 256. <https://doi.org/10.1016/j.matchemphys.2020.123673>

Huda MN, Kezilebieke S, Ojanen T, Drost R, Liljeroth P. 2020. Tuneable topological domain wall states in engineered atomic chains. *npj Quantum Materials*. 5(1). <https://doi.org/10.1038/s41535-020-0219-3>

Koyama C, Tahara S, Kohara S, Onodera Y, Småbråten DR, Selbach SM, Akola J, Ishikawa T, Masuno A, Mizuno A, Okada JT, Watanabe Y, Nakata Y, Ohara K, Tamari H, Oda H, Obayashi I, Hiraoka Y, Sakata O. 2020. Very sharp diffraction peak in nonglass-forming liquid with the formation of distorted tetracusters. *NPG ASIA MATERIALS*. 12(1). <https://doi.org/10.1038/s41427-020-0220-0>

Haiko O, Valtonen K, Kaijalainen A, Uusikallio S, Hannula J, Liimatainen T, Kömi J. 2019. Effect of tempering on the impact-abrasive and abrasive wear resistance of ultra-high strength steels. *Wear*. 440-441. <https://doi.org/10.1016/j.wear.2019.203098>

Dongho-Nguimdo GM, Igumbor E, Zambou S, Joubert DP. 2019. First principles prediction of the solar cell efficiency of chalcopyrite materials  $\text{AgMX}_2$ (M=In, Al; X=S, Se, Te). *Computational Condensed Matter*. 21. <https://doi.org/10.1016/j.cocom.2019.e00391>

Rissanen I, Laurson L. 2019. Bursty magnetic friction between polycrystalline thin films with domain walls. *Physical Review B*. 100(14). <https://doi.org/10.1103/PhysRevB.100.144408>

Vetter C, Steinkopf R, Bergner K, Orningotti M, Nolte S, Gross H, Szameit A. 2019. Realization of Free-Space Long-Distance Self-Healing Bessel Beams. *Laser and Photonics Reviews*. 13(10). <https://doi.org/10.1002/lpor.201900103>

Skaugen A, Murray P, Laurson L. 2019. Analytical computation of the demagnetizing energy of thin-film domain walls. *Physical Review B*. 100(9). <https://doi.org/10.1103/PhysRevB.100.094440>

Reshef O, Saad-Bin-Alam M, Huttunen MJ, Carlow G, Sullivan BT, Ménard JM, Dolgaleva K, Boyd RW. 2019. Multiresonant High-Q Plasmonic Metasurfaces. *Nano Letters*. 19(9):6429-6434. <https://doi.org/10.1021/acs.nanolett.9b02638>

Kiilakoski J, Langlade C, Koivuluoto H, Vuoristo P. 2019. Characterizing the micro-impact fatigue behavior of APS and HVOF-sprayed ceramic coatings. *Surface and Coatings Technology*. 371:245-254. <https://doi.org/10.1016/j.surfcoat.2018.10.097>

Rissanen I, Laurson L. 2019. Magnetic non-contact friction from domain wall dynamics actuated by oscillatory mechanical motion. *Journal of Physics D: Applied Physics*. 52(44). <https://doi.org/10.1088/1361-6463/ab351f>

Ruuskanen J, Stenvall A, Lahtinen V, Nugteren JV, Kirby G, Murtomäki J. 2019. Modelling thermodynamics in a high erature superconducting dipole magnet: An inverse problem based approach. *Superconductor Science and Technology*. 32(9). <https://doi.org/10.1088/1361-6668/ab2bc9>

Murtomäki JS, Van Nugteren J, Stenvall A, Kirby G, Rossi L. 2019. 3-D mechanical modeling of 20 T HTS clover leaf end coils - Good practices and lessons learned. *IEEE Transactions on Applied Superconductivity*. 29(5). <https://doi.org/10.1109/TASC.2019.2899317>

Lorin C, Fleiter J, Salmi T, Schoerling D. 2019. Exploration of Two Layer Nb<sub>3</sub>Sn Designs of the Future Circular Collider Main Quadrupoles. *IEEE Transactions on Applied Superconductivity*. 29(5). <https://doi.org/10.1109/TASC.2019.2892814>

Matikainen V, Rubio Peregrina S, Ojala N, Koivuluoto H, Schubert J, Houdková , Vuoristo P. 2019. Erosion wear performance of WC-10Co4Cr and Cr<sub>3</sub>C<sub>2</sub>-25NiCr coatings sprayed with high-velocity thermal spray processes. *Surface and Coatings Technology*. 370:196-212. <https://doi.org/10.1016/j.surfcoat.2019.04.067>

Kezilebieke S, Žitko R, Dvorak M, Ojanen T, Liljeroth P. 2019. Observation of Coexistence of Yu-Shiba-Rusinov States and Spin-Flip Excitations. *Nano Letters*. 19(7):4614-4619. <https://doi.org/10.1021/acs.nanolett.9b01583>

Ghalibaf M, Doddapaneni TRKC, Alén R. 2019. Pyrolytic behavior of lignocellulosic-based polysaccharides. *Journal of Thermal Analysis and Calorimetry*. 137(1):121-131. <https://doi.org/10.1007/s10973-018-7919-y>

Hilska J, Koivusalto E, Puustinen J, Suomalainen S, Guina M. 2019. Epitaxial phases of high Bi content GaSbBi alloys. *Journal of Crystal Growth*. 516:67-71. <https://doi.org/10.1016/j.jcrysGro.2019.03.028>

Chinthar AR, Valtonen K, Kuokkala VT, Kundu S, Peet MJ, Bhadeshia HKDH. 2019. Role of fracture toughness in impact-abrasion wear. *Wear*. 428-429:430-437. <https://doi.org/10.1016/j.wear.2019.03.028>

Sautter JD, Xu L, Miroshnichenko AE, Lysevych M, Volkovskaya I, Smirnova DA, Camacho-Morales R, Zangeneh Kamali K, Karouta F, Vora K, Tan HH, Kauranen M, Staude I, Jagadish C, Neshev DN, Rahmani M. 2019. Tailoring Second-Harmonic Emission from (111)-GaAs Nanoantennas. *Nano Letters*. 19(6):3905-3911. <https://doi.org/10.1021/acs.nanolett.9b01112>

Sariola V. 2019. Analytical Expressions for Spring Constants of Capillary Bridges and Snap-in Forces of Hydrophobic Surfaces. *Langmuir*. 35(22):7129-7135. <https://doi.org/10.1021/acs.langmuir.9b00152>

Lai Y, Zhang H, Sugano Y, Xie H, Kallio P. 2019. Correlation of Surface Morphology and Interfacial Adhesive Behavior between Cellulose Surfaces: Quantitative Measurements in Peak-Force Mode with the Colloidal Probe Technique. *Langmuir*. 35(22):7312-7321. <https://doi.org/10.1021/acs.langmuir.8b03503>

Vuornos K, Ojansivu M, Koivisto JT, Häkkänen H, Belay B, Montonen T, Huhtala H, Kääriäinen M, Hupa L, Kellomäki M, Hyttinen J, Ihlainen JA, Miettinen S. 2019. Bioactive glass ions induce efficient osteogenic differentiation of human adipose stem cells encapsulated in gellan gum and collagen type I hydrogels. *Materials Science and Engineering C*. 99:905-918. <https://doi.org/10.1016/j.msec.2019.02.035>

Ayir N, Trujillo Fierro MF, Riihonen T, Allen M. 2019. Experimenting Waveforms and Efficiency in RF Power Transfer. In: teoksessa 2019 IEEE MTT-S International Microwave Symposium, IMS 2019. IEEE. Sivut 1140-1143. (IEEE MTT-S International Microwave Symposium Digest). <https://doi.org/10.1109/MWSYM.2019.8700791>

Salmi T, Schoerling D. 2019. Energy density-method: An approach for a quick estimation of quench temperatures in high-field accelerator magnets. *IEEE Transactions on Applied Superconductivity*. 29(4). <https://doi.org/10.1109/TASC.2018.2880340>

Hütner J, Herranen T, Laurson L. 2019. Multistep Bloch-line-mediated Walker breakdown in ferromagnetic strips. *Physical Review B*. 99(17). <https://doi.org/10.1103/PhysRevB.99.174427>

Trainer DJ, Putilov AV, Wang B, Lane C, Saari T, Chang TR, Jeng HT, Lin H, Xi X, Nieminen J, Bansil A, Iavarone M. 2019. Moiré superlattices and 2D electronic properties of graphite/MoS<sub>2</sub> heterostructures. *Journal of Physics and Chemistry of Solids.* 128:325-330. <https://doi.org/10.1016/j.jpcs.2017.10.034>

Saari T, Nieminen J. 2019. Spin filtering in silicene by edges and chemically or electrically induced interfaces. *Journal of Physics and Chemistry of Solids.* 128:316-324. <https://doi.org/10.1016/j.jpcs.2017.12.037>

Valtonen K, Ojala N, Haiko O, Kuokkala V-T. 2019. Comparison of various high-stress wear conditions and wear performance of martensitic steels. *Wear.* 426-427(Part A):3-13. <https://doi.org/10.1016/j.wear.2018.12.006>

Kulig W, Korolainen H, Zatorska M, Kwolek U, Wydro P, Kepczynski M, Róg T. 2019. Complex Behavior of Phosphatidylcholine-Phosphatidic Acid Bilayers and Monolayers: Effect of Acyl Chain Unsaturation. *Langmuir.* 35(17):5944-5956. <https://doi.org/10.1021/acs.langmuir.9b00381>

Minarelli EL, Poyhönen K, Van Dalum GAR, Ojanen T, Fritz L. 2019. Engineering of Chern insulators and circuits of topological edge states. *Physical Review B.* 99(16). <https://doi.org/10.1103/PhysRevB.99.165413>

Puustinen J, Hilska J, Guina M. 2019. Analysis of GaAsBi growth regimes in high resolution with respect to As/Ga ratio using stationary MBE growth. *Journal of Crystal Growth.* 511:33-41. <https://doi.org/10.1016/j.jcrysGro.2019.01.010>

Guandalini A, Rozzi CA, Räsänen E, Pittalis S. 2019. Fundamental gaps of quantum dots on the cheap. *Physical Review B.* 99(12). <https://doi.org/10.1103/PhysRevB.99.125140>

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 AS, Idemoto Y, Sakata O, Ohishi Y. 2019. Ultrahigh-pressure form of SiO<sub>2</sub> glass with dense pyrite-type crystalline homology. *Physical Review B.* 99(4). <https://doi.org/10.1103/PhysRevB.99.045153>

van Nugteren J, Murtomäki J, Ruuskanen J, Kirby G, Hagen P, DeRijk G, Ten Kate H, Bottura L, Rossi L. 2019. A Fast Quench Protection System for High-Temperature Superconducting Magnets. *IEEE Transactions on Applied Superconductivity.* 29(1). <https://doi.org/10.1109/TASC.2018.2848229>

Kiilakoski J, Puranen J, Heinonen E, Koivuluoto H, Vuoristo P. 2019. Characterization of Powder-Precursor HVOF-Sprayed Al<sub>2</sub>O<sub>3</sub>-YSZ/ZrO<sub>2</sub> Coatings. *Journal of Thermal Spray Technology.* 28(1-2):98-107. <https://doi.org/10.1007/s11666-018-0816-x>

Viheriälä J, Tuorila H, Zia N, Cherchi M, Aalto T, Guina M. 2019. 1.3μm U-bend traveling wave SOA devices for high efficiency coupling to silicon photonics. Reed GT, Knights AP, Toimittajat. teoksessa Silicon Photonics XIV. SPIE, IEEE. (Proceedings of SPIE - The International Society for Optical Engineering). <https://doi.org/10.1117/12.2505935>

Mereuta A, Nechay K, Caliman A, Suruceanu G, Gallo P, Guina M, Kapon E. 2019. 1.55-μm wavelength wafer-fused OP-VECSELs in flip-chip configuration. Keller U, Toimittaja. teoksessa Vertical External Cavity Surface Emitting Lasers (VECSELs) IX. SPIE, IEEE. (Proceedings of SPIE - The International Society for Optical Engineering). <https://doi.org/10.1117/12.2508342>

Yadav A, Chichkov NB, Gumennyuk R, Zhrebtssov E, Melkumov MA, Yashkov MV, Dianov EM, Rafailov EU. 2019. 405-nm pumped Ce<sup>3+</sup>-doped silica fiber for broadband fluorescence from cyan to red. Digonnet MJF, Jiang S, Toimittajat. teoksessa Optical Components and Materials XVI. SPIE, IEEE. (Proceedings of SPIE - The International Society for Optical Engineering). <https://doi.org/10.1117/12.2509599>

Zakeri FS, Bätz M, Jaschke T, Keinert J, Chuchvara A. 2019. Benchmarking of several disparity estimation algorithms for light field processing. Bazeille S, Verrier N, Cudel C, Toimittajat. teoksessa Fourteenth International Conference on Quality Control by Artificial Vision. SPIE, IEEE. (Proceedings of SPIE - The International Society for Optical Engineering). <https://doi.org/10.1117/12.2521747>

Gonçalves LPL, Wang J, Vinati S, Barborini E, Wei XK, Heggen M, Franco M, Sousa JPS, Petrovykh DY, Soares OSGP, Kovnir K, Akola J, Kolen'ko YV. 2019. Combined experimental and theoretical study of acetylene semi-hydrogenation over Pd/Al<sub>2</sub>O<sub>3</sub>. International Journal of Hydrogen Energy. <https://doi.org/10.1016/j.ijhydene.2019.04.086>

Orelma H. 2019. Continuum approach to high-cycle fatigue. The finite life-time case with stochastic stress history. Vestnik Samarskogo Gosudarstvennogo Tekhnicheskogo Universiteta, Seriya Fiziko-Matematicheskie Nauki. 23(3):452-463. <https://doi.org/10.14498/vsgtu1705>

Välikangas T, Hærvig J, Kuuluvainen H, Dal Maso M, Peltonen P, Vuorinen V. 2019. Deposition of dry particles on a fin-and-tube heat exchanger by a coupled soft-sphere DEM and CFD. International Journal of Heat and Mass Transfer. <https://doi.org/10.1016/j.ijheatmasstransfer.2019.119046>

Houaoui A, Lyyra I, Agniel R, Pauthe E, Massera J, Boissière M. 2019. Dissolution, bioactivity and osteogenic properties of composites based on polymer and silicate or borosilicate bioactive glass. Materials Science and Engineering C. 107. <https://doi.org/10.1016/j.msec.2019.110340>

Kahle H, Penttinen JP, Phung HM, Rajala P, Tukiainen A, Ranta S, Guina M. 2019. MECSELs with direct emission in the 760 nm to 810 nm spectral range: A single- and double-side pumping comparison and high-power continuous-wave operation. Keller U, Toimittaja. teoksessa Vertical External Cavity Surface Emitting Lasers (VECSELs) IX. SPIE, IEEE. (Proceedings of SPIE - The International Society for Optical Engineering). <https://doi.org/10.1117/12.2512111>

Järvinen H, Honkanen M, Oja O, Järvenpää M, Peura P. 2019. Microstructure-property relationships of novel ultra-high strength press hardening steels. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science. 50(2):816-836. <https://doi.org/10.1007/s11661-018-4967-7>

Radevici I, Sadi T, Tripurari T, Tiira J, Ranta S, Tukiainen A, Guina M, Oksanen J. 2019. Observation of local electroluminescent cooling and identifying the remaining challenges. Seletskiy DV, Epstein RI, Sheik-Bahae M, Toimittajat. teoksessa Photonic Heat Engines: Science and Applications. SPIE, IEEE. (Proceedings of SPIE - The International Society for Optical Engineering). <https://doi.org/10.1117/12.2505814>

Kiilakoski J, Trache R, Björklund S, Joshi S, Vuoristo P. 2019. Process Parameter Impact on Suspension-HVOF-Sprayed Cr<sub>2</sub>O<sub>3</sub> Coatings. Journal of Thermal Spray Technology. <https://doi.org/10.1007/s11666-019-00940-7>

Jokiaho T, Santa-aho S, Peura P, Vippola M. 2019. Role of Steel Plate Thickness on the Residual Stress Formation and Cracking Behavior During Flame Cutting. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science. <https://doi.org/10.1007/s11661-019-05314-w>

Saleh A, Ryczkowski P, Genty G, Toivonen J. 2019. Short-range supercontinuum based lidar for combustion diagnostics. Kimata M, Valenta CR, Toimittajat. teoksessa SPIE Future Sensing Technologies. SPIE, IEEE. (Proceedings of SPIE). <https://doi.org/10.1117/12.2542720>

Kocsis P, Shevkunov I, Katkovnik V, Egiazarian K. 2019. Single exposure lensless subpixel phase imaging. Kress BC, Schelkens P, Toimittajat. teoksessa Digital Optical Technologies 2019. SPIE, IEEE. (Proceedings of SPIE - The International Society for Optical Engineering). <https://doi.org/10.1117/12.2525679>

Xu L, Saerens G, Timofeeva M, Miroshnichenko AE, Camacho-Morales R, Volkovskaya I, Smirnova DA, Lysevych M, Huang L, Cai M, Karouta F, Hoe Tan H, Kauranen M, Jagadish C, Grange R, Neshev DN, Rahmani M. 2019. Switchable unidirectional second-harmonic emission through GaAs nanoantennas. Mitchell A, Rubinsztein-Dunlop H, Toimittajat. teoksessa AOS Australian Conference on Optical Fibre Technology, ACOFT 2019 and Australian Conference on Optics, Lasers, and Spectroscopy, ACOLS 2019. SPIE. (Proceedings of SPIE - The International Society for Optical Engineering). <https://doi.org/10.1117/12.2539887>

Sautter J, Xu L, Miroshnichenko A, Lysevych M, Volkovskaya I, Smirnova D, Camacho Morales M, Zangeneh Kamali K, Karouta F, Vora K, Tan HH, Kauranen M, Staude I, Jagadish C, Neshev DN, Rahmani M. 2019. Tailoring directional scattering of second-harmonic generation from (111)-GaAs nanoantennas. Mitchell A, Rubinsztein-Dunlop H, Toimittajat.

teoksessa AOS Australian Conference on Optical Fibre Technology, ACOFT 2019 and Australian Conference on Optics, Lasers, and Spectroscopy, ACOLS 2019. SPIE. (Proceedings of SPIE - The International Society for Optical Engineering). <https://doi.org/10.1117/12.2539086>

Joost U, Sutka A, Oja M, Smits K, Doeblin N, Loot A, Järvekülg M, Hirsimäki M, Valden M, Nommiste E. 2018. Reversible photodoping of TiO<sub>2</sub> nanoparticles. *Chemistry of Materials*. 30(24):8968-8974. <https://doi.org/10.1021/acs.chemmater.8b04813>

Czaplicki R, Kiviniemi A, Huttunen MJ, Zang X, Stolt T, Vartiainen I, Butet J, Kuittinen M, Martin OJF, Kauranen M. 2018. Less Is More: Enhancement of Second-Harmonic Generation from Metasurfaces by Reduced Nanoparticle Density. *Nano Letters*. 18(12):7709-7714. <https://doi.org/10.1021/acs.nanolett.8b03378>

Murtomäki JS, van Nugteren J, Kirby G, DeRijk G, Rossi L, Stenvall A. 2018. ICED - Inductively Coupled Energy Dissipater for Future High Field Accelerator Magnets. *IEEE Transactions on Applied Superconductivity*. 28(8). <https://doi.org/10.1109/TASC.2018.2841909>

Gunes M, Ukelge MO, Donmez O, Erol A, Gumus C, Alghamdi H, Galeti HVA, Henini M, Schmidbauer M, Hilska J, Puustinen J, Guina M. 2018. 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. *Semiconductor Science and Technology*. 33(12). <https://doi.org/10.1088/1361-6641/aaea2e>

Hegele LA, Scagliarini A, Sbragaglia M, Mattila KK, Philippi PC, Puleri DF, Gounley J, Randles A. 2018. High-Reynolds-number turbulent cavity flow using the lattice Boltzmann method. *Physical Review E*. 98(4). <https://doi.org/10.1103/PhysRevE.98.043302>

Ponomarenko M, Egiazarian K, Lukin V, Abramova V. 2018. Structural Similarity Index with Predictability of Image Blocks. teoksessa 2018 IEEE 17th International Conference on Mathematical Methods in Electromagnetic Theory, MMET 2018 - Proceedings. IEEE COMPUTER SOCIETY PRESS. Sivut 115-118. <https://doi.org/10.1109/MMET.2018.8460285>

Aho A, Isoaho R, Tukiainen A, Gori G, Campesato R, Guina M. 2018. Dilute nitride triple junction solar cells for space applications: Progress towards highest AM0 efficiency. *Progress in Photovoltaics: Research and Applications*. 26(19):740-744. <https://doi.org/10.1002/pip.3011>

Sippola P, Kolehmainen J, Ozel A, Liu X, Saarenrinne P, Sundaresan S. 2018. Experimental and numerical study of wall layer development in a tribocharged fluidized bed. *Journal of Fluid Mechanics*. 849:860-884. <https://doi.org/10.1017/jfm.2018.412>

Sajna MS, Perumbilavil S, Prakashan VP, Sanu MS, Joseph C, Biju PR, Unnikrishnan NV. 2018. Enhanced resonant nonlinear absorption and optical limiting in Er<sup>3+</sup> ions doped multicomponent tellurite glasses. *Materials Research Bulletin*. 104:227-235. <https://doi.org/10.1016/j.materresbull.2018.04.026>

Cemlyn B, Adams M, Harbord E, Li N, Henning ID, Oulton R, Korpijärvi VM, Guina M. 2018. Near-threshold high spin amplification in a 1300 nm GaInNAs spin laser. *Semiconductor Science and Technology*. 33(9). <https://doi.org/10.1088/1361-6641/aad42e>

Lampio K, Karvinen R. 2018. A new method to optimize natural convection heat sinks. *Heat and Mass Transfer/Waerme- und Stoffübertragung*. 54(8):2571-2580. <https://doi.org/10.1007/s00231-017-2106-4>

Prando GA, Orsi Gordo V, Puustinen J, Hilska J, Alghamdi HM, Som G, Gunes M, Akyol M, Souto S, Rodrigues AD, Galeti HVA, Henini M, Gobato YG, Guina M. 2018. 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. *Semiconductor Science and Technology*. 33(8). <https://doi.org/10.1088/1361-6641/aad02e>

Zhao J, Prioli M, Stenvall A, Salmi T, Gao Y, Caiffi B, Lorin C, Marinozzi V, Farinon S, Sorbi M. 2018. Mechanical stress analysis during a quench in CLIQ protected 16 T dipole magnets designed for the future circular collider. *Physica C: Superconductivity and its Applications*. 550:27-34. <https://doi.org/10.1016/j.physc.2018.04.003>

Mikkonen R, Mäntysalo M. 2018. Evaluation of screen printed silver trace performance and long-term reliability against environmental stress on a low surface energy substrate. *Microelectronics Reliability*. 86:54-65.  
<https://doi.org/10.1016/j.microrel.2018.05.010>

Roldán Del Cerro P, Salminen T, Lastusaari M, Petit L. 2018. Persistent luminescent borosilicate glasses using direct particles doping method. *Scripta Materialia*. 151:38-41. <https://doi.org/10.1016/j.scriptamat.2018.03.034>

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, Loefler C, Nobrega A, Perez JC, 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. 2018. Progress on HL-LHC Nb<sub>3</sub>Sn Magnets. *IEEE Transactions on Applied Superconductivity*. 28(4). <https://doi.org/10.1109/TASC.2018.2830703>

Murtonmäki JS, Kouhia R, Stenvall A, Bottura L, Kirby G, van Nugteren J, DeRijk G, Rossi L. 2018. Investigation of REBCO Roebel Cable Irreversible Critical Current Degradation Under Transverse Pressure. *IEEE Transactions on Applied Superconductivity*. 28(4). <https://doi.org/10.1109/TASC.2018.2829150>

van Nugteren J, Kirby G, Murtonmäki J, DeRijk G, Rossi L, Stenvall A. 2018. Towards REBCO 20T+ Dipoles for Accelerators. *IEEE Transactions on Applied Superconductivity*. 28(4). <https://doi.org/10.1109/TASC.2018.2820177>

Rasappa S, Schulte L, Borah D, Hulkkonen H, Ndoni S, Salminen T, Sentharamaikanan R, Morris MA, Niemi T. 2018. Morphology evolution of PS-b-PDMS block copolymer and its hierarchical directed self-assembly on block copolymer templates. *Microelectronic Engineering*. 192:1-7. <https://doi.org/10.1016/j.mee.2018.02.002>

Dessi P, Porca E, Frunzo L, Lakaniemi A-M, Collins G, Esposito G, Lens PNL. 2018. Inoculum pretreatment differentially affects the active microbial community performing mesophilic and thermophilic dark fermentation of xylose. *International Journal of Hydrogen Energy*. 43(19):9233-9245. <https://doi.org/10.1016/j.ijhydene.2018.03.117>

Sarcan F, Mutlu S, Cokduyugular E, Donmez O, Erol A, Puustinen J, Guina M. 2018. A study of electric transport in n- and p-type modulation-doped GaInNAs/GaAs quantum well structures under a high electric field. *Semiconductor Science and Technology*. 33(6). <https://doi.org/10.1088/1361-6641/aabc39>

Sutka A, Timusk M, Joost U, Ignatans R, Maiorov M. 2018. Switchable light reflectance in dilute magneto-optical colloids based on nickel ferrite nanowires. *e-Journal of Surface Science and Nanotechnology*. 16:119-121.  
<https://doi.org/10.1380/ejssnt.2018.119>

Nugteren JV, Kirby G, Bajas H, Bajko M, Ballarino A, Bottura L, Chiuchiolo A, Contat PA, Dhallé M, Durante M, Fazilleau P, Fontalva A, Gao P, Goldacker W, Kate HT, Kario A, Lahtinen V, Lorin C, Markelov A, Mazet J, Molodyk A, Murtonmäki J, Long N, Perez J, Petrone C, Pincot F, Rijk GD, Rossi L, Russenschuck S, Ruuskanen J, Schmitz K, Stenvall A, Usoskin A, Willering G, Yang Y. 2018. Powering of an HTS dipole insert-magnet operated standalone in helium gas between 5 and 85 K. *Superconductor Science and Technology*. 31(6). <https://doi.org/10.1088/1361-6668/aab887>

Matikainen V, Koivuluoto H, Vuoristo P, Schubert J, Houdková. 2018. Effect of nozzle geometry on the microstructure and properties of hvaf-sprayed wc-10co4cr and cr3c2-25nircr coatings. *Journal of Thermal Spray Technology*. 27(4):680-694. <https://doi.org/10.1007/s11666-018-0717-z>

Ruuskanen J, Stenvall A, Van Nugteren J, Lahtinen V. 2018. Optimization of an E3SPreSSO Energy-Extraction System for High-Field Superconducting Magnets. *IEEE Transactions on Applied Superconductivity*. 28(3). <https://doi.org/10.1109/TASC.2018.2794457>

Petronijevic E, Leahu G, Belardini A, Centini M, Li Voti R, Hakkarainen T, Koivusalo E, Rizzo Piton M, Suomalainen S, Guina M, Sibilia C. 2018. Photo-Acoustic Spectroscopy Reveals Extrinsic Optical Chirality in GaAs-Based Nanowires Partially Covered with Gold. *International Journal of Thermophysics*. 39(4). <https://doi.org/10.1007/s10765-018-2367-2>

Koivusalo L, Karvinen J, Sorsa E, Jönkkäri I, Väliaho J, Kallio P, Ilmarinen T, Miettinen S, Skottman H, Kellomäki M. 2018. Hydrazone crosslinked hyaluronan-based hydrogels for therapeutic delivery of adipose stem cells to treat corneal defects. Materials Science and Engineering C. 85:68-78. <https://doi.org/10.1016/j.msec.2017.12.013>

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 JS, van Nugteren J, Petrone C, DeRijk G, Senatore C, Statera M, Stenvall A, Tixador P, Yang Y, Usoskin A, Zangenberg N. 2018. The EuCARD2 Future Magnets Program for particle accelerator high field dipoles: review of results and next steps. IEEE Transactions on Applied Superconductivity. 28(3). <https://doi.org/10.1109/TASC.2017.2784357>

Sassatelli P, Bolelli G, Lassinantti Gualtieri M, Heinonen E, Honkanen M, Lusvarghi L, Manfredini T, Rigon R, Vippola M. 2018. Properties of HVOF-sprayed Stellite-6 coatings. Surface and Coatings Technology. 338:45-62. <https://doi.org/10.1016/j.surfcoat.2018.01.078>

Janka L, Berger LM, Norporth J, Trache R, Thiele S, Tomastik C, Matikainen V, Vuoristo P. 2018. Improving the high temperature abrasion resistance of thermally sprayed Cr<sub>3</sub>C<sub>2</sub>-NiCr coatings by WC addition. Surface and Coatings Technology. 337:296-305. <https://doi.org/10.1016/j.surfcoat.2018.01.035>

Petronijevic E, Leahu G, Belardini A, Centini M, Li Voti R, Hakkarainen T, Koivusalo E, Guina M, Sibilia C. 2018. Resonant Absorption in GaAs-Based Nanowires by Means of Photo-Acoustic Spectroscopy. International Journal of Thermophysics. 39(3). <https://doi.org/10.1007/s10765-018-2365-4>

Barreca D, Carraro G, Maccato C, Altantzis T, Kaunisto K, Gasparotto A. 2018. Controlled Growth of Supported ZnO Inverted Nanopyramids with Downward Pointing Tips. Crystal Growth and Design. 18(4):2579-2587. <https://doi.org/10.1021/acs.cgd.8b00198>

Katkovnik V, Shevkunov I, Petrov NV, Egiazarian K. 2018. Multiwavelength surface contouring from phase-coded diffraction patterns. teoksessa Unconventional Optical Imaging 2018. Strasbourg, France. SPIE. (Proceedings of SPIE - The International Society for Optical Engineering). <https://doi.org/10.1117/12.2306127>

Noronen T, Fedotov A, Rissanen J, Gumennyuk R, Butov O, Chamorovskii Y, Golant K, Odnoblyudov M, Filippov V. 2018. Ultra-large mode area single frequency anisotropic MOPA with double clad Yb-doped tapered fiber. teoksessa Fiber Lasers XV: Technology and Systems. SPIE, IEEE. (Proceedings of SPIE). <https://doi.org/10.1117/12.2288942>

Murtomaeki JS, Kirby G, van Nugteren J, Contat PA, Fleiter J, De Frutos OS, Pincot FO, DeRijk G, Rossi L, Ruuskanen J , Stenvall A, Wolf F. 2018. 10 kA Joints for HTS Roebel Cables. IEEE Transactions on Applied Superconductivity. 28(3). <https://doi.org/10.1109/TASC.2018.2804951>

Voronin V, Pismenskova M, Zelensky A, Cen Y, Nadykto A, Egiazarian K. 2018. Action recognition using the 3D dense microblock difference. teoksessa Counterterrorism, Crime Fighting, Forensics, and Surveillance Technologies II. SPIE. (Proceedings of SPIE). <https://doi.org/10.1117/12.2326801>

Glorieux B, Salminen T, Massera J, Lastusaari M, Petit L. 2018. 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. Journal of Non-Crystalline Solids. 482:46-51. <https://doi.org/10.1016/j.jnoncrysol.2017.12.021>

Välikangas T, Karvinen R. 2018. Conjugated Heat Transfer Simulation of a Fin-and-Tube Heat Exchanger. Heat Transfer Engineering. 39(13-14):1192-1200. <https://doi.org/10.1080/01457632.2017.1363628>

Saarimaa V, Kaleva A, Paunikallio T, Nikkanen J-P, Heinonen S, Levänen E, Väistönen P, Markkula A. 2018. Convenient extraction method for quantification of thin zinc patina layers. Surface and Interface Analysis. 50(5):564-570. <https://doi.org/10.1002/sia.6429>

Lorin C, Simon D, Felice H, Rifflet JM, Salmi T, Schoerling D. 2018. Design of a Nb<sub>3</sub>Sn 400 T/m quadrupole for the Future Circular Collider. *IEEE Transactions on Applied Superconductivity*. 28(3). <https://doi.org/10.1109/TASC.2018.2797945>

Ali S, Orell O, Kanerva M, Hannula SP. 2018. Effect of Morphology and Crystal Structure on the Thermal Conductivity of Titania Nanotubes. *Nanoscale Research Letters*. 13. <https://doi.org/10.1186/s11671-018-2613-3>

Välikangas T, Singh S, Sørensen K, Condra T. 2018. Fin-and-tube heat exchanger enhancement with a combined herringbone and vortex generator design. *International Journal of Heat and Mass Transfer*. 118:602-616. <https://doi.org/10.1016/j.ijheatmasstransfer.2017.11.006>

Mateos X, Loiko P, Lamrini S, Scholle K, Fuhrberg P, Suomalainen S, Häkkinen A, Guina M, Vatnik S, Vedin I, Aguiló M, Diáz F, Wang Y, Griebner U, Petrov V. 2018. Highly-efficient Ho:KY(WO<sub>4</sub>)<sub>2</sub> thin-disk lasers at 2.06 μm. In *Pacific-Rim Laser Damage 2018: Optical Materials for High-Power Lasers*. SPIE, IEEE. (Proceedings of SPIE). <https://doi.org/10.1117/12.2316822>

Karioja P, Alajoki T, Cherchi M, Ollila J, Harjanne M, Heinilehto N, Suomalainen S, Zia N, Tuorila H, Viheriälä J, Guina M, Buczynski R, Kasztelanic R, Salo T, Virtanen S, Kluczynski P, Borgen L, Ratajczyk M, Kalinowski P. 2018. Integrated multi-wavelength mid-IR light source for gas sensing. In *Next-Generation Spectroscopic Technologies XI*. SPIE, IEEE. (SPIE Conference Proceedings). <https://doi.org/10.1117/12.2305712>

Toral F, Munilla J, Salmi T. 2018. Magnetic and mechanical design of a 16 T common coil dipole for FCC. *IEEE Transactions on Applied Superconductivity*. 28(3). <https://doi.org/10.1109/TASC.2018.2797909>

Rajan R, Rainosalo E, Thomas SP, Ramamoorthy SK, Zavašnik J, Vuorinen J, Skrifvars M. 2018. Modification of epoxy resin by silane-coupling agent to improve tensile properties of viscose fabric composites. *Polymer Bulletin*. 75(1):167–195. <https://doi.org/10.1007/s00289-017-2022-2>

Koivuluoto H, Matikainen V, Larjo J, Vuoristo P. 2018. Novel Online Diagnostic Analysis for In-Flight Particle Properties in Cold Spraying. *Journal of Thermal Spray Technology*. 27(3):423–432. <https://doi.org/10.1007/s11666-018-0685-3>

Stenvall A, Lahtinen V. 2018. Open Material Property Library With Native Simulation Tool Integrations - MASTO. *IEEE Transactions on Applied Superconductivity*. <https://doi.org/10.1109/TASC.2018.2799850>

Dessì P, Porca E, Waters NR, Lakaniemi A-M, Collins G, Lens PNL. 2018. Thermophilic versus mesophilic dark fermentation in xylose-fed fluidised bed reactors: Biohydrogen production and active microbial community. *International Journal of Hydrogen Energy*. 43(11):5473-5485. <https://doi.org/10.1016/j.ijhydene.2018.01.158>

Bolelli G, Bursi M, Lusvarghi L, Manfredini T, Matikainen V, Rigon R, Sassatelli P, Vuoristo P. 2018. Tribology of FeVCrC coatings deposited by HVOF and HVAF thermal spray processes. *Wear*. 394-395:113-133. <https://doi.org/10.1016/j.wear.2017.10.014>

Saarimaa V, Kaleva A, Nikkanen J-P, Heinonen S, Levänen E, Väistönen P, Markkula A, Juhanoja J. 2017. Supercritical carbon dioxide treatment of hot dip galvanized steel as a surface treatment before coating. *Surface and Coatings Technology*. 331:137-142. <https://doi.org/10.1016/j.surfcoat.2017.10.047>

Santangelo PE, Allesina G, Bolelli G, Lusvarghi L, Matikainen V, Vuoristo P. 2017. Infrared Thermography as a Non-destructive Testing Solution for Thermal Spray Metal Coatings. *Journal of Thermal Spray Technology*. 26(8):1982–1993. <https://doi.org/10.1007/s11666-017-0642-6>

Sarlin E, Saarimäki M, Sironen R, Lindgren M, Siljander S, Kanerva M, Vuorinen J. 2017. Erosive wear of filled vinylester composites in water and acidic media at elevated temperature. *Wear*. 390-391:84-92. <https://doi.org/10.1016/j.wear.2017.07.011>

Ropo M, Akola J, Jones RO. 2017. Crystallization of supercooled liquid antimony: A density functional study. *Physical Review B*. 96(18). <https://doi.org/10.1103/PhysRevB.96.184102>

Haavisto JM, Kokko ME, Lay C-H, Puhakka JA. 2017. Effect of hydraulic retention time on continuous electricity production from xylose in up-flow microbial fuel cell. *International Journal of Hydrogen Energy*. 42:27494-27502. <https://doi.org/10.1016/j.ijhydene.2017.05.068>

Chen X, Ma S, Ukkonen L, Björninen T, Virkki J. 2017. Antennas and antenna-electronics interfaces made of conductive yarn and paint for cost-effective wearable RFIDs and sensors. *teoksessa 2017 IEEE MTT-S International Microwave Symposium, IMS 2017*. IEEE. Sivut 827-830. <https://doi.org/10.1109/MWSYM.2017.8058707>

He H, Tajima J, Sydanheimo L, Nishikawa H, Ukkonen L, Virkki J. 2017. Inkjet-printed antenna-electronics interconnections in passive UHF RFID tags. *teoksessa 2017 IEEE MTT-S International Microwave Symposium, IMS 2017*. IEEE. Sivut 598-601. <https://doi.org/10.1109/MWSYM.2017.8058638>

Välimäki H, Verho J, Kreutzer J, Kattiparambil Rajan D, Ryynänen T, Pekkanen-Mattila M, Ahola A, Tappura K, Kallio P, Lekkala J. 2017. Fluorimetric oxygen sensor with an efficient optical read-out for in vitro cell models. *Sensors and Actuators B: Chemical*. 249:738-746. <https://doi.org/10.1016/j.snb.2017.04.182>

Nguyen H, Tuomisto M, Oksa J, Salminen T, Lastusaari M, Petit L. 2017. Upconversion in low rare-earth concentrated phosphate glasses using direct  $\text{NaYF}_4$ :  $\text{Er}^{3+}$ ,  $\text{Yb}^{3+}$  nanoparticles doping. *Scripta Materialia*. 139:130-133. <https://doi.org/10.1016/j.scriptamat.2017.06.050>

Keski-Rahkonen J, Luukko PJJ, Kaplan L, Heller EJ, Räsänen E. 2017. Controllable quantum scars in semiconductor quantum dots. *Physical Review B*. 96(9). <https://doi.org/10.1103/PhysRevB.96.094204>

Isakov M, Matikainen V, Koivuluoto H, May M. 2017. Systematic analysis of coating-substrate interactions in the presence of flow localization. *Surface and Coatings Technology*. 324:264-280. <https://doi.org/10.1016/j.surfcoat.2017.05.040>

Tkalich D, Li CC, Kane A, Saai A, Tkach D, Yastrebov VA, Hokka M, Kuokkala V-T, Bengtsson M, From A. 2017. Wear of cemented tungsten carbide percussive drill-bit inserts: Laboratory and field study. *Wear*. 386-387:106-117. <https://doi.org/10.1016/j.wear.2017.05.010>

Matikainen V, Bolelli G, Koivuluoto H, Honkanen M, Vippola M, Lusvarghi L, Vuoristo P. 2017. A Study of  $\text{Cr}_3\text{C}_2$ -Based HVOF- and HVAF-Sprayed Coatings: Microstructure and Carbide Retention. *Journal of Thermal Spray Technology*. 26(6):1-18. <https://doi.org/10.1007/s11666-017-0578-x>

Alberucci A, Laudyn UA, Piccardi A, Kwasny M, Klus B, Karpierz MA, Assanto G. 2017. Nonlinear continuous-wave optical propagation in nematic liquid crystals: Interplay between reorientational and thermal effects. *Physical Review E*. 96(1). <https://doi.org/10.1103/PhysRevE.96.012703>

Schoerling D, Durante M, Lorin C, Martinez T, Ruuskanen J, Salmi T, Sorbi M, Tommasini D, Toral F. 2017. Considerations on a Cost Model for High-Field Dipole Arc Magnets for FCC. *IEEE Transactions on Applied Superconductivity*. 27(4). <https://doi.org/10.1109/TASC.2017.2657510>

Kirby GA, Van Nugteren J, Bajas H, Benda V, Ballarino A, Bajko M, Bottura L, Broekens K, Canale M, Chiuchiolo A, Gentini L, Peray N, Perez JC, De Rijk G, Rijllart A, Rossi L, Murtomaki J, Mazet J, Pincot FO, Volpini G, Durante M, Fazilleau P, Lorin C, Stenvall A, Goldacker W, Kario A, Usoskin A. 2017. First Cold Powering Test of REBCO Roebel Wound Coil for the EuCARD2 Future Magnet Development Project. *IEEE Transactions on Applied Superconductivity*. 27(4). <https://doi.org/10.1109/TASC.2017.2653204>

Murtomaki JS, Van Nugteren J, Kirby G, Rossi L, Ruuskanen J, Stenvall A. 2017. Mechanical Effects of the Nonuniform Current Distribution on HTS Coils for Accelerators Wound With REBCO Roebel Cable. *IEEE Transactions on Applied Superconductivity*. 27(4). <https://doi.org/10.1109/TASC.2017.2665882>

Marinozzi V, Bellomo G, Caiffi B, Fabbricatore P, Farinon S, Salmi T, Sorbi M, Stenvall A, Volpini G. 2017. Quench Protection Study of the Eurocircol 16 T  $\cos\theta$  Dipole for the Future Circular Collider (FCC). IEEE Transactions on Applied Superconductivity. 27(4). <https://doi.org/10.1109/TASC.2017.2656156>

Salmi T, Prioli M, Stenvall A, Ruuskanen J, Verweij AP, Auchmann B, Marinozzi V. 2017. Suitability of Different Quench Protection Methods for a 16 T Block-Type  $Nb_3Sn$  Accelerator Dipole Magnet. IEEE Transactions on Applied Superconductivity. 27(4). <https://doi.org/10.1109/TASC.2017.2651386>

Tommasini D, Auchmann B, Bajas H, Bajko M, Ballarino A, Bellomo G, Benedikt M, Bermudez SI, Bordini B, Bottura L, Buzio M, Dhalle M, Durante M, De Rijk G, Fabbricatore P, Farinon S, Ferracin P, Gao P, Lackner F, Lorin C, Marinozzi V, Martinez T, Munilla J, Ogitsu T, Ortwein R, Perez J, Prioli M, Rifflet JM, Rocheapault E, Russenschuck S, Salmi T, Savary F, Schoerling D, Segreti M, Senatore C, Sorbi M, Stenvall A, Todesco E, Toral F, Verweij AP, Volpini G, Wessel S, Wolf F. 2017. The 16 T Dipole Development Program for FCC. IEEE Transactions on Applied Superconductivity. 27(4). <https://doi.org/10.1109/TASC.2016.2634600>

Piccardi A, Alberucci A, Kravets N, Buchnev O, Assanto G. 2017. Nematicon-enhanced spontaneous symmetry breaking. Molecular Crystals and Liquid Crystals. 649(1):59-65. <https://doi.org/10.1080/15421406.2017.1303916>

Mentink M, Salmi T. 2017. Quench absorption coils: A quench protection concept for high-field superconducting accelerator magnets. Superconductor Science and Technology. 30(6). <https://doi.org/10.1088/1361-6668/aa6678>

Mattila KK, Philippi PC, Hegele LA. 2017. High-order regularization in lattice-Boltzmann equations. PHYSICS OF FLUIDS . 29(4). <https://doi.org/10.1063/1.4981227>

Lopez-Iscoa P, Petit L, Massera J, Janner D, Boetti NG, Pugliese D, Fiorilli S, Novara C, Giorgis F, Milanese D. 2017. Effect of the addition of  $Al_2O_3$ ,  $TiO_2$  and  $ZnO$  on the thermal, structural and luminescence properties of  $Er^{3+}$ -doped phosphate glasses. Journal of Non-Crystalline Solids. 460:161-168. <https://doi.org/10.1016/j.jnoncrysol.2017.01.030>

Kuzmin M, Lahtonen K, Vuori L, Sánchez-de-Armas R, Hirsimäki M, Valden M. 2017. Investigation of the structural anisotropy in a self-assembling glycinate layer on Cu(100) by scanning tunneling microscopy and density functional theory calculations. Applied Surface Science. 409:111-116. <https://doi.org/10.1016/j.apsusc.2017.03.005>

Ruuskanen J, Stenvall A, Lahtinen V, Pardo E. 2017. Electromagnetic nonlinearities in a Roebel-cable-based accelerator magnet prototype: Variational approach. Superconductor Science and Technology. 30(2). <https://doi.org/10.1088/1361-6668/30/2/024008>

Marttila J, Allén M, Kosunen M, Stadius K, Ryyränen J, Valkama M. 2017. Reference receiver enhanced digital linearization of wideband direct-conversion receivers. IEEE Transactions on Microwave Theory and Techniques. 65(2):607-620. <https://doi.org/10.1109/TMTT.2016.2638840>

Balanta MAG, Orsi Gordo V, Carvalho ARH, Puustinen J, Alghamdi HM, Henini M, Galeti HVA, Guina M, Galvão Gobato Y. 2017. Polarization resolved photoluminescence in  $GaAs_{1-x}Bi_x/GaAs$  quantum wells. Journal of Luminescence. 182:49-52. <https://doi.org/10.1016/j.jlumin.2016.10.008>

Sarjas H, Surzhenkov A, Juhani K, Antonov M, Adoberg E, Kulu P, Viljus M, Traksmaa R, Matikainen V, Vuoristo P. 2017. Abrasive-Erosive Wear of Thermally Sprayed Coatings from Experimental and Commercial  $Cr_3C_2$ -Based Powders. Journal of Thermal Spray Technology. 26(8):2020–2029. <https://doi.org/10.1007/s11666-017-0638-2>

Katkovnik V, Shevkunov I, Petrov NV, Egiazarian K. 2017. Computational wavelength resolution for in-line lensless holography: Phase-coded diffraction patterns and wavefront group-sparsity. teoksessa Digital Optical Technologies 2017. SPIE. (Proceedings of SPIE). <https://doi.org/10.1117/12.2269327>

Paaso H, Gulati N, Patron D, Hakkarainen A, Werner J, Dandekar KR, Valkama M, Mammela A. 2017. DoA Estimation Using Compact CRLH Leaky-Wave Antennas: Novel Algorithms and Measured Performance. *IEEE Transactions on Antennas and Propagation*. 4836-4849. <https://doi.org/10.1109/TAP.2017.2724584>

Stoykova E, Nazarova D, Berberova N, Gotchev A, Ivanov B, Mateev G. 2017. Dynamic laser speckle metrology with binarization of speckle patterns. *teoksessa 19th International Conference and School on Quantum Electronics: Laser Physics and Applications*. SPIE. (Proceedings of SPIE). <https://doi.org/10.1117/12.2262330>

Bomberg M, Miettinen H, Wahlström M, Kaartinen T, Ahoranta S, Lakaniemi A-M, Kinnunen P. 2017. Evaluation of long-term post process inactivation of bioleaching microorganisms. *teoksessa 22nd International Biohydrometallurgy Symposium*. Trans Tech Publications Ltd. Sivut 57-60. (Solid State Phenomena). <https://doi.org/10.4028/www.scientific.net/SSP.262.57>

Janka L, Norpott J, Trache R, Thiele S, Berger LM. 2017. HVOF- and HVAF-Sprayed Cr<sub>3</sub>C<sub>2</sub>-NiCr Coatings Deposited from Feedstock Powders of Spherical Morphology: Microstructure Formation and High-Stress Abrasive Wear Resistance Up to 800 °C. *Journal of Thermal Spray Technology*. 26(7):1720-1731. <https://doi.org/10.1007/s11666-017-0621-y>

Oksanen VT, Lehtovaara AJ, Kallio MH. 2017. Load capacity of lubricated bismuth bronze bimetal bearing under elliptical sliding motion. *Wear*. 388-389:72-80. <https://doi.org/10.1016/j.wear.2017.05.001>

Zhao J, Stenvall A, Salmi T, Gao Y, Lorin C. 2017. Mechanical behavior of a 16 T FCC dipole magnet during a quench. *IEEE Transactions on Applied Superconductivity*. 27(6). <https://doi.org/10.1109/TASC.2017.2721974>

Salpavaara T, Hänninen A, Antniemi A, Lekkala J, Kellomäki M. 2017. Non-destructive and wireless monitoring of biodegradable polymers. *Sensors and Actuators B: Chemical*. 251:1018-1025. <https://doi.org/10.1016/j.snb.2017.05.116>

Lindroos M, Laukkonen A, Cailletaud G, Kuokkala V-T. 2017. On the effect of deformation twinning and microstructure to strain hardening of high manganese austenitic steel 3D microstructure aggregates at large strains. *International Journal of Solids and Structures*. 125:68-76. <https://doi.org/10.1016/j.ijsolstr.2017.07.015>

Lampio K, Karvinen R. 2017. Optimization of convectively cooled heat sinks. *Microelectronics Reliability*. 79:473-479. <https://doi.org/10.1016/j.microrel.2017.06.011>

Filippov V, Vorotynskii A, Noronen T, Gumenyuk R, Chamorovskii Y, Golant K. 2017. Picosecond MOPA with ytterbium doped tapered double clad fiber. *teoksessa Fiber Lasers XIV: Technology and Systems*. SPIE. (Proceedings of SPIE; 10083). <https://doi.org/10.1117/12.2252006>

Matikainen V, Bolelli G, Koivuluoto H, Sassatelli P, Lusvarghi L, Vuoristo P. 2017. Sliding wear behaviour of HVOF and HVAF sprayed Cr<sub>3</sub>C<sub>2</sub>-based coatings. *Wear*. 388-389:57-71. <https://doi.org/10.1016/j.wear.2017.04.001>

Kolesnik S, Sitbon M, Lineykin S, Batzelis E, Papathanassiou S, Suntio T, Kuperman A. 2017. Solar Irradiation Independent Expression for Photovoltaic Generator Maximum Power Line. *IEEE Journal of Photovoltaics*. 7(5):1416-1420. <https://doi.org/10.1109/JPHOTOV.2017.2713404>

Koivuluoto H, Milanti A, Bolelli G, Latokartano J, Marra F, Pulci G, Vihinen J, Lusvarghi L, Vuoristo P. 2017. Structures and properties of laser-assisted cold-sprayed aluminum coatings. *teoksessa THERMEC 2016*. Trans Tech Publications Ltd. Sivut 984-989. (Materials Science Forum). <https://doi.org/10.4028/www.scientific.net/MSF.879.984>

Lahbib I, Valkonen A, Rzaigui M, Smirani W. 2017. Synthesis, Structural Characterization, Hirshfeld Surface and Antioxidant Activity Analysis of a Novel Organic Cation Antimonate Complex. *Journal of Cluster Science*. 28(4):2239-2252. <https://doi.org/10.1007/s10876-017-1217-x>

Morandi A, Ainslie MD, Grilli F, Stenvall A. 2017. The 5th international workshop on numerical modelling of high temperature superconductors. *Superconductor Science and Technology*. 30(8). <https://doi.org/10.1088/1361-6668/aa7676>

Järveläinen M, Kaleva A, Kaitajärvi A, Laakso J, Kanerva U, Levänen E. 2016. Compression curve analysis and compressive strength measurement of brittle granule beds in lieu of individual granule measurements. *Particuology*. 29:60-68. <https://doi.org/10.1016/j.partic.2015.10.006>

Varis T, Suhonen T, Calonius O, Čuban J, Pietola M. 2016. Optimization of HVOF Cr<sub>3</sub>C<sub>2</sub>-NiCr coating for increased fatigue performance. *Surface and Coatings Technology*. 305:123-131. <https://doi.org/10.1016/j.surfcoat.2016.08.012>

Järvinen H, Isakov M, Nyssönen T, Järvenpää M, Peura P. 2016. The effect of initial microstructure on the final properties of press hardened 22MnB5 steels. *Materials Science and Engineering A: Structural Materials Properties Microstructure and Processing*. 676:109-120. <https://doi.org/10.1016/j.msea.2016.08.096>

Ärrälä M, Hafiz H, Mou D, Wu Y, Jiang R, Riedemann T, Lograsso TA, Barbiellini B, Kaminski A, Bansil A, Lindroos M. 2016. 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. *Physical Review B*. 94(15). <https://doi.org/10.1103/PhysRevB.94.155144>

Kalikka J, Akola J, Jones RO. 2016. 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. *Physical Review B*. 94(13). <https://doi.org/10.1103/PhysRevB.94.134105>

Lindgren M, Siljander S, Suihkonen R, Pohjanne P, Vuorinen J. 2016. Erosion-corrosion resistance of various stainless steel grades in high-temperature sulfuric acid solution. *Wear*. 364-365:10-21. <https://doi.org/10.1016/j.wear.2016.06.007>

Myllymäki S, Putala J, Hannu J, Kunnari E, Mäntysalo M. 2016. RF measurements to pinpoint defects in inkjet-printed, thermally and mechanically stressed coplanar waveguides. *Microelectronics Reliability*. 65:142-150. <https://doi.org/10.1016/j.microrel.2016.08.021>

Kylänpää I, Cavaliere F, Ziani NT, Sassetti M, Räsänen E. 2016. Thermal effects on the Wigner localization and Friedel oscillations in many-electron nanowires. *Physical Review B*. 94(11). <https://doi.org/10.1103/PhysRevB.94.115417>

Pilehrood MK, Atashi A, Sadeghi-Aliabadi H, Nousiainen P, Harlin A. 2016. 3D micro-nano structured hybrid scaffolds: An investigation into the role of nanofiber coating on viability, proliferation and differentiation of seeded mesenchymal stem cells. *Journal Nanoscience and Nanotechnology*. 16(9):9000-9007. <https://doi.org/10.1166/jnn.2016.12740>

Cui S, Massera J, Lastusaari M, Hupa L, Petit L. 2016. Novel oxyfluorophosphate glasses and glass-ceramics. *Journal of Non-Crystalline Solids*. 445-446:40-44. <https://doi.org/10.1016/j.jnoncrysol.2016.05.005>

Suihkonen R, Lindgren M, Siljander S, Sarlin E, Vuorinen J. 2016. Erosion wear of vinylester matrix composites in aqueous and acidic environments at elevated temperatures. *Wear*. 358-359:7-16. <https://doi.org/10.1016/j.wear.2016.03.026>

Bolelli G, Berger LM, Börner T, Koivuluoto H, Matikainen V, Lusvarghi L, Lyphout C, Markocsan N, Nylén P, Sassatelli P, Trache R, Vuoristo P. 2016. Sliding and abrasive wear behaviour of HVOF- and HVAF-sprayed Cr<sub>3</sub>C<sub>2</sub>-NiCr hardmetal coatings. *Wear*. 358-359:32-50. <https://doi.org/10.1016/j.wear.2016.03.034>

Trujillo-Sevilla JM, Katkovnik V, Javidi B, Rodríguez-Ramos JM. 2016. Restoring Integral Images from Focal Stacks Using Compressed Sensing Techniques. *Journal of Display Technology*. 12(7):701-706. <https://doi.org/10.1109/JDT.2016.2522922>

Kiilakoski J, Lindroos M, Apostol M, Koivuluoto H, Kuokkala V-T, Vuoristo P. 2016. Characterization of High-Velocity Single Particle Impacts on Plasma-Sprayed Ceramic Coatings. *Journal of Thermal Spray Technology*. 25:1127-1137. <https://doi.org/10.1007/s11666-016-0428-2>

Ferracin P, Ambrosio G, Anerella M, Ballarino A, Bajas H, Bajko M, Bordini B, Bossert R, Cheng DW, Dietderich DR, 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 JC, Prin H, Rysti J, Rocheleau E, Sabbi G, Salmi T, Schmalzle J, Sorbi M, Sequeira Tavares S, Todesco E, Wanderer P, Wang X, Yu M. 2016. Development of MQXF: The Nb<sub>3</sub>Sn Low- $\beta$  Quadrupole for the HiLumi LHC. *IEEE Transactions on Applied Superconductivity*. 26(4). <https://doi.org/10.1109/TASC.2015.2510508>

Sharma R, Bhalerao S, Gupta D. 2016. Effect of incorporation of CdS NPs on performance of PTB7: PCBM organic solar cells. *Organic Electronics: physics, materials, applications*. 33:274-280. <https://doi.org/10.1016/j.orgel.2016.03.030>

Marchevsky M, Turqueti M, Cheng DW, Felice H, Sabbi G, Salmi T, Stenvall A, Chlachidze G, Ambrosio G, Ferracin P, Izquierdo Bermudez S, Perez JC, Todesco E. 2016. Protection Heater Design Validation for the LARP Magnets Using Thermal Imaging. *IEEE Transactions on Applied Superconductivity*. 26(4). <https://doi.org/10.1109/TASC.2016.2530161>

Marinazzi V, Ambrosio G, Ferracin P, Izquierdo Bermudez S, Rysti J, Salmi T, Sorbi M, Todesco E. 2016. Quench Protection Study of the Updated MQXF for the LHC Luminosity Upgrade (HiLumi LHC). *IEEE Transactions on Applied Superconductivity*. 26(4). <https://doi.org/10.1109/TASC.2016.2523548>

DiMarco J, Ambrosio G, Anerella M, Bajas H, Chlachidze G, Borgnolutti F, Bossert R, Cheng D, Dietderich D, Felice H, Holik T, Pan H, Ferracin P, Ghosh A, Godeke A, Hafalia AR, Marchevsky M, Orris D, Ravaioli E, Sabbi G, Salmi T, Schmalzle J, Stoynev S, Strauss T, Sylvester C, Tartaglia M, Todesco E, Wanderer P, Wang X, Yu M. 2016. Test Results of the LARP Nb<sub>3</sub>Sn Quadrupole HQ03a. *IEEE Transactions on Applied Superconductivity*. 26(4). <https://doi.org/10.1109/TASC.2016.2528283>

Salmi T, Stenvall A. 2016. The Impact of Protection Heater Delays Distribution on the Hotspot Temperature in a High-Field Accelerator Magnet. *IEEE Transactions on Applied Superconductivity*. 26(4). <https://doi.org/10.1109/TASC.2016.2517238>

Milanti A, Matikainen V, Bolelli G, Koivuluoto H, Lusvarghi L, Vuoristo P. 2016. Microstructure and Sliding Wear Behavior of Fe-Based Coatings Manufactured with HVOF and HVAF Thermal Spray Processes. *Journal of Thermal Spray Technology*. 25(5):1040–1055. <https://doi.org/10.1007/s11666-016-0410-z>

Kulju S, Akola J, Prendergast D, Jones RO. 2016. Tuning electronic properties of graphene heterostructures by amorphous-to-crystalline phase transitions. *Physical Review B*. 93(19). <https://doi.org/10.1103/PhysRevB.93.195443>

Soto AM, Koivisto JT, Parraga JE, Silva-Correia J, Oliveira JM, Reis RL, Kellomäki M, Hyttinen J, Figueiras E. 2016. Optical Projection Tomography Technique for Image Texture and Mass Transport Studies in Hydrogels Based on Gellan Gum. *Langmuir*. 32(20):5173-5182. <https://doi.org/10.1021/acs.langmuir.6b00554>

Janka L, Norpoth J, Trache R, Berger LM. 2016. Influence of heat treatment on the abrasive wear resistance of a Cr<sub>3</sub>C<sub>2</sub> NiCr coating deposited by an ethene-fuelled HVOF spray process. *Surface and Coatings Technology*. 291:444-451. <https://doi.org/10.1016/j.surfcoat.2016.02.066>

Soltani I, Hraiech S, Horchani-Naifer K, Massera J, Petit L, Férid M. 2016. Thermal, structural and optical properties of Er<sup>3+</sup> doped phosphate glasses containing silver nanoparticles. *Journal of Non-Crystalline Solids*. 438:67-73. <https://doi.org/10.1016/j.jnoncrysol.2015.12.022>

Aho V, Mattila K, Kühn T, Kekäläinen P, Pulkkinen O, Minussi RB, Vihinen-Ranta M, Timonen J. 2016. Diffusion through thin membranes: Modeling across scales. *Physical Review E*. 93(4). <https://doi.org/10.1103/PhysRevE.93.043309>

Fernandez-Palacio F, Saccone M, Priimägi A, Terraneo G, Pilati T, Metrangolo P, Resnati G. 2016. Coordination networks incorporating halogen-bond donor sites and azobenzene groups. *CrystEngComm*. 18(13):2251-2257. <https://doi.org/10.1039/c6ce00059b>

Escamez G, Sirois F, Lahtinen V, Stenvall A, Badel A, Tixador P, Ramdane B, Meunier G, Perrin-Bit R, Bruzek CÉ. 2016. 3-D Numerical Modeling of AC Losses in Multifilamentary MgB<sub>2</sub> Wires. *IEEE Transactions on Applied Superconductivity*. 26(3). <https://doi.org/10.1109/TASC.2016.2533024>

Kirby G, Rossi L, Badel A, Bajko M, Ballarino A, Bottura L, Dhalle M, Durante M, Fazilleau P, Fleiter J, Goldacker W, Häör 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. 2016. Status of the Demonstrator Magnets for the EuCARD-2 Future Magnets Project. *IEEE Transactions on Applied Superconductivity*. 26(3). <https://doi.org/10.1109/TASC.2016.2528544>

Vippola M, Valkonen M, Sarlin E, Honkanen M, Huttunen H. 2016. Insight to Nanoparticle Size Analysis—Novel and Convenient Image Analysis Method Versus Conventional Techniques. *Nanoscale Research Letters*. 11(1). <https://doi.org/10.1186/s11671-016-1391-z>

Selvan NT, Eshwaran SB, Das A, Stöckelhuber KW, Wießner S, Pötschke P, Nando GB, Chervanyov AI, Heinrich G. 2016. Piezoresistive natural rubber-multiwall carbon nanotube nanocomposite for sensor applications. *Sensors and Actuators, A: Physical*. 239:102-113. <https://doi.org/10.1016/j.sna.2016.01.004>

Bansod ND, Kapgate BP, Das C, Das A, Basu D, Debnath SC. 2016. Compatibilization of natural rubber/nitrile rubber blends by sol-gel nano-silica generated by in situ method. *JOURNAL OF SOL-GEL SCIENCE AND TECHNOLOGY*. 80(2):548–559. <https://doi.org/10.1007/s10971-016-4114-0>

Pirkkalainen H, Elovaara J, Korpinen L. 2016. Decreasing the extremely low-frequency electric field exposure with a Faraday cage during work tasks from a man hoist at a 400 kV substation. *Progress In Electromagnetics Research M*. 48:55-66.

Hupa L, Fagerlund S, Massera J, Björkvik L. 2016. Dissolution behavior of the bioactive glass S53P4 when sodium is replaced by potassium, and calcium with magnesium or strontium. *Journal of Non-Crystalline Solids*. 41-46. <https://doi.org/10.1016/j.jnoncrysol.2015.03.026>

Isotalo TJ, Niemi T. 2016. Dots-on-the-fly electron beam lithography. Bencher C, Toimittaja. teoksessa SPIE Proceedings: Alternative Lithographic Technologies VIII. SPIE. (Proceedings of SPIE). <https://doi.org/10.1117/12.2219136>

Zia N, Viheriälä J, Koskinen R, Koskinen M, Suomalainen S, Guina M. 2016. Fabrication and characterization of broadband superluminescent diodes for 2 μm wavelength. teoksessa Light-Emitting Diodes: Materials, Devices, and Applications for Solid State Lighting XX. SPIE. (Proceedings of SPIE). <https://doi.org/10.1117/12.2209720>

Rocherullé J, Massera J, Oudadesse H, Calvez L, Trolès J, Zhang XH. 2016. Heat capacities of crystalline and glassy lithium metaphosphate up to the transition region. *Journal of Thermal Analysis and Calorimetry*. 123(1):401-407. <https://doi.org/10.1007/s10973-015-4938-9>

Viheriälä J, Aho AT, Mäkelä J, Salmi J, Virtanen H, Leinonen T, Dumitrescu M, Guina M. 2016. High-power 1550 nm tapered DBR lasers fabricated using soft UV-nanoimprint lithography. teoksessa High-Power Diode Laser Technology and Applications XIV. SPIE. (SPIE Conference Proceedings). <https://doi.org/10.1117/12.2207423>

Moirangthem M, Stumpel JE, Alp B, Teunissen P, Bastiaansen CWM, Schenning APHJ. 2016. Hot pen and laser writable photonic polymer films. teoksessa Emerging Liquid Crystal Technologies XI. SPIE. <https://doi.org/10.1117/12.2209065>

Aalto T, Harjanne M, Offrein BJ, Caér C, Neumeyr C, Malacarne A, Guina M, Sheehan RN, Peters FH, Melanen P. 2016. Integrating III-V, Si, and polymer waveguides for optical interconnects: RAPIDO. teoksessa Optical Interconnects XVI. SPIE. (Proceedings of SPIE). <https://doi.org/10.1117/12.2214786>

Nyysönen T, Isakov M, Peura P, Kuokkala V-T. 2016. Iterative Determination of the Orientation Relationship Between Austenite and Martensite from a Large Amount of Grain Pair Misorientations. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science. 47(6):2587-2590. <https://doi.org/10.1007/s11661-016-3462-2>

Tuominen J, Näkki J, Pajukoski H, Hyvärinen L, Vuoristo P. 2016. Microstructural and abrasion wear characteristics of laser-clad tool steel coatings. Surface Engineering. 32(12):923-933. <https://doi.org/10.1080/02670844.2016.1180496>

Fotiadi AA, Korobko DA, Okhotnikov OG, Zolotovskii IO. 2016. Optical fiber amplifier with spectral compression elements for high-power laser pulse generation. teoksessa Nonlinear Optics and its Applications IV. SPIE. (Proceedings of SPIE). <https://doi.org/10.1117/12.2223637>

Sakho EHM, Oluwafemi OS, Perumbilavil S, Philip R, Kala MS, Thomas S, Kalarikkal N. 2016. Rapid and facile synthesis of graphene oxide quantum dots with good linear and nonlinear optical properties. Journal of Materials Science: Materials in Electronics. 27(10):10926-10933. <https://doi.org/10.1007/s10854-016-5204-z>

Frantc VA, Makov SV, Voronin VV, Marchuk VI, Semenishchev EA, Egiazarian KO, Agaian S. 2016. Simultaneous binary hash and features learning for image retrieval. teoksessa Mobile Multimedia/Image Processing, Security, and Applications 2016. SPIE. (SPIE Conference Proceedings). <https://doi.org/10.1117/12.2223605>

Hakkarainen T, Tommila J, Schramm A, Simonen J, Niemi T, Strelow C, Kipp T, Kontio J, Guina M. 2016. Site-controlled InAs Quantum Dots for Plasmonics. teoksessa Conference on Lasers and Electro-Optics 2016: QELS\_Fundamental Science. OSA - The Optical Society. [https://doi.org/10.1364/CLEO\\_QELS.2016.FM1B.3](https://doi.org/10.1364/CLEO_QELS.2016.FM1B.3)

Golovanov V, Golovanova V, Rantala TT. 2016. Thermal desorption of molecular oxygen from SnO<sub>2</sub> (110) surface: Insights from first-principles calculations. Journal of Physics and Chemistry of Solids. 89:15-22. <https://doi.org/10.1016/j.jpcs.2015.10.010>

Auer S, Koho T, Uusi-Kerttula H, Vesikari T, Blazevic V, Hytönen VP. 2015. Rapid and sensitive detection of norovirus antibodies in human serum with a bilayer interferometry biosensor. Sensors and Actuators B: Chemical. 221:507-514. <https://doi.org/10.1016/j.snb.2015.06.088>

Kimionis J, Isakov M, Koh BS, Georgiadis A, Tentzeris MM. 2015. 3D-Printed Origami Packaging with Inkjet-Printed Antennas for RF Harvesting Sensors. IEEE Transactions on Microwave Theory and Techniques. 63(12):4521-4532. <https://doi.org/10.1109/TMTT.2015.2494580>

Bito J, Hester JG, Tentzeris MM. 2015. Ambient RF Energy Harvesting from a Two-Way Talk Radio for Flexible Wearable Wireless Sensor Devices Utilizing Inkjet Printing Technologies. IEEE Transactions on Microwave Theory and Techniques. 63(12):4533-4543. <https://doi.org/10.1109/TMTT.2015.2495289>

Liu X, Yao S, Cook BS, Tentzeris MM, Georgakopoulos SV. 2015. An Origami Reconfigurable Axial-Mode Bifilar Helical Antenna. IEEE Transactions on Antennas and Propagation. 63(12):5897-5903. <https://doi.org/10.1109/TAP.2015.2481922>

He Y, Pan Z, Cheng X, He Y, Qiao J, Tentzeris MM. 2015. A Novel Dual-Band, Dual-Polarized, Miniaturized and Low-Profile Base Station Antenna. IEEE Transactions on Antennas and Propagation. 63(12):5399-5408. <https://doi.org/10.1109/TAP.2015.2481488>

Ihalainen TO, Aires L, Herzog FA, Schwartlander R, Moeller J, Vogel V. 2015. Differential basal-to-apical accessibility of lamin A/C epitopes in the nuclear lamina regulated by changes in cytoskeletal tension. Nature Materials. 14(12):1252-1261. <https://doi.org/10.1038/nmat4389>

Gadelovits S, Sitbon M, Suntio T, Kuperman A. 2015. Single-source multibattery solar charger: Case study and implementation issues. Progress in Photovoltaics: Research and Applications. 23(12):1916-1928. <https://doi.org/10.1002/pip.2591>

Kuzmin M, Laukkanen P, Yasir M, Mäkelä J, Tuominen M, Dahl J, Punkkinen MPJ, Kokko K, Hedman HP, Moon J, Punkkinen R, Polojärvi V, Korpijärvi VM, Guina M. 2015. Observation of unusual metal-semiconductor interaction and metal-induced gap states at an oxide-semiconductor interface: The case of epitaxial BaO/Ge(100) junction. *Physical Review B*. 92(16). <https://doi.org/10.1103/PhysRevB.92.165311>

Oksanen V, Valtonen K, Andersson P, Vaajoki A, Laukkanen A, Holmberg K, Kuokkala VT. 2015. Comparison of laboratory rolling-sliding wear tests with in-service wear of nodular cast iron rollers against wire ropes. *Wear*. 340-341:73-81. <https://doi.org/10.1016/j.wear.2015.07.006>

Myläri V, Ruoko T-P, Vuorinen J, Lemmetyinen H. 2015. Characterization of thermally aged polyetheretherketone fibres: Mechanical, thermal, rheological and chemical property changes. *Polymer Degradation and Stability*. 120:419-426. <https://doi.org/10.1016/j.polymdegradstab.2015.08.003>

Bourhis K, Massera J, Petit L, Koponen J, Fargues A, Cardinal T, Hupa L, Hupa M, Dussauze M, Rodriguez V, Ferraris M. 2015. Erbium-doped borosilicate glasses containing various amounts of P<sub>2</sub>O<sub>5</sub> and Al<sub>2</sub>O<sub>3</sub>: Influence of the silica content on the structure and thermal, physical, optical and luminescence properties. *Materials Research Bulletin*. 70:47-54. <https://doi.org/10.1016/j.materresbull.2015.04.017>

Tamminen P, Viheräkoski T, Sydänheimo L, Ukkonen L. 2015. ESD qualification data used as the basis for building electrostatic discharge protected areas. *Journal of Electrostatics*. 77:174-181. <https://doi.org/10.1016/j.elstat.2015.08.009>

Milanti A, Matikainen V, Koivuluoto H, Bolelli G, Lusvarghi L, Vuoristo P. 2015. Effect of spraying parameters on the microstructural and corrosion properties of HVAF-sprayed Fe-Cr-Ni-B-C coatings. *Surface and Coatings Technology*. 277:81-90. <https://doi.org/10.1016/j.surfcoat.2015.07.018>

Tukiainen A, Likonen J, Toikkanen L, Leinonen T. 2015. Unintentional boron contamination of MBE-grown GaInP/AlGaInP quantum wells. *Journal of Crystal Growth*. 425:60-63. <https://doi.org/10.1016/j.jcrysgro.2015.02.048>

Barreca D, Carraro G, Warwick MEA, Kaunisto K, Gasparotto A, Gombac V, Sada C, Turner S, Van Tendeloo G, Maccato C, Fornasiero P. 2015. Fe<sub>2</sub>O<sub>3</sub>-TiO<sub>2</sub> nanosystems by a hybrid PE-CVD/ALD approach: controllable synthesis, growth mechanism, and photocatalytic properties. *CrystEngComm*. 17(32):6219-6226. <https://doi.org/10.1039/c5ce00883b>

Mäkelä J, Tuominen M, Yasir M, Polojärvi V, Aho A, Tukiainen A, Kuzmin M, Punkkinen MPJ, Laukkanen P, Kokko K, Guina M. 2015. Effects of thinning and heating for TiO<sub>2</sub>/AlInP junctions. *Journal of Electron Spectroscopy and Related Phenomena*. 205:6-9. <https://doi.org/10.1016/j.elspec.2015.08.004>

Devassy L, Jisha CP, Alberucci A, Kuriakose VC. 2015. Parity-time-symmetric solitons in trapped Bose-Einstein condensates and the influence of varying complex potentials: A variational approach. *Physical Review E*. 92(2). <https://doi.org/10.1103/PhysRevE.92.022914>

Levin M, Rojas E, Vanhala E, Vippola M, Liguori B, Kling KI, Koponen IK, Mølhav K, Tuomi T, Gregurec D, Moya S, Jensen KA. 2015. Influence of relative humidity and physical load during storage on dustiness of inorganic nanomaterials: implications for testing and risk assessment. *Journal of Nanoparticle Research*. 17(8). <https://doi.org/10.1007/s11051-015-3139-6>

Salmi T, Chlachidze G, Marchevsky M, Bajas H, Felice H, Stenvall A. 2015. Analysis of uncertainties in protection heater delay time measurements and simulations in Nb<sub>3</sub>Sn high-field accelerator magnets. *IEEE Transactions on Applied Superconductivity*. 25(4). <https://doi.org/10.1109/TASC.2015.2437332>

Haaparanta A-M, Uppstu P, Hannula M, Ellä V, Rosling A, Kellomäki M. 2015. Improved dimensional stability with bioactive glass fibre skeleton in poly(lactide-co-glycolide) porous scaffolds for tissue engineering. *Materials Science and Engineering C: Materials for Biological Applications*. 56:457-466. <https://doi.org/10.1016/j.msec.2015.07.013>

Isoniemi T, Tuukkanen S, Cameron DC, Simonen J, Toppari JJ. 2015. Measuring optical anisotropy in poly(3,4-ethylene dioxythiophene): poly(styrene sulfonate) films with added graphene. *Organic Electronics*. 25:317-323.  
<https://doi.org/10.1016/j.orgel.2015.06.037>, <https://doi.org/10.1016/j.orgel.2015.06.037>

Godec A, Metzler R. 2015. Signal focusing through active transport. *Physical Review E*. 92(1).  
<https://doi.org/10.1103/PhysRevE.92.010701>

Mattila KK, Hegele LA, Philippi PC. 2015. Investigation of an entropic stabilizer for the lattice-Boltzmann method. *Physical Review E*. 91(6). <https://doi.org/10.1103/PhysRevE.91.063010>

De Carvalho SJ, Metzler R, Cherstvy AG. 2015. Inverted critical adsorption of polyelectrolytes in confinement. *Soft Matter*. 11(22):4430-4443. <https://doi.org/10.1039/c5sm00635j>

Salpavaara T, Järveläinen M, Seppälä S, Yli-Hallila T, Verho J, Vilkko M, Lekkala J, Levänen E. 2015. Passive resonance sensor based method for monitoring particle suspensions. *Sensors and Actuators B: Chemical*. 219:324-330.  
<https://doi.org/10.1016/j.snb.2015.04.121>

Kirby GA, 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 JC, De Rijk G, Rijllart A, Rossi L, Ten Kate H, Durante M, Fazilleau P, Lorin C, Häroö E, Stenvall A, Caspi S, Marchevsky M, Goldacker W, Kario A. 2015. Accelerator-quality HTS dipole magnet demonstrator designs for the EuCARD-2 5-T 40-mm clear aperture magnet. *IEEE Transactions on Applied Superconductivity*. 25(3). <https://doi.org/10.1109/TASC.2014.2361933>

Järveläinen M, Humalamäki J, Laakso J, Levänen E. 2015. Mechanical characterization of fiber ceramics: Effect of temperature. *Advanced Engineering Materials*. 17(6):821-830. <https://doi.org/10.1002/adem.201400512>

Borah D, Rasappa S, Salaun M, Zellsman M, Lorret O, Lontos G, Ntetsikas K, Avgeropoulos A, Morris MA. 2015. Soft graphoepitaxy for large area directed self-assembly of polystyrene-block-poly(dimethylsiloxane) block copolymer on nanopatterned poss substrates fabricated by nanoimprint lithography. *Advanced Functional Materials*. 25(22):3425-3432. <https://doi.org/10.1002/adfm.201500100>

Marinozzi V, Ambrosio G, Bellomo G, Chlachidze G, Felice H, Marchevsky M, Salmi T, Sorbi M, Todesco E. 2015. Study of quench protection for the Nb<sub>3</sub>Sn low- $\beta$  quadrupole for the LHC luminosity upgrade (HiLumi-LHC). *IEEE Transactions on Applied Superconductivity*. 25(3). <https://doi.org/10.1109/TASC.2014.2383435>

Lylý M, Krooshoop E, Lübkemann R, Wessel S, Stenvall A, Dhalle M, Mikkonen R. 2015. Suitability of bundle approximation in AC loss analysis of NbTi wires: Simulations and experiment. *IEEE Transactions on Applied Superconductivity*. 25(3). <https://doi.org/10.1109/TASC.2014.2376184>

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 AR, Marchevsky M, Ravaioli E, Sabbi GL, Salmi T, Schmalzle J, Todesco E, Wanderer P, Wang X, Yu M. 2015. Test results of the LARP HQ02b magnet at 1.9 K. *IEEE Transactions on Applied Superconductivity*. 25(3). <https://doi.org/10.1109/TASC.2014.2378375>

Rossi L, Badel A, Bajko M, Ballarino A, Bottura L, Dhallé MMJ, Durante M, Fazilleau P, Fleiter J, Goldacker W, Häroö 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. 2015. The EuCARD-2 future magnets European collaboration for accelerator-quality HTS magnets. *IEEE Transactions on Applied Superconductivity*. 25(3). <https://doi.org/10.1109/TASC.2014.2364215>

Ruuskanen J, Stenvall A, Lahtinen V. 2015. Utilizing triangular mesh with MMEV to study hysteresis losses of round superconductors obeying critical state model. *IEEE Transactions on Applied Superconductivity*. 25(3). <https://doi.org/10.1109/TASC.2014.2365408>

Song X, Liu Z, Suhonen T, Varis T, Huang L, Zheng X, Zeng Y. 2015. Effect of melting state on the thermal shock resistance and thermal conductivity of APS  $ZrO_2$ -7.5wt.%  $Y_2O_3$  coatings. *Surface and Coatings Technology*. 270:132-138. <https://doi.org/10.1016/j.surfcoat.2015.03.011>

Godec A, Metzler R. 2015. Optimization and universality of Brownian search in a basic model of quenched heterogeneous media. *Physical Review E*. 91(5). <https://doi.org/10.1103/PhysRevE.91.052134>

Lahtinen V, Stenvall A, Sirois F, Pellikka M. 2015. A Finite Element Simulation Tool for Predicting Hysteresis Losses in Superconductors Using an H-Oriented Formulation with Cohomology Basis Functions. *Journal of Superconductivity and Novel Magnetism*. 28(8):2345-2354 . <https://doi.org/10.1007/s10948-015-3074-x>

Koivisto AJ, Aromaa M, Koponen IK, Fransman W, Jensen KA, Mäkelä JM, Hämeri KJ. 2015. Workplace performance of a loose-fitting powered air purifying respirator during nanoparticle synthesis. *Journal of Nanoparticle Research*. 17(4). <https://doi.org/10.1007/s11051-015-2990-9>

Safdari H, Chechkin AV, Jafari GR, Metzler R. 2015. Aging scaled Brownian motion. *Physical Review E*. 91(4). <https://doi.org/10.1103/PhysRevE.91.042107>

Lindgren M, Suihkonen R, Vuorinen J. 2015. Erosive wear of various stainless steel grades used as impeller blade materials in high temperature aqueous slurry. *Wear*. 328-329:391-400. <https://doi.org/10.1016/j.wear.2015.03.014>

Lindroos M, Ratia V, Apostol M, Valtonen K, Laukkonen A, Molnar W, Holmberg K, Kuokkala VT. 2015. The effect of impact conditions on the wear and deformation behavior of wear resistant steels. *Wear*. 328-329:197-205. <https://doi.org/10.1016/j.wear.2015.02.032>

Liu X, Fan Y, Tentzeris MM. 2015. An integrated "sense-and-communicate" broad-/narrow-band optically controlled reconfigurable antenna for cognitive radio systems. *Microwave and Optical Technology Letters*. 57(4):1016-1023. <https://doi.org/10.1002/mop.29004>

Härö E, Stenvall A, Van Nugteren J, Kirby G. 2015. Hot spot temperature in an HTS Coil: Simulations with MIITs and finite element method. *IEEE Transactions on Applied Superconductivity*. 25(2). <https://doi.org/10.1109/TASC.2015.2396945>

Romanelli F, Abhangi M, Abreu P, Aftanas M, Afzal M, Aggarwal KM, Aho-Mantila L, Ahonen E, Aints M, Airila M, Albanese R, Alegre D, Alessi E, Aleynikov P, Alfier A, Alkseev A, Allan P, Almviva S, Alonso A, Alper B, Alsworth I, Alves D, Ambrosino G, Ambrosino R, Amosov V, Andersson F, Andersson Sundén E, Angelone M, Anghel A, Anghel M, Angioni C, Appel L, Apruzzese G, Arena P, Ariola M, Arnichand H, Arnoux G, Arshad S, Ash A, Asp E, Asunta O, Atanasiu CV, Austin Y, Avotina L, Axton MD, Ayres C, Bachmann C, Baciero A, Baião D, Bailesco V, Baiocchi B, Baker A, Baker RA, Balboa I, Balden M, Balshaw N, Bament R, Banks JW, Baranov YF, Barlow IL, Barnard MA, Barnes D, Barnsley R, Baron Wiechec A, Baruzzo M, Basiuk V, Bassan M, Bastow R, Batista A, Batistoni P, Bauer R, Bauvir B, Bazylev B, Beal J, Beaumont PS, Becoulet A, Bednarczyk P, Bekris N, Beldishevski M, Bell K, Belli F, Bellinger M, Belo JK, Belo P, Belonohy, Benteman NA, Bergsåker H, Bernardo J, Bernert M, Berry M, Bertalot L, Beurskens MNA, Bieg B, Bielecki J, Biewer T, Bigi M, Bílková P, Binda F, Bizarro JPS, Björkas C, Blackman K, Blackman TR, Blanchard P, Blanco E, Blatchford P, Bobkov V, Boboc A, Bodnár G, Bogar O, Bolzonella T, Boncagni L, Bonham R, Bonheure G, Boom J, Booth J, Borba D, Borodin D, Botrugno A, Boulbe C, Boulting P, Bovert KV, Bowden M, Bower C, Boyce T, Boyer HJ, Bradshaw JMA, Braic V, Breizman B, Bremond S, Brennan PD, Brett A, Brezinsek S, Bright MDJ, Brix M, Broeckx W, Brombin M, Brown BC, Brown DPD, Brown M, Bruno E, Bucalossi J, Buch J, Buckley MA, Bucko K, Budny R, Bufferand H, Bulman M, Bulmer N, Bunting P, Buratti P, Burcea G, Burckhart A, Buscarino A, Butcher PR, Butler NK, Bykov I, Byrne J, Byszuk A, Cackett A, Cahyna P, Cain G, Calabró G, Callaghan CP, Campling DC, Cane J, Cannas B, Capel AJ, Caputano M, Card PJ, Cardinali A, Carman P, Carralero D, Carraro L, Carvalho BB, Carvalho I, Carvalho P, Casson FJ, Castaldo C, Cavazzana R, Cavinato M, Cazzaniga A, Cecconello M, Cecil E, Cenedese A, Centoli C, Cesario R, Challis CD, Chandler M, Chandra D, Chang CS, Chankin A, Chapman IT, Chapman SC, Chernyshova M, Chiru P, Chitarin G, Chouli B, Chung N, Ciraolo G, Cirim D, Citrin J, Clairet F, Clark E, Clatworthy D, Clay R, Clever M, Coad JP, Coates PA, Coccorese V, Cociolvo V, Coda S, Coelho R, Coenen JW, Coffey I, Colas L, Collins S, Conboy JE, Conroy S, Cook N, Coombs D, Cooper D, Cooper SR, Corre Y, Corrigan G, Cortes S, Coster D, Couchman AS, Cox M, Cox MP, Cox P, Craciunescu T, Cramp S, Crisanti F, Cristescu I, Croci G, Croft O, Crombé K, Crowe R, Cruz N, Cseh G, Cull K, Cupido L, Curran D, Curua M, Czarnecka A, Czarski T, Dalley S, Dalziel A, Darrow D, Davies R, Davis W, Day C, Day IE, De La Cal E, De La Luna E, De Magistris M, De Pablos JL, De Tommasi G, De Vries PC, Deakin K, Deane J, Decker J, Degli Agostini F,

Dejarnac R, Delabie E, Den Harder N, Dendy RO, Denner P, Devaux S, Devynck P, Di Maio F, Di Pace L, Dittmar T, Dodt D, Donné T, Dooley P, Dorling SE, Dormido-Canto S, Doswon S, Douai D, Doyle PT, Dreischuh T, Drewelow P, Drozdov V, Drozdowicz K, Dumont R, Dumortier P, Dunai D, Dunne M, Ijurian I, Durodié F, Dutta P, Duval B, Dux R, Dylst K, Dzysiu N, Edappala PV, Edwards AM, Eich T, Ekedahl A, Elevated T, El-Jorf R, Elsmore CG, Ericsson G, Eriksson A, Eriksson J, Eriksson LG, Esposito B, Esser HG, Esteve D, Evans GE, Evans J, Ewart GD, Ewers DT, Fagan D, Falie D, Farthing JW, Fasoli A, Fattorini L, Faugeras B, Faustin J, Fawlk N, Federici G, Fedorczak N, Felton RC, Fenzi C, Fernandes A, Fernandes H, Ferreira J, Fessey JA, Figini L, Figueiredo A, Figueiredo J, Fil A, Finburg P, Firdauss M, Fischer U, Fittil L, Fitzgerald M, Flammini D, Flanagan J, Fleming C, Flinders K, Formisano A, Forsythe L, Fortuna L, Fortune M, Frasca M, Frassinetti L, Freisinger M, Fresa R, Frigione D, Fuchs V, Fylie J, Gadomska M, Gál K, Galperti C, Galvão R, Gao X, Garavaglia S, Garcia J, Garcia-Carrasco A, García-Munoz M, Gardner M, Garzotti L, Gaudio P, Gauthier E, Gaze JW, Gear DF, Gee SJ, Gelfusa M, Genangeli E, Gerasimov S, Gervasini G, Ghate M, Gherendi M, Giacalone JC, Giacomelli L, Gibson CS, Giegerich T, Gin D, Giovannozzi E, Girardo JB, Giroud C, Giruzzi G, Gleason-Gonzalez C, Godwin J, Gohil P, Gójska A, Goloborod'ko V, Gomes R, Gonçalves B, Goniche M, Gonzalez S, Goodsell B, Goodyear A, Gorini G, Goussarov A, Graham B, Graham ME, Graves J, Grazier N, Green NR, Greuner H, Grigore E, Grish FS, Grisolia C, Grist D, Groth M, Grundy CN, Gryaznevich M, Guard D, Gubb D, Guillemaut C, Guo Y, Utoh HH, Hackett LJ, Hacquin S, Hagar A, Hakola A, Halitovs M, Hall SJ, Hallworth Cook SP, Hammond K, Hart J, Harting D, Hartmann N, Haupt TDV, Hawkes NC, Hawkins J, Haydon PW, Hazel S, Heesterman PJL, Heinola K, Hellesen C, Hellsten T, Helou W, Hemming ON, Hender TC, Henderson M, Henriques R, Hepple D, Hermon G, Hidalgo C, Highcock EG, Hill JW, Hill M, Hillairet J, Hillesheim J, Hillis D, Hjalmarsson A, Hobirk J, Hogben CHA, Hogeweij GMD, Homfray DA, Horáček J, Horton AR, Horton LD, Hotchin SP, Hough MR, Howarth PJ, Huber A, Huddleston TM, Hughes M, Hunter CL, Hurzlmeier H, Huygen S, Huynh P, Igkitkhanov J, Iglesias D, Imríšek M, Ivanova D, Ivanova-Stanik I, Ivings E, Jachmich S, Jacobsen AS, Jacquet P, Jakubowska K, James J, Janky F, Järvinen A, Jaulmes F, Jednorog S, Jenkins C, Jenkins I, Ješko K, Joffrin E, Johnson R, Johnson T, Joita L, Jones G, Jones TTC, Joyce L, Jupén C, Hoshino KK, Kallenbach A, Kalupin D, Kamiya K, Kaniewski J, Kantor A, Karhunen J, Kasprowicz G, Kaveney G, Kazakov Y, Keeling DL, Keep J, Kempenaars M, Kennedy C, Kenny D, Khilkevich E, Kiisk M, Kim HT, Kim HS, King C, King D, King RF, Kinna DJ, Kiptily V, Kirov K, Kirschner A, Kizane G, Klepper C, Knaup M, Knipe SJ, Kobuchi T, Köchl F, Kocsis G, Kogut D, Koivuranta S, Köppen M, Koskela T, Koslowski HR, Kotov V, Kowalska-Strzęciwilk E, Krasilnikov A, Krasilnikov V, Kreter A, Krieger K, Krivchenkov Y, Krivska A, Kruezi U, Ksiazek I, Kukushkin A, Kundu A, Kurki-Suonio T, Kwon OJ, Kyrytsya V, Laan M, Labate C, Laguardia L, Lam N, Lane C, Lang PT, Lapins J, Lasa A, Last JR, Lawson A, Lawson KD, Lazaros A, Lazzaro E, Lee S, Leggate HJ, Lehnens M, Leichtle D, Leichuer P, Leipold F, Lengar I, Lennholm M, Lerche E, Leyland M, Leysen W, Liang Y, Likonen J, Lindholm V, Linke J, Linsmeier C, Lipschultz B, Litaudon X, Liu G, Liu Y, Lo Schiavo VP, Loarer T, Loarte A, Lobel RC, Lohr N, Lomas PJ, Lönnroth J, López J, López JM, Louche F, Loving AB, Lowbridge S, Lowry C, Luce T, Lucock RMA, Lukin A, Lungu AM, Lungu CP, Lupelli I, Lysoivan A, Macheta P, Mackenzie AS, Maddaluno G, Maddison GP, Magesh B, Maget P, Maggi CF, Maier H, Mailloux J, Maj A, Makkonen T, Makwana R, Malaquias A, Mansfield F, Mansfield M, Manso ME, Mantica P, Mantinen M, Manzanares A, Marandet Y, Marcenko N, Marchetto C, Marchuk O, Marinelli M, Marinucci M, Markovič T, Marocco D, Marot L, Marren CA, Marsen S, Marshal R, Martin A, Martin DL, Martin Y, Martín De Aguilera A, Martín-Solís JR, Masiello A, Maslov M, Maslova V, Matejcík S, Mattei M, Matthews GF, Matveev D, Matveev M, Maviglia F, Mayer M, Mayoral ML, Mazon D, Mazzotta C, McAdams R, McCarthy PJ, McClements KG, McCormick K, McCullen PA, McDonald D, McGregor R, McKean R, McKeon J, McKinley R, Meadows I, Meadows RC, Medina F, Medland M, Medley S, Meigh S, Meigs AG, Meneses L, Menmuir S, Merrigan IR, Mertens P, Meshchaninov S, Messiaen A, Meszaros B, Meyer H, Miano G, Michling R, Middleton-Gear D, Miettunen J, Migliucci P, Militello-Asp E, Minucci S, Mirizzi F, Miyoshi Y, Mlynář J, Monakhov I, Monier-Garbet P, Mooney R, Moradi S, Mordijk S, Moreira L, Moreno R, Morgan PD, Morgan R, Morley L, Morlock C, Morris AW, Morris J, Moser L, Moulton D, Murari A, Muraro A, Mustata I, Asakura NN, Nabais F, Nakano T, Nardon E, Naulin V, Nave MFF, Nedzelski I, Neethiraj N, Nemtsev G, Nespoli F, Neto A, Neu R, Neubauer O, Newman M, Nicholls KJ, Nicolai D, Nicolas T, Nieckchen P, Nielsen P, Nightingale MPS, Nilsson E, Nishijima D, Noble C, Nocente M, Nodwell D, Nordman H, Nunes I, O'meara B, Oberkofler M, Obryk B, Odupitan T, Ogawa MT, O'gorman T, Okabayashi M, Olariu S, O'mullane M, Ongena J, Orsitto F, Oswuigwe BI, Pace N, Pacella D, Page A, Paget A, Pagett D, Pajuste E, Palazzo S, Pamela J, Pamela S, Panin A, Panja S, Papp P, Parail V, Paris P, Parish SCW, Park M, Parsloe A, Pasqualotto R, Pearson IJ, Pedrosa MA, Pereira R, Perelli Cippo E, Perez Von Thun C, Perez-Von-Thun C, Pericoli-Ridolfini V, Perona A, Peruzzo S, Peschanyi S, Peterka M, Petersson P, Petrvich G, Petržilka V, Pfefferle D, Philipps V, Pietropaolo A, Pillon M, Pintsuk G, Piovesan P, Pires Dos Reis A, Pironti A, Pisano F, Pitts R, Pluszczyk C, Plyusnin V, Pomaro N, Pompilian O, Pool PJ, Popovich S, Porcelli F, Porosnicu C, Porton M, Pospieszczyk A, Possnert G, Potzel S, Powell T, Pozniak K, Pozzi J, Prajapati V, Prakash R, Prestopino G, Price D, Price R, Prior P, Prokopowicz R, Proudfoot R, Puglia P, Puiatti ME, Pulley D, Purahoo K, Pütterich T, Quercia A, Rachlew E, Rack M, Raeder J, Rainford MSJ, Ramogida G, Ranjan S, Rasmussen J, Rasmussen JJ, Rathod K, Rattá G, Rayner C, Rebai M, Reece D, Reed A, Réfy D, Regan B, Regana J, Reich M, Reid P, Reinelt M, Reinke ML, Reinke M, Reiser D, Reiter D, Rendell D, Reux C, Riccardo V, Rimini FG, Riva M, Roberts JEC, Robins RJ, Robinson SA, Robinson T, Robson DW, Roddick P, Rodionov R, Rohde V, Romanelli M, Romanelli S, Romano A, Rowe D, Rowe S, Rowley A, Rubel M, Rubinacci G, Ruchko L, Ruiz M, Ruset C, Ryć L, Rzadkiewicz J, Saarelma S, Sabot R, Sadakov S, Safi E, Sagar P, Saibene G, Saint-Laurent F, Salewski M, Salmi A, Salzedas F, Samm U, Sandiford D, Sandquist P, Santa P, Santala MIK, Sartori F, Sartori R, Saunders R, Sauter O, Scannell R, Scarabosio A, Schlummer T, Schmidt V, Schmitz O, Schmuck S, Schneider M, Scholz M, Schöpf K, Schweer B, Sergienko G, Serikov A, Sertoli M, Shabbir A, Shannon M, Shannon MMJ, Sharapov SE, Shaw I, Shaw SR, Shepherd A, Shevelev A, Shumack A, Sibbald M, Sieglin B, Silva C, Simmons PA, Sinha A, Sipilä SK, Sips ACC, Sirén P, Sirinelli A, Sjöstrand H, Skiba M, Skilton R, Slade B, Smith N, Smith PG, Smith TJ, Snoj L, Soare S, Solano ER, Soldatov S, Sonato P, Sopplesa A, Sousa J, Sowden CBC, Sozzi C, Sparkes A, Spelzini T, Spineanu F, Stables G, Stamatelatos I, Stamp MF, Stancalie V, Stankiewicz R, Stankunas G, Stano M, Stan-Sion C, Starkey DE, Stead MJ, Stejner M, Stephen AV, Stephen M, Stevens BD, Stoyanov D, Strachan J, Strand P,

Stransky M, Ström P, Stubbs G, Studholme W, Subba F, Summers HP, Sun Y, Svensson J, Sykes N, Syme BD, Szabolics T, Szepesi G, Szydłowski A, Suzuki TT, Tabarés F, Takalo V, Tál B, Tala T, Talbot AR, Taliercio C, Tamain P, Tame C, Tardocchi M, Taroni L, Taylor KA, Telesca G, Teplova N, Terra A, Testa D, Teuchner B, Tholerus S, Thomas F, Thomas JD, Thomas P, Thompson A, Thompson CA, Thompson VK, Thomson L, Thorne L, Tigwell PA, Tipton N, Tiseanu I, Tojo H, Tokar MZ, Tomeš M, Tonner P, Tosti S, Towndrow M, Trimble P, Tripsy M, Tsallas M, Tsitrone E, Tskhakaya Jun D, Tudisco O, Turner I, Turner MM, Turnianskiy M, Tvalashvili G, Tyrrell SGJ, UI-Abidin Z, Ulyatt D, Unterberg B, Urano H, Uytdehouwen I, Vadgama AP, Valcarcel D, Valisa M, Valovic M, Van Eester D, Van Renterghem W, Van Rooij GJ, Varandas CAF, Varoutis S, Vartanian S, Vasava K, Vdovin V, Vega J, Verdoollaeghe G, Verhoeven R, Verona C, Vervier M, Veshchev E, Vézinet D, Vicente J, Villari S, Villone F, Vinyar I, Viola B, Vitelli R, Vitins A, Vlad M, Voitsekhovitch I, Vondráček P, Vrancken M, Pires De Sa WW, Waldon CWF, Walker M, Walsh M, Warren RJ, Waterhouse J, Watkins NW, Watts C, Wauters T, Way MW, Webster A, Weckmann A, Weiland J, Weisen H, Weiszflog M, Welte S, Wendel J, Wenninger R, West AT, Wheatley MR, Whetham S, Whitehead AM, Whitehead BD, Whittington P, Widdowson AM, Wiesen S, Wilkes D, Wilkinson J, Williams M, Wilson AR, Wilson DJ, Wilson HR, Wischmeier M, Withenshaw G, Witts DM, Wojciech D, Wojeński A, Wood D, Wood S, Woodley C, Woźnicka U, Wright J, Wu J, Yao L, Yapp D, Yavorskij V, Yoo MG, Yorkshades J, Young C, Young D, Young ID, Zabolotny W, Zacks J, Zagorski R, Zaitsev FS, Zanino R, Zaroschi V, Zastrow KD, Zeidner W, Ziolkowski A, Zoita V, Zoleznik S, Zychor I. 2015. Overview of the JET results. Nuclear Fusion. 55(10). <https://doi.org/10.1088/0029-5515/55/10/104001>

Kuisma M, Sakko A, Rossi TP, Larsen AH, Enkovaara J, Lehtovaara L, Rantala TT. 2015. Localized surface plasmon resonance in silver nanoparticles: Atomistic first-principles time-dependent density-functional theory calculations. Physical Review B. 91(11). <https://doi.org/10.1103/PhysRevB.91.115431>

Varis T, Bankiewicz D, Yrjas P, Oksa M, Suhonen T, Tuurna S, Ruusuvuori K, Holmström S. 2015. High temperature corrosion of thermally sprayed NiCr and FeCr coatings covered with a KCl-K<sub>2</sub>SO<sub>4</sub> salt mixture. Surface and Coatings Technology. 265:235-243. <https://doi.org/10.1016/j.surfcoat.2014.11.012>

Bolelli G, Berger LM, Börner T, Koivuluoto H, Lusvarghi L, Lyphout C, Markocsan N, Matikainen V, Nylén P, Sassatelli P, Trache R, Vuoristo P. 2015. Tribology of HVOF- and HVAF-sprayed WC-10Co4Cr hardmetal coatings: A comparative assessment. Surface and Coatings Technology. 265:125-144. <https://doi.org/10.1016/j.surfcoat.2015.01.048>

Valagiannopoulos CA, Tukiainen A, Aho T, Niemi T, Guina M, Tretyakov SA, Simovski CR. 2015. Perfect magnetic mirror and simple perfect absorber in the visible spectrum. Physical Review B. 91(11). <https://doi.org/10.1103/PhysRevB.91.115305>

Wecharine I, Valkonen A, Rzaigui M, Sta WS, Smith G. 2015. Crystal structure of 2-methylpiperazine-1,4-dium bis(hydrogen maleate). Acta Crystallographica Section E : Structure Reports Online. 71(3):o193-o194. <https://doi.org/10.1107/S2056989015003102>

Sitbon M, Leppäaho J, Suntio T, Kuperman A. 2015. Dynamics of photovoltaic-generator-interfacing voltage-controlled buck power stage. IEEE Journal of Photovoltaics. 5(2):633-640. <https://doi.org/10.1109/JPHOTOV.2014.2379094>

Subramaniyam NP, Hyttinen J. 2015. Dynamics of intracranial electroencephalographic recordings from epilepsy patients using univariate and bivariate recurrence networks. Physical Review E. 91(2). <https://doi.org/10.1103/PhysRevE.91.022927>

Ray S, Steven RT, Green FM, Höök F, Taskinen B, Hytönen VP, Shard AG. 2015. Neutralized chimeric avidin binding at a reference biosensor surface. Langmuir. 31(6):1921-1930. <https://doi.org/10.1021/la503213f>

Miller TL, Ärrälä M, Smallwood CL, Zhang W, Hafiz H, Barbiellini B, Kurashima K, Adachi T, Koike Y, Eisaki H, Lindroos M, Bansil A, Lee DH, Lanzara A. 2015. Resolving unoccupied electronic states with laser ARPES in bismuth-based cuprate superconductors. Physical Review B. 91(8). <https://doi.org/10.1103/PhysRevB.91.085109>

Beyeh NK, Pan F, Valkonen A, Rissanen K. 2015. Encapsulation of secondary and tertiary ammonium salts by resorcinarenes and pyrogallarenes: The effect of size and charge concentration. CrystEngComm. 17(5):1182-1188. <https://doi.org/10.1039/c4ce01927j>

Bautista G, Mäkitalo J, Chen Y, Dhaka V, Grasso M, Karvonen L, Jiang H, Huttunen MJ, Huhtio T, Lipsanen H, Kauranen M. 2015. Second-harmonic generation imaging of semiconductor nanowires with focused vector beams. *Nano Letters*. 15(3):1564-1569. <https://doi.org/10.1021/nl503984b>

Choi S, Su W, Tentzeris MM, Lim S. 2015. A novel fluid-reconfigurable advanced and delayed phase line using inkjet-printed microfluidic composite right/left-handed transmission line. *IEEE Microwave and Wireless Components Letters*. 25(2):142-144. <https://doi.org/10.1109/LMWC.2014.2382685>

Järvelä J, Lylly M, Stenvall A, Juntunen R, Souc J, Mikkonen R. 2015. Design, fabrication, and testing of a low AC-loss conduction-cooled cryostat for magnetization loss measurement apparatus. *IEEE Transactions on Applied Superconductivity*. 25(1). <https://doi.org/10.1109/TASC.2014.2357754>

Shin J, Cherstvy AG, Metzler R. 2015. Kinetics of polymer looping with macromolecular crowding: Effects of volume fraction and crowder size. *Soft Matter*. 11(3):472-488. <https://doi.org/10.1039/c4sm02007c>

Li Z, Le T, Wu Z, Yao Y, Li L, Tentzeris M, Moon KS, Wong CP. 2015. Rational design of a printable, highly conductive silicone-based electrically conductive adhesive for stretchable radio-frequency antennas. *Advanced Functional Materials*. 25(3):464-470. <https://doi.org/10.1002/adfm.201403275>

Czaplicki R, Mäkitalo J, Siikanen R, Husu H, Lehtolahti J, Kuittinen M, Kauranen M. 2015. Second-Harmonic Generation from Metal Nanoparticles: Resonance Enhancement versus Particle Geometry. *Nano Letters*. 15(1):530-534. <https://doi.org/10.1021/nl503901e>

Kalimeri M, Derreumaux P, Sterpone F. 2015. Are coarse-grained models apt to detect protein thermal stability? the case of OPEP force field. *Journal of Non-Crystalline Solids*. 407:494-501. <https://doi.org/10.1016/j.jnoncrysol.2014.07.005>

Mariotti C, Cook BS, Roselli L, Tentzeris MM. 2015. State-of-the-art inkjet-printed metal-insulator-metal (MIM) capacitors on silicon substrate. *IEEE Microwave and Wireless Components Letters*. 25(1):13-15. <https://doi.org/10.1109/LMWC.2014.2365745>

Kantola E, Leinonen T, Ranta S, Tavast M, Penttinen J-P, Guina M. 2015. 1180nm VECSEL with 50 W output power. teoksessa Proceedings of SPIE - The International Society for Optical Engineering. SPIE. <https://doi.org/10.1117/12.2079480>

Rubel AS, Lukin VV, Egiazarian K. 2015. A method for predicting DCT-based denoising efficiency for grayscale images corrupted by AWGN and additive spatially correlated noise. teoksessa Proceedings of SPIE - The International Society for Optical Engineering. SPIE. <https://doi.org/10.1117/12.2082533>

Battisti F, Carli M, Stramacci A, Boev A, Gotchev A. 2015. A perceptual quality metric for high-definition stereoscopic 3D video. teoksessa Image Processing: Algorithms and Systems XIII. SPIE. (SPIE Conference Proceedings). <https://doi.org/10.1117/12.2086901>

Martinez F, Neculqueo G, Vasquez SO, Lemmetyinen H, Efimov A, Vivo P. 2015. Branched thiophene oligomer/polymer bulk heterojunction organic solar cell. teoksessa Materials Research Society Symposium Proceedings. MATERIALS RESEARCH SOCIETY. Sivut 19-25. <https://doi.org/10.1557/opl.2015.529>

Lukin VV, Ponomarenko NN, Ieremeiev O, Egiazarian K, Astola J. 2015. Combining full-reference image visual quality metrics by neural network. teoksessa Proceedings of SPIE - The International Society for Optical Engineering. SPIE. <https://doi.org/10.1117/12.2085465>

Voronin VV, Marchuk VI, Fisunov AV, Tokareva SV, Egiazarian KO. 2015. Depth map occlusion filling and scene reconstruction using modified exemplar-based inpainting. teoksessa Image Processing: Algorithms and Systems XIII. SPIE. (SPIE Conference Proceedings). <https://doi.org/10.1117/12.2076506>

Niittymäki M, Lahti K, Suhonen T, Metsäjoki J. 2015. Dielectric Breakdown Strength of Thermally Sprayed Ceramic Coatings: Effects of Different Test Arrangements. *Journal of Thermal Spray Technology*. 24(3):542-551.  
<https://doi.org/10.1007/s11666-014-0211-1>

Ledentsov NN, Shchukin VA, Lyytikäinen J, Okhotnikov O, Cherkashin NA, Shernyakov YM, Payusov AS, Gordeev NY, Maximov MV, Schlichting S, Nippert F, Hoffmann A. 2015. Green (In,Ga,Al)P-GaP light-emitting diodes grown on high-index GaAs surfaces. *teoksessa Proceedings of SPIE: Light-Emitting Diodes: Materials, Devices, and Applications for Solid State Lighting XIX*. SPIE. <https://doi.org/10.1117/12.2083953>

Leinonen T, Penttinen JP, Korpiläärvi VM, Kantola E, Guina M. 2015. >8W GaInNAs VECSEL emitting at 615 nm. *teoksessa Proceedings of SPIE: Vertical External Cavity Surface Emitting Lasers (VECSELs) V*. SPIE. <https://doi.org/10.1117/12.2079162>

Milanti A, Koivuluoto H, Vuoristo P. 2015. Influence of the Spray Gun Type on Microstructure and Properties of HVAF Sprayed Fe-Based Corrosion Resistant Coatings. *Journal of Thermal Spray Technology*. 24(7):1312-1322.  
<https://doi.org/10.1007/s11666-015-0298-z>

Borg T, Pääkkönen EJ. 2015. Linear viscoelastic model for different flows based on control theory. *Applied Rheology*. 25(6). <https://doi.org/10.3933/ApplRheol-25-64304>

Frosio I, Egiazarian K, Pulli K. 2015. Machine learning for adaptive bilateral filtering. *teoksessa Image Processing: Algorithms and Systems XIII*. SPIE. (Proceedings of SPIE - The International Society for Optical Engineering). <https://doi.org/10.1117/12.2077733>

Ye C, Koponen J, Aalos V, Kokki T, Petit L, Kimmelma O. 2015. Measuring bend losses in large-mode-area fibers. *teoksessa Fiber Lasers XII: Technology, Systems, and Applications*. SPIE. <https://doi.org/10.1117/12.2076813>

Korpiläärvi V-M, Kantola EL, Leinonen T, Guina M. 2015. Monolithic GaInNAsSb/GaAs VECSEL emitting at 1550 nm. *teoksessa SPIE conference proceedings*. SPIE. <https://doi.org/10.1117/12.2077517>

Voronin VV, Frantc VA, Marchuk VI, Sherstobitov AI, Egiazarian K. 2015. No-reference visual quality assessment for image inpainting. *teoksessa Image Processing: Algorithms and Systems XIII*. SPIE. (SPIE Conference Proceedings). <https://doi.org/10.1117/12.2076507>

Polojärvi V, Pavelescu E-M, Schramm A, Tukiainen A, Aho A, Puustinen J, Guina M. 2015. Optical properties and thermionic emission in solar cells with InAs quantum dots embedded within GaNAs and GaInNAs. *Scripta Materialia*. 108:122-125. <https://doi.org/10.1016/j.scriptamat.2015.06.033>

Heikkinen J, Gumenuk R, Rantamäki A, Lyytikäinen J, Leinonen T, Zolotovskii I, Melkumov M, Dianov EM, Okhotnikov OG. 2015. Power and wavelength scaling using semiconductor disk laser - bismuth fiber MOPA systems. Guina M, Toimittaja. *teoksessa Vertical External Cavity Surface Emitting Lasers (VECSELs) V*. BELLINGHAM: SPIE. (Proceedings of SPIE). <https://doi.org/10.1117/12.2076805>

Suominen O, Gotchev A. 2015. Preserving natural scene lighting by strobe-lit video. *teoksessa Image Processing: Algorithms and Systems XIII*. SPIE. (SPIE Conference Proceedings). <https://doi.org/10.1117/12.2185013>

Smirnov S, Gotchev A. 2015. Real-time depth image-based rendering with layered dis-occlusion compensation and aliasing-free composition. *teoksessa Proceedings of SPIE - The International Society for Optical Engineering*. SPIE. (SPIE Conference Proceedings). <https://doi.org/10.1117/12.2086895>

Mäkelä JM, Haapanen J, Aromaa M, Teisala H, Tuominen M, Stepien M, Saarinen JJ, Toivakka M, Kuusipalo J. 2015. Roll-to-roll coating by liquid flame spray nanoparticle deposition. *teoksessa Materials Research Society Symposium Proceedings*. MATERIALS RESEARCH SOCIETY. Sivut 37-42. <https://doi.org/10.1557/opl.2015.530>

Stumpel JE, Gil ER, Spoelstra AB, Bastiaansen CWM, Broer DJ, Schenning APHJ. 2015. Stimuli-Responsive Materials Based on Interpenetrating Polymer Liquid Crystal Hydrogels. *Advanced Functional Materials*. 25(22):3314–3320. <https://doi.org/10.1002/adfm.201500745>

Maximov MV, Kryzhanovskaya NV, Nadtochiy AM, Moiseev EI, Shostak II, Bogdanov AA, Sadrieva ZF, Zhukov AE, Lipovskii AA, Karpov DV, Laukkonen J, Tommila J. 2014. Ultrasmall microdisk and microring lasers based on InAs/InGaAs/GaAs quantum dots. *Nanoscale Research Letters*. 9(1). <https://doi.org/10.1186/1556-276X-9-657>

Kimionis J, Georgiadis A, Collado A, Tentzeris MM. 2014. Enhancement of RF tag backscatter efficiency with low-power reflection amplifiers. *IEEE Transactions on Microwave Theory and Techniques*. 62(12):3562-3571. <https://doi.org/10.1109/TMTT.2014.2363835>

Song X, Suhonen T, Varis T, Huang L, Zheng X, Zeng Y. 2014. Fabrication and Characterization of Amorphous Alumina-Yttria-Stabilized Zirconia Coatings by Air Plasma Spraying. *Journal of Thermal Spray Technology*. 23(8):1302-1311. <https://doi.org/10.1007/s11666-014-0124-z>

Ojala N, Valtonen K, Heino V, Kallio M, Aaltonen J, Siitonen P, Kuokkala VT. 2014. Effects of composition and microstructure on the abrasive wear performance of quenched wear resistant steels. *Wear*. 317(1-2):225-232. <https://doi.org/10.1016/j.wear.2014.06.003>

Ball J, Parra FI, Barnes M, Dorland W, Hammett GW, Rodrigues P, Loureiro NF. 2014. Intrinsic momentum transport in up-down asymmetric tokamaks. *PLASMA PHYSICS AND CONTROLLED FUSION*. 56(9). <https://doi.org/10.1088/0741-3335/56/9/095014>

Lång JJK, Punkkinen MPJ, Tuominen M, Hedman HP, Vähä-Heikkilä M, Polojärvi V, Salmi J, Korpijärvi VM, Schulte K, Kuzmin M, Punkkinen R, Laukkonen P, Guina M, Kokko K. 2014. Unveiling and controlling the electronic structure of oxidized semiconductor surfaces: Crystalline oxidized InSb(100)(1 × 2)-O: Crystalline oxidized InSb(100)(1 × 2)-O. *Physical Review B*. 90(4):1-9. <https://doi.org/10.1103/PhysRevB.90.045312>

Oksa M, Varis T, Ruusuvuori K. 2014. Performance testing of iron based thermally sprayed HVOF coatings in a biomass-fired fluidised bed boiler. *Surface and Coatings Technology*. 251:191-200. <https://doi.org/10.1016/j.surfcoat.2014.04.025>

Pluhařová E, Fischer HE, Mason PE, Jungwirth P. 2014. Hydration of the chloride ion in concentrated aqueous solutions using neutron scattering and molecular dynamics. *Molecular Physics*. 112(9-10):1230-1240. <https://doi.org/10.1080/00268976.2013.875231>

Ghabchi A, Sampath S, Holmberg K, Varis T. 2014. Damage mechanisms and cracking behavior of thermal sprayed WC-CoCr coating under scratch testing. *Wear*. 313(1-2):97-105. <https://doi.org/10.1016/j.wear.2014.02.017>

Ciranna A, Ferrari R, Santala V, Karp M. 2014. Inhibitory effects of substrate and soluble end products on biohydrogen production of the alkalithermophile Caloramator celer: Kinetic, metabolic and transcription analyses. *International Journal of Hydrogen Energy*. 39(12):6391-6401. <https://doi.org/10.1016/j.ijhydene.2014.02.047>

Priimagi A, Shevchenko A. 2014. Azopolymer-based micro- and nanopatterning for photonic applications. *Journal of Polymer Science. Part B, Polymer Physics*. 52(3):163-182. <https://doi.org/10.1002/polb.23390>

Ma L, Jackson KA, Wang J, Horoi M, Jellinek J. 2014. Investigating the metallic behavior of Na clusters using site-specific polarizabilities. *Physical Review B*. 89(3). <https://doi.org/10.1103/PhysRevB.89.035429>

Sorianello V, Colace L, Rajamani S, Assanto G. 2014. Design and simulation of optically controlled field effect transistors. *Physica Status Solidi C*. 11(1):81-84. <https://doi.org/10.1002/pssc.201300128>

Sorianello V, De Iacovo A, Colace L, Fabbri A, Tortora L, Assanto G. 2014. Spin-on-dopant phosphorus diffusion in germanium thin films for near-infrared detectors. *Physica Status Solidi C*. 11(1):57-60.  
<https://doi.org/10.1002/pssc.201300114>

Traille A, Kim S, Coustou A, Aubert H, Tentzeris MM. 2014. A conformal/rollable monolithic miniaturized ultra-portable ground penetrating radar using additive and inkjet printing. *teoksessa 2014 IEEE MTT-S International Microwave Symposium, IMS 2014*. Institute of Electrical and Electronics Engineers Inc.  
<https://doi.org/10.1109/MWSYM.2014.6848398>

Wang J, Ray AK. 2014. A full-potential linearized augmented plane wave study of the interaction of CO<sub>2</sub> with α-Pu (020) surface nanolayers. *Journal of Computational and Theoretical Nanoscience*. 11(7):1710-1717.  
<https://doi.org/10.1166/jctn.2014.3555>

Sand A, Rakkolainen I. 2014. A hand-held immaterial volumetric display. *teoksessa Proceedings of SPIE-IS and T Electronic Imaging - Stereoscopic Displays and Applications XXV*. SPIE. <https://doi.org/10.1117/12.2035280>

Kimionis J, Georgiadis A, Kim S, Collado A, Niotaki K, Tentzeris MM. 2014. An enhanced-range RFID tag using an ambient energy powered reflection amplifier. *teoksessa 2014 IEEE MTT-S International Microwave Symposium, IMS 2014*. Institute of Electrical and Electronics Engineers Inc. <https://doi.org/10.1109/MWSYM.2014.6848653>

Kim S, Aubert H, Tentzeris MM. 2014. An inkjet-printed flexible broadband coupler in substrate integrated waveguide (SIW) technology for sensing, RFID and communication applications. *teoksessa 2014 IEEE MTT-S International Microwave Symposium, IMS 2014*. Institute of Electrical and Electronics Engineers Inc.  
<https://doi.org/10.1109/MWSYM.2014.6848580>

Yao S, Georgakopoulos SV, Cook B, Tentzeris M. 2014. A novel reconfigurable origami accordion antenna. *teoksessa 2014 IEEE MTT-S International Microwave Symposium, IMS 2014*. Institute of Electrical and Electronics Engineers Inc.  
<https://doi.org/10.1109/MWSYM.2014.6848571>

Cho C, Yi X, Wang Y, Tentzeris MM, Leon RT. 2014. Compressive strain measurement using RFID patch antenna sensors. *teoksessa Sensors and Smart Structures Technologies for Civil, Mechanical, and Aerospace Systems 2014*. SPIE. <https://doi.org/10.1117/12.2045122>

Rasappa S, Borah D, Senthamarai Kannan R, Faulkner CC, Holmes JD, Morris MA. 2014. Fabrication of 3-D nanodimensioned electric double layer capacitor structures using block copolymer templates. *Journal Nanoscience and Nanotechnology*. 14(7):5221-5227. <https://doi.org/10.1166/jnn.2014.8668>

Varis T, Suhonen T, Ghabchi A, Valarezo A, Sampath S, Liu X, Hannula SP. 2014. Formation mechanisms, structure, and properties of HVOF-sprayed WC-CoCr coatings: An approach toward process maps. *Journal of Thermal Spray Technology*. 23(6):1009-1018. <https://doi.org/10.1007/s11666-014-0110-5>

Tehrani BK, Bito J, Cook BS, Tentzeris MM. 2014. Fully inkjet-printed multilayer microstrip and T-resonator structures for the RF characterization of printable materials and interconnects. *teoksessa 2014 IEEE MTT-S International Microwave Symposium, IMS 2014*. Institute of Electrical and Electronics Engineers Inc.  
<https://doi.org/10.1109/MWSYM.2014.6848664>

Vyas RJ, Bito J, Kim S, Tentzeris MM. 2014. Harvesting wireless signals from two-way talk-radios to power smart meters and displays. *teoksessa 2014 IEEE MTT-S International Microwave Symposium, IMS 2014*. Institute of Electrical and Electronics Engineers Inc. <https://doi.org/10.1109/MWSYM.2014.6848669>

Cook BS, Mariotti C, Cooper JR, Revier D, Tehrani BK, Aluigi L, Roselli L, Tentzeris MM. 2014. Inkjet-printed, vertically-integrated, high-performance inductors and transformers on flexible LCP substrate. *teoksessa 2014 IEEE MTT-S International Microwave Symposium, IMS 2014*. Institute of Electrical and Electronics Engineers Inc.  
<https://doi.org/10.1109/MWSYM.2014.6848575>

Ye C, Koponen J, Aallos V, Petit L, Kimmelma O, Kokki T. 2014. Mode coupling in few-mode large-mode-area fibers. teoksessa Fiber Lasers XI: Technology, Systems, and Applications. SPIE. <https://doi.org/10.1117/12.2038575>

Stumpel JE, Broer DJ, Bastiaansen CWM, Schenning APHJ. 2014. Optical and topographic changes in water-responsive patterned cholesteric liquid crystalline polymer coatings. teoksessa Proceedings of SPIE: Organic Photonics VI. SPIE. (Proceedings of SPIE: the International Society for Optical Engineering). <https://doi.org/10.1117/12.2052678>

Kantola E, Leinonen T, Ranta S, Tavast M, Guina M. 2014. Pulsed high-power yellow-orange VECSEL. teoksessa Photonics Europe 2014, Semiconductor Lasers and Laser Dynamics VI, April 14-17, 2014, Brussels, Belgium. Proceedings of SPIE. SPIE. (SPIE Conference Proceedings). <https://doi.org/10.1117/12.2054716>

Liu X, Yao S, Georgakopoulos SV, Cook BS, Tentzeris MM. 2014. Reconfigurable helical antenna based on an origami structure for wireless communication system. teoksessa 2014 IEEE MTT-S International Microwave Symposium, IMS 2014. Institute of Electrical and Electronics Engineers Inc. <https://doi.org/10.1109/MWSYM.2014.6848553>

Mokarian-Tabari P, Cummins C, Rasappa S, Simao C, Torres CMS, Holmes JD, Morris MA. 2014. Study of the kinetics and mechanism of rapid self-assembly in block copolymer thin films during solvo-microwave annealing. Langmuir. 30(35):10728-10739. <https://doi.org/10.1021/la503137q>

Mylläri V, Ruoko TP, Järvelä P. 2014. The effects of UV irradiation to polyetheretherketone fibres: Characterization by different techniques. Polymer Degradation and Stability. 109:278-284. <https://doi.org/10.1016/j.polymdegradstab.2014.08.003>

Cooper JR, Cook BS, Tentzeris MM. 2014. The first hardware-based, anti-collision methodology for frequency doubling transceivers for RFID and wireless sensing applications. teoksessa 2014 IEEE MTT-S International Microwave Symposium, IMS 2014. Institute of Electrical and Electronics Engineers Inc. <https://doi.org/10.1109/MWSYM.2014.6848626>

Wang Q, Sun Z, Rotenberg E, Ronning F, Bauer ED, Lin H, Markiewicz RS, Lindroos M, Barbiellini B, Bansil A, Dessau DS. 2013. Symmetry-broken electronic structure and uniaxial Fermi surface nesting of untwinned CaFe<sub>2</sub>As<sub>2</sub>. Physical Review B. 88(23). <https://doi.org/10.1103/PhysRevB.88.235125>

Cook BS, Cooper JR, Tentzeris MM. 2013. An inkjet-printed microfluidic rfid-enabled platform for wireless lab-on-chip applications. IEEE Transactions on Microwave Theory and Techniques. 61(12):4714-4723. <https://doi.org/10.1109/TMTT.2013.2287478>

Diban N, Haimi SP, Bolhuis-Versteeg L, Teixeira S, Miettinen S, Poot AA, Grijpma DW, Stamatialis D. 2013. Effect of surface morphology of poly(iμ-caprolactone) scaffolds on adipose stem cell adhesion and proliferation. Macromolecular symposia. 334(1):126-132. <https://doi.org/10.1002/masy.201300106>

Gebraad AWH, Miettinen S, Grijpma DW, Haimi SP. 2013. Human adipose stem cells in chondrogenic differentiation medium without growth factors differentiate towards annulus fibrosus phenotype in vitro. Macromolecular symposia. 334(1):49-56. <https://doi.org/10.1002/masy.201300104>

German SJ, Behbahani M, Miettinen S, Grijpma DW, Haimi SP. 2013. Proliferation and differentiation of adipose stem cells towards smooth muscle cells on poly(trimethylene carbonate) membranes. Macromolecular symposia. 334(1):133-142. <https://doi.org/10.1002/masy.201300100>

Kivistö A, Santala V, Karp M. 2013. Non-sterile process for biohydrogen and 1,3-propanediol production from raw glycerol . International Journal of Hydrogen Energy. 38(27):11749-11755. <https://doi.org/10.1016/j.ijhydene.2013.06.119>

Seppälä JJ, Larjo A, Aho T, Yli-Harja O, Karp MT, Santala V. 2013. Prospecting hydrogen production of Escherichia coli by metabolic network modeling. International Journal of Hydrogen Energy. 38(27):11780-11789. <https://doi.org/10.1016/j.ijhydene.2013.07.002>

Yi X, Cho C, Cooper J, Wang Y, Tentzeris MM, Leon RT. 2013. Passive wireless antenna sensor for strain and crack sensing - Electromagnetic modeling, simulation, and testing. *Smart Materials and Structures*. 22(8). <https://doi.org/10.1088/0964-1726/22/8/085009>

Borah D, Rasappa S, Senthamarai Kannan R, Holmes JD, Morris MA. 2013. Tuning PDMS brush chemistry by UV-O<sub>3</sub> exposure for PS-b-PDMS microphase separation and directed self-assembly. *Langmuir*. 29(28):8959-8968. <https://doi.org/10.1021/la401561k>

Cook BS, Cooper JR, Tentzeris MM. 2013. Multi-layer RF capacitors on flexible substrates utilizing inkjet printed dielectric polymers. *IEEE Microwave and Wireless Components Letters*. 23(7):353-355. <https://doi.org/10.1109/LMWC.2013.2264658>

Gordon TR, Paik T, Klein DR, Naik GV, Caglayan H, Boltasseva A, Murray CB. 2013. Shape-dependent plasmonic response and directed self-assembly in a new semiconductor building block, indium-doped cadmium oxide (ICO). *Nano Letters*. 13(6):2857-2863. <https://doi.org/10.1021/nl4012003>

Thomann O, Pihlatie M, Rautanen M, Himanen O, Lagerbom J, Mäkinen M, Varis T, Suhonen T, Kiviah J. 2013. Development and application of HVOF sprayed spinel protective coating for SOFC interconnects. *Journal of Thermal Spray Technology*. 22(5):631-639. <https://doi.org/10.1007/s11666-012-9880-9>

Oksa M, Tuurna S, Varis T. 2013. Increased lifetime for biomass and waste to energy power plant boilers with HVOF coatings: High temperature corrosion testing under chlorine-containing molten salt. *Journal of Thermal Spray Technology*. 22(5):783-796. <https://doi.org/10.1007/s11666-013-9928-5>

Pelto JM, Haimi SP, Siljander AS, Miettinen SS, Tappura KM, Higgins MJ, Wallace GG. 2013. Surface properties and interaction forces of biopolymer-doped conductive polypyrrole surfaces by atomic force microscopy. *Langmuir*. 29(20):6099-6108. <https://doi.org/10.1021/la4009366>

McManamon C, Delaney P, Kavanagh C, Wang JJ, Rasappa S, Morris MA. 2013. Depth profiling of PLGA copolymer in a novel biomedical bilayer using confocal raman spectroscopy. *Langmuir*. 29(19):5905-5910. <https://doi.org/10.1021/la400402a>

Rooj S, Das A, Stöckelhuber KW, Wang DY, Galiatsatos V, Heinrich G. 2013. Understanding the reinforcing behavior of expanded clay particles in natural rubber compounds. *Soft Matter*. 9(14):3798-3808. <https://doi.org/10.1039/c3sm27519a>

Cochrane C, Mordon SR, Lesage JC, Koncar V. 2013. New design of textile light diffusers for photodynamic therapy. *Materials Science and Engineering C: Materials for Biological Applications*. 33(3):1170-1175. <https://doi.org/10.1016/j.msec.2012.12.007>

Borah D, Ozmen M, Rasappa S, Shaw MT, Holmes JD, Morris MA. 2013. Molecularly functionalized silicon substrates for orientation control of the microphase separation of PS-b-PMMA and PS-b-PDMS block copolymer systems. *Langmuir*. 29(9):2809-2820. <https://doi.org/10.1021/la304140q>

Barboza R, Bortolozzo U, Assanto G, Residori S. 2013. Optical vortex generation in nematic liquid crystal light valves. *Molecular Crystals and Liquid Crystals*. 572(1):24-30. <https://doi.org/10.1080/15421406.2012.763206>

Pitkänen H, Alatalo M, Puisto A, Ropo M, Kokko K, Vitos L. 2013. Ab initio study of the surface properties of austenitic stainless steel alloys. *Surfase Science*. 609:190-194. <https://doi.org/10.1016/j.susc.2012.12.007>

Wang J, Ma L, Wang G. 2013. Adsorption behavior and electronic properties of Pd<sub>n</sub> (n ≤ 10) clusters on silicon carbide nanotubes: A first-principles study. *Journal of Physics: Condensed Matter*. 25(8). <https://doi.org/10.1088/0953-8984/25/8/085302>

Fafarman AT, Hong SH, Caglayan H, Ye X, Diroll BT, Paik T, Engheta N, Murray CB, Kagan CR. 2013. Chemically tailored dielectric-to-metal transition for the design of metamaterials from nanoimprinted colloidal nanocrystals. *Nano Letters*. 13(2):350-357. <https://doi.org/10.1021/nl303161d>

Wang H, Feng Y, Zhao H, Fang Z, Khan M, Guo J. 2013. A potential nonthrombogenic small-diameter vascular scaffold with polyurethane/poly(ethylene glycol) hybrid materials by electrospinning technique. *Journal Nanoscience and Nanotechnology*. 13(2):1578-1582. <https://doi.org/10.1166/jnn.2013.6051>

Ma L, Ray AK. 2013. Growth behavior and magnetic properties of spherical uranium oxide nanoclusters. *Journal of Computational and Theoretical Nanoscience*. 10(2):334-340. <https://doi.org/10.1166/jctn.2013.2701>

Quan X, Li R, Tentzeris MM. 2013. A broadband omnidirectional circularly polarized antenna. *IEEE Transactions on Antennas and Propagation*. 61(5):2363-2370. <https://doi.org/10.1109/TAP.2012.2237532>

De Paolis R, Le T, Coccetti F, Monti G, Tarricone L, Tentzeris MM, Plana R. 2013. A novel circuit model of nanotechnology-enabled inkjet-printed gas sensors using multi-wall carbon nanotubes. *teoksessa 2013 IEEE MTT-S International Microwave Symposium Digest*, MTT 2013. <https://doi.org/10.1109/MWSYM.2013.6697790>

Kim S, Cook B, Cooper J, Traille A, Georgiadis A, Aubert H, Tentzeris MM. 2013. A novel dual-band retro-directive reflector array on paper utilizing Substrate Integrated Waveguide (SIW) and inkjet printing technologies for chipless RFID tag and sensor applications. *teoksessa 2013 IEEE MTT-S International Microwave Symposium Digest*, MTT 2013. <https://doi.org/10.1109/MWSYM.2013.6697704>

Cook BS, Cooper JR, Kim S, Tentzeris MM. 2013. A novel inkjet-printed passive microfluidic RFID-based sensing platform . *teoksessa 2013 IEEE MTT-S International Microwave Symposium Digest*, MTT 2013. <https://doi.org/10.1109/MWSYM.2013.6697592>

Vyas R, Cook B, Kawahara Y, Tentzeris M. 2013. A self-sustaining, autonomous, wireless-sensor beacon powered from long-range, ambient, RF energy. *teoksessa 2013 IEEE MTT-S International Microwave Symposium Digest*, MTT 2013. <https://doi.org/10.1109/MWSYM.2013.6697786>

Naishadham K, Li R, Yang L, Wu T, Hunsicker W, Tentzeris M. 2013. A shared-aperture dual-band planar array with self-similar printed folded dipoles. *IEEE Transactions on Antennas and Propagation*. 61(2):606-613. <https://doi.org/10.1109/TAP.2012.2216491>

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 AR, Marchevsky M, Russenschuck S, Sabbi GL, Salmi T, Schmalzle J, Todesco E, Wanderer P, Wang X, Yu M. 2013. Cold test results of the LARP HQ Nb<sub>3</sub>Sn quadrupole magnet at 1.9 K. *IEEE Transactions on Applied Superconductivity*. 23(3). <https://doi.org/10.1109/TASC.2013.2245281>

Yi X, Cho C, Cook B, Wang Y, Tentzeris MM, Leon RT. 2013. Design and simulation of a slotted patch antenna sensor for wireless strain sensing. *teoksessa Nondestructive Characterization for Composite Materials, Aerospace Engineering, Civil Infrastructure, and Homeland Security* 2013. <https://doi.org/10.1117/12.2009233>

Vyas RJ, Cook BB, Kawahara Y, Tentzeris MM. 2013. E-WEHP: A batteryless embedded sensor-platform wirelessly powered from ambient digital-TV signals. *IEEE Transactions on Microwave Theory and Techniques*. 61(6):2491-2505. <https://doi.org/10.1109/TMTT.2013.2258168>

Kim S, Kawahara Y, Georgiadis A, Collado A, Tentzeris MM. 2013. Low-cost inkjet-printed fully passive RFID tags using metamaterial-inspired antennas for capacitive sensing applications. *teoksessa 2013 IEEE MTT-S International Microwave Symposium Digest*, MTT 2013. <https://doi.org/10.1109/MWSYM.2013.6697644>

Ronkainen H, Kanerva U, Varis T, Ruusuvuori K, Turunen E, Peräntie J, Putala J, Juuti J, Jantunen H. 2013. Materials for electronics by thermal spraying. In: *teoksessa Physical and Numerical Simulation of Materials Processing VII*. Sivut 451-456. (Materials Science Forum). <https://doi.org/10.4028/www.scientific.net/MSF.762.451>

Alatalo M, Pitkänen H, Ropo M, Kokko K, Vitos L. 2013. Modeling of steels and steel surfaces using quantum mechanical first principles methods. In: *teoksessa Physical and Numerical Simulation of Materials Processing VII*. Sivut 445-450. (Materials Science Forum). <https://doi.org/10.4028/www.scientific.net/MSF.762.445>

Kim S, Mariotti C, Alimenti F, Mezzanotte P, Georgiadis A, Collado A, Roselli L, Tentzeris MM. 2013. No battery required: Perpetual rfid-enabled wireless sensors for cognitive intelligence applications. *IEEE Microwave Magazine*. 14(5):66-77. <https://doi.org/10.1109/MMM.2013.2259398>

Cook BS, Le T, Palacios S, Traillle A, Tentzeris MM. 2013. Only skin deep: Inkjet-printed zero-power sensors for large-scale RFID-integrated smart skins. *IEEE Microwave Magazine*. 14(3):103-114. <https://doi.org/10.1109/MMM.2013.2240855>

Wang H, Feng Y, Fang Z, Yuan W, Khan M. 2012. Co-electrospun blends of PU and PEG as potential biocompatible scaffolds for small-diameter vascular tissue engineering. *Materials Science and Engineering C: Materials for Biological Applications*. 32(8):2306-2315. <https://doi.org/10.1016/j.msec.2012.07.001>

Mahimwalla Z, Yager KG, Mamiya JI, Shishido A, Priimagi A, Barrett CJ. 2012. Azobenzene photomechanics: Prospects and potential applications. *Polymer Bulletin*. 69(8):967-1006. <https://doi.org/10.1007/s00289-012-0792-0>

Kapgate BP, Das C, Das A, Basu D, Reuter U, Heinrich G. 2012. Effect of sol-gel derived in situ silica on the morphology and mechanical behavior of natural rubber and acrylonitrile butadiene rubber blends. *JOURNAL OF SOL-GEL SCIENCE AND TECHNOLOGY*. 63(3):501-509. <https://doi.org/10.1007/s10971-012-2812-9>

Vikholm-Lundin I, Auer S, Paakkunainen M, Määttä JAE, Munter T, Leppiniemi J, Hytönen VP, Tappura K. 2012. Cysteine-tagged chimeric avidin forms high binding capacity layers directly on gold. *Sensors and Actuators B: Chemical*. 171-172:440-448. <https://doi.org/10.1016/j.snb.2012.05.008>

Serak SV, Tabiryan NV, Assanto G. 2012. Nematicons in azobenzene liquid crystals. *Molecular Crystals and Liquid Crystals*. 559:202-213. <https://doi.org/10.1080/15421406.2012.658710>

Ananthasayanam B, Joseph PF, Joshi D, Gaylord S, Petit L, Blouin VY, Richardson KC, Cler DL, Stairker M, Tardiff M. 2012. Final shape of precision molded optics: Part II - Validation and sensitivity to material properties and process parameters. *JOURNAL OF THERMAL STRESSES*. 35(7):614-636. <https://doi.org/10.1080/01495739.2012.674838>

Priimagi A, Cavallo G, Forni A, Gorynsztein-Leben M, Kaivola M, Metrangolo P, Milani R, Shishido A, Pilati T, Resnati G, Terraneo G. 2012. Halogen bonding versus hydrogen bonding in driving self-assembly and performance of light-responsive supramolecular polymers. *Advanced Functional Materials*. 22(12):2572-2579. <https://doi.org/10.1002/adfm.201200135>

Ananthasayanam B, Joseph PF, Joshi D, Gaylord S, Petit L, Blouin VY, Richardson KC, Cler DL, Stairker M, Tardiff M. 2012. Final shape of precision molded optics: Part I - Computational approach, material definitions and the effect of lens shape. *JOURNAL OF THERMAL STRESSES*. 35(6):550-578. <https://doi.org/10.1080/01495739.2012.674830>

Subramaniam K, Das A, Häußler L, Harnisch C, Stöckelhuber KW, Heinrich G. 2012. Enhanced thermal stability of polychloroprene rubber composites with ionic liquid modified MWCNTs. *Polymer Degradation and Stability*. 97(5):776-785. <https://doi.org/10.1016/j.polymdegradstab.2012.02.001>

Morrison JT, Storm M, Chowdhury E, Akli KU, Feldman S, Willis C, Daskalova RL, Growden T, Berger P, Ditmire T, Van Woerkom L, Freeman RR. 2012. Selective deuteron production using target normal sheath acceleration. *Physics of Plasmas*. 19(3). <https://doi.org/10.1063/1.3695061>

Viitala M, Kuisma M, Rantala TT. 2012. Physisorption of benzene on a tin dioxide surface: Van der Waals interaction. *Physical Review B*. 85(8):1-5. <https://doi.org/10.1103/PhysRevB.85.085412>

Vyas R, Nishimoto H, Tentzeris M, Kawahara Y, Asami T. 2012. A battery-less, energy harvesting device for long range scavenging of wireless power from terrestrial TV broadcasts. *teoksessa IMS 2012 - 2012 IEEE MTT-S International Microwave Symposium*. <https://doi.org/10.1109/MWSYM.2012.6259708>

Kim S, Georgiadis A, Collado A, Tentzeris MM. 2012. An inkjet-printed solar-powered wireless beacon on paper for identification and wireless power transmission applications. *IEEE Transactions on Microwave Theory and Techniques*. 60(12):4178-4186. <https://doi.org/10.1109/TMTT.2012.2222922>

Lee H, Kim S, De Donno D, Tentzeris MM. 2012. A novel Universal inkjet-printed EBG-backed flexible RFID for rugged on-body and metal mounted applications. *teoksessa IMS 2012 - 2012 IEEE MTT-S International Microwave Symposium*. <https://doi.org/10.1109/MWSYM.2012.6259728>

Yang D, Feng Y, Behl M, Lendlein A, Zhao H, Khan M, Guo J. 2012. Biomimetic hemo-compatible surfaces of polyurethane by grafting copolymer brushes of poly(ethylene glycol) and poly(phosphorylcholine methacrylate). *teoksessa Multifunctional Polymer-Based Materials*. Sivut 171-176. <https://doi.org/10.1557/opl.2012.702>

Borah D, Rasappa S, Kosmala B, Holmes JD, Morris MA. 2012. Block copolymer self-assembly on ethylene glycol (EG) self-assembled monolayer (SAM) for nanofabrication. *teoksessa Nanoscale Materials Modification by Photon, Ion, and Electron Beams*. Sivut 8-13. <https://doi.org/10.1557/opl.2012.1224>

De Donno D, Lakafosis V, Tarricone L, Tentzeris MM. 2012. Increasing performance of SDR-based collision-free RFID systems. *teoksessa IMS 2012 - 2012 IEEE MTT-S International Microwave Symposium*. <https://doi.org/10.1109/MWSYM.2012.6259645>

Leuteritz A, Kutlu B, Meinl J, Wang D, Das A, Wagenknecht U, Heinrich G. 2012. Layered Double Hydroxides (LDH): A multifunctional versatile system for nanocomposites. *Molecular Crystals and Liquid Crystals*. 556:107-113. <https://doi.org/10.1080/15421406.2012.635923>

De Donno D, Tarricone L, Catarinucci L, Lakafosis V, Tentzeris MM. 2012. Performance enhancement of the RFID EPC Gen2 protocol by exploiting collision recovery. *Progress in Electromagnetics Research B*. (43):53-72.

Sane N, Ford J, Harris AI, Bhattacharyya SS. 2012. Prototyping scalable digital signal processing systems for radio astronomy using dataflow models. *Radio Science*. 47(3). <https://doi.org/10.1029/2011RS004924>

Yi X, Vyas R, Cho C, Fang CH, Cooper J, Wang Y, Leon RT, Tentzeris MM. 2012. Thermal effects on a passive wireless antenna sensor for strain and crack sensing. *teoksessa Sensors and Smart Structures Technologies for Civil, Mechanical, and Aerospace Systems 2012*. <https://doi.org/10.1117/12.914833>

Georgiadis A, Collado A, Kim S, Lee H, Tentzeris MM. 2012. UHF solar powered active oscillator antenna on low cost flexible substrate for wireless identification applications. *teoksessa IMS 2012 - 2012 IEEE MTT-S International Microwave Symposium*. <https://doi.org/10.1109/MWSYM.2012.6259643>

Assanto G, Marchant TR, Minzoni AA, Smyth NF. 2011. Reorientational versus Kerr dark and gray solitary waves using modulation theory. *Physical Review E*. 84(6). <https://doi.org/10.1103/PhysRevE.84.066602>

Kim ST, Choi J, Chae K, Beck S, Kim SH, Bien F, Lee CH, Lim K, Laskar J, Tentzeris MM. 2011. A non-interruptive link-variation monitoring circuit for wireless sensor applications. *IEEE Microwave and Wireless Components Letters*. 21(12):691-693. <https://doi.org/10.1109/LMWC.2011.2170828>

Zhang T, Li R, Jin G, Wei G, Tentzeris MM. 2011. A novel multiband planar antenna for GSM/UMTS/LTE/Zigbee/RFID mobile devices. *IEEE Transactions on Antennas and Propagation*. 59(11):4209-4214. <https://doi.org/10.1109/TAP.2011.2164201>

Pakarinen OM, Kaparaju PLN, Rintala JA. 2011. Hydrogen and methane yields of untreated, water-extracted and acid (HCl) treated maize in one- and two-stage batch assays. *International Journal of Hydrogen Energy*. 36(22):14401-14407. <https://doi.org/10.1016/j.ijhydene.2011.08.028>

Zhong WP, Belić MR, Assanto G. 2011. Localized nonlinear wavepackets with radial-azimuthal modulated nonlinearity and an external potential. *Physica Scripta*. 84(5). <https://doi.org/10.1088/0031-8949/84/05/055001>

Wang J, Ray AK. 2011. Adsorption and dissociation of molecular oxygen on  $\alpha$ -Pu (0 2 0) surface: A density functional study. *Physica B: Condensed Matter*. 406(17):3285-3294. <https://doi.org/10.1016/j.physb.2011.05.041>

Vikholm-Lundin I, Auer S, Hellgren AC. 2011. Detection of 3,4-methylenedioxymethamphetamine (MDMA, ecstasy) by displacement of antibodies. *Sensors and Actuators B: Chemical*. 156(1):28-34. <https://doi.org/10.1016/j.snb.2011.03.069>

Uusitalo MA, Peltonen J, Ryhänen T. 2011. Machine learning: How it can help nanocomputing. *Journal of Computational and Theoretical Nanoscience*. 8(8):1347-1363. <https://doi.org/10.1166/jctn.2011.1821>

Ropo M, Kokko K, Airiskallio E, Punkkinen MPJ, Hogmark S, Kollr J, Johansson B, Vitos L. 2011. First-principles atomistic study of surfaces of Fe-rich Fe-Cr. *Journal of Physics: Condensed Matter*. 23(26). <https://doi.org/10.1088/0953-8984/23/26/265004>

Assanto G, Garca-Reimbert C, Minzoni AA, Smyth NF, Worthy AL. 2011. Lagrange solution for three wavelength solitary wave clusters in nematic liquid crystals. *Physica D: Nonlinear Phenomena*. 240(14-15):1213-1219. <https://doi.org/10.1016/j.physd.2011.04.019>

Bottura L, Bonasia A, Borgnolutti F, Gaertner W, Le Naour S, Oberli L, Peiro G, Richter D, Salmi T, Sikler G, Willering G. 2011. Strand and cable R&D for fast cycled magnets at CERN. *IEEE Transactions on Applied Superconductivity*. 21(3 PART 2):2354-2358. <https://doi.org/10.1109/TASC.2011.2105236>

Zhong WP, Belić M, Assanto G, Huang T. 2011. Three-dimensional spatiotemporal vector solitary waves. *JOURNAL OF PHYSICS B: ATOMIC MOLECULAR AND OPTICAL PHYSICS*. 44(9). <https://doi.org/10.1088/0953-4075/44/9/095403>

Borah D, Shaw MT, Rasappa S, Farrell RA, O'Mahony C, Faulkner CM, Bosea M, Gleeson P, Holmes JD, Morris MA. 2011. Plasma etch technologies for the development of ultra-small feature size transistor devices. *Journal of Physics D: Applied Physics*. 44(17). <https://doi.org/10.1088/0022-3727/44/17/174012>

Ma L, Ray AK. 2011. An ab initio study of  $\text{PuO}_{2\pm0.25}$ ,  $\text{UO}_{2\pm0.25}$ , and  $\text{U}0.5\text{Pu}0.5\text{O}_{2\pm0.25}$ . *European Physical Journal B*. 81(1):103-113. <https://doi.org/10.1140/epjb/e2011-10759-0>

Manna M, Mukhopadhyay C. 2011. Molecular dynamics simulations of the interactions of kinin peptides with an anionic POPG bilayer. *Langmuir*. 27(7):3713-3722. <https://doi.org/10.1021/la104046z>

Sorianello V, Colace L, Assanto G, Nardone M. 2011. Micro-Raman characterization of Germanium thin films evaporated on various substrates. *Microelectronic Engineering*. 88(4):492-495. <https://doi.org/10.1016/j.mee.2010.10.028>

Colace L, Sorianello V, Romagnoli M, Socci L, Assanto G. 2011. Optical power monitors in Ge monolithically integrated on SOI chips. *Microelectronic Engineering*. 88(4):514-517. <https://doi.org/10.1016/j.mee.2010.10.033>

Sorianello V, Colace L, Assanto G, Notargiacomo A, Armani N, Rossi F, Ferrari C. 2011. Thermal evaporation of Ge on Si for near infrared detectors: Material and device characterization. *Microelectronic Engineering*. 88(4):526-529. <https://doi.org/10.1016/j.mee.2010.09.024>

Potapov I, Volkov E, Kuznetsov A. 2011. Dynamics of coupled repressilators: The role of mRNA kinetics and transcription cooperativity. *Physical Review E*. 83(3). <https://doi.org/10.1103/PhysRevE.83.031901>

Alimenti F, Virili M, Orecchini G, Mezzanotte P, Palazzari V, Tentzeris MM, Roselli L. 2011. A new contactless assembly method for paper substrate antennas and UHF RFID chips. *IEEE Transactions on Microwave Theory and Techniques*. 59(3):627-637. <https://doi.org/10.1109/TMTT.2010.2103210>

Lisjak D, Lintunen P, Hujanen A, Varis T, Bolelli G, Lusvarghi L, Jagodič M, Drofenik M. 2011. Hexaferrite/polyethylene Composite coatings prepared with flame spraying. *Materials Letters*. 65(3):534-536. <https://doi.org/10.1016/j.matlet.2010.10.076>

Petelenz P, Kulig W. 2011. Absorption profile and femtosecond intraband relaxation of the intense upper Davydov component in oligothiophenes. *Physica Status Solidi B: Basic Solid State Physics*. 248(2):412-415. <https://doi.org/10.1002/pssb.201000640>

Lakafosis V, Traillle A, Lee H, Gebara E, Tentzeris MM, Dejean GR, Kirovski D. 2011. RF fingerprinting physical objects for anticounterfeiting applications. *IEEE Transactions on Microwave Theory and Techniques*. 59(2):504-514. <https://doi.org/10.1109/TMTT.2010.2095030>

Gupta SK, Wu HH, Kwak KJ, Casal P, Nicholson TR, Wen X, Anisha R, Bhushan B, Berger PR, Lu W, Brillson LJ, Lee SC. 2011. Interfacial design and structure of protein/polymer films on oxidized AlGaN surfaces. *Journal of Physics D: Applied Physics*. 44(3). <https://doi.org/10.1088/0022-3727/44/3/034010>

Gilardi G, Asquini R, D'Alessandro A, Assanto G. 2011. An electro-optically tunable Bragg reflector based on liquid crystals. *Molecular Crystals and Liquid Crystals*. 549:62-68. <https://doi.org/10.1080/15421406.2011.581137>

Lee H, Shaker G, Naishadham K, Song X, McKinley M, Wagner B, Tentzeris M. 2011. Carbon-nanotube loaded antenna-based ammonia gas sensor. *IEEE Transactions on Microwave Theory and Techniques*. 59(10 PART 2):2665-2673. <https://doi.org/10.1109/TMTT.2011.2164093>

De Paolis R, Pacchini S, Coccetti F, Monti G, Tarricone L, Tentzeris MM, Plana R. 2011. Circuit model of carbon-nanotube inks for microelectronic and microwave tunable devices. *teoksessa 2011 IEEE MTT-S International Microwave Symposium, IMS 2011*. <https://doi.org/10.1109/MWSYM.2011.5972853>

Occhiuzzi C, Rida A, Marrocco G, Tentzeris MM. 2011. CNT-based RFID passive gas sensor. *teoksessa 2011 IEEE MTT-S International Microwave Symposium, IMS 2011*. <https://doi.org/10.1109/MWSYM.2011.5972715>

Thai TT, Aubert H, Pons P, Tentzeris MM, Plana R. 2011. Design of a highly sensitive wireless passive RF strain transducer. *teoksessa 2011 IEEE MTT-S International Microwave Symposium, IMS 2011*. <https://doi.org/10.1109/MWSYM.2011.5972980>

Lagerbom J, Ritvonen T, Suhonen T, Varis T. 2011. Gas atomized thermal spray powders of various metals and alloys. *teoksessa Proceedings of the Euro International Powder Metallurgy Congress and Exhibition, Euro PM 2011. European Powder Metallurgy Association (EPMA)*.

Sapaev UK, Yusupov DB, Assanto G. 2011. Multicolor nonlinear pulse compression by consecutive optical parametric amplification in quasi-phase matched structures. *teoksessa ICONO 2010: International Conference on Coherent and Nonlinear Optics*. <https://doi.org/10.1117/12.882887>

Traille A, Tentzeris MM. 2011. Multi-resolution time-domain and level-set techniques for multi-domain/multi-physics/multi-phase simulations. teoksessa 2011 IEEE MTT-S International Microwave Symposium, IMS 2011. <https://doi.org/10.1109/MWSYM.2011.5972741>

Occhiuzzi C, Rida A, Marrocco G, Tentzeris M. 2011. RFID passive gas sensor integrating carbon nanotubes. IEEE Transactions on Microwave Theory and Techniques. 59(10 PART 2):2674-2684. <https://doi.org/10.1109/TMTT.2011.2163416>

Yi X, Wu T, Lantz G, Wang Y, Leon RT, Tentzeris MM. 2011. Thickness variation study of RFID-based folded patch antennas for strain sensing. teoksessa Sensors and Smart Structures Technologies for Civil, Mechanical, and Aerospace Systems 2011. <https://doi.org/10.1117/12.879868>

Orecchini G, Yang L, Tentzeris MM, Roselli L. 2011. Wearable battery-free active paper printed RFID tag with human-energy scavenger. teoksessa 2011 IEEE MTT-S International Microwave Symposium, IMS 2011. <https://doi.org/10.1109/MWSYM.2011.5972808>

Rondin L, Dantelle G, Slablab A, Grosshans F, Treussart F, Bergonzo P, Perruchas S, Gacoin T, Chaigneau M, Chang HC, Jacques V, Roch JF. 2010. Surface-induced charge state conversion of nitrogen-vacancy defects in nanodiamonds. Physical Review B. 82(11). <https://doi.org/10.1103/PhysRevB.82.115449>

Dantelle G, Slablab A, Rondin L, Lainé F, Carrel F, Bergonzo P, Perruchas S, Gacoin T, Treussart F, Roch JF. 2010. Efficient production of NV colour centres in nanodiamonds using high-energy electron irradiation. Journal of Luminescence . 130(9):1655-1658. <https://doi.org/10.1016/j.jlumin.2009.12.003>

Emmert-Streib F. 2010. Exploratory analysis of spatiotemporal patterns of cellular automata by clustering compressibility. Physical Review E. 81(2). <https://doi.org/10.1103/PhysRevE.81.026103>

Caglayan H, Özbay E. 2010. Observation of cavity structures in composite metamaterials. Journal of Nanophotonics. 4(1). <https://doi.org/10.1117/1.3475763>

Emmert-Streib F, Dehmer M. 2009. Fault tolerance of information processing in gene networks. Physica A: Statistical Mechanics and Its Applications. 388(4):541-548. <https://doi.org/10.1016/j.physa.2008.10.032>

Caglayan H, Bulu I, Ozbay E. 2009. Observation of off-axis directional beaming via subwavelength asymmetric metallic gratings. Journal of Physics D: Applied Physics. 42(4). <https://doi.org/10.1088/0022-3727/42/4/045105>

Caglayan H, Ozbay E. 2009. The magical world of metamaterials. teoksessa Photonic Materials, Devices, and Applications III. (Proceedings of SPIE). <https://doi.org/10.1117/12.821407>

Caglayan H, Bulu I, Loncar M, Ozbay E. 2008. Cavity formation in split ring resonators. Photonics and Nanostructures - Fundamentals and Applications. 6(3-4):200-204. <https://doi.org/10.1016/j.photonics.2008.09.001>

Papadimitriou C, Kalimeri M, Eftaxias K. 2008. Nonextensivity and universality in the earthquake preparation process. Physical Review E. 77(3). <https://doi.org/10.1103/PhysRevE.77.036101>

Özbay E, Bulu I, Caglayan H. 2007. Transmission, refraction, and focusing properties of labyrinth based left-handed metamaterials. Physica Status Solidi (B) Basic Research. 244(4):1202-1210. <https://doi.org/10.1002/pssb.200674507>

Bulu I, Caglayan H, Ozbay E. 2006. Designing materials with desired electromagnetic properties. Microwave and Optical Technology Letters. 48(12):2611-2615. <https://doi.org/10.1002/mop.21988>

Ozbay E, Bulu I, Caglayan H. 2006. Labyrinth based left-handed metamaterials and sub-wavelength focusing of electromagnetic waves. teoksessa Photonic Crystal Materials and Devices IV. (Proceedings of SPIE). <https://doi.org/10.1117/12.649548>

Wojdyła M, Bała W, Derkowska B, Łukasiak Z, Czaplicki R, Sofiani Z, Dabos-Seignon S, Sahraoui B. 2006. Photoluminescence and third harmonic generation in ZnPc thin films. *Nonlinear Optics, Quantum Optics*. 35(1-3):103-119.

Bulu I, Caglayan H, Ozbay E. 2005. Negative refraction and focusing of electromagnetic waves by metallocodielectric photonic crystals. *Physical Review B - Condensed Matter and Materials Physics*. 72(4). <https://doi.org/10.1103/PhysRevB.72.045124>

Ozbay E, Bulu I, Aydin K, Caglayan H, Alici KB, Guven K. 2005. Highly directive radiation and negative refraction using photonic crystals. *Laser Physics*. 15(2):217-224.

Söderlund M, Koponen J, Tammela S, Philippov V, Po H. 2005. Design considerations for large-mode-area polarization maintaining double clad fibers. *Driggers RG, Huckridge DA, Toimittajat. teoksessa Proceedings of SPIE - The International Society for Optical Engineering*. <https://doi.org/10.1117/12.630474>

Caglayan H, Bulu I, Ozbay E. 2005. Highly directional enhanced radiation from sources embedded inside two and three-dimensional photonic crystals. *teoksessa Proceedings of SPIE. SPIE. Sivut 131-141. (Proceedings of SPIE)*. <https://doi.org/10.1117/12.587503>

Payne DN, Jeong Y, Nilsson J, Sahu JK, Soh DBS, Alegria C, Dupriez P, Codemard CA, Philippov VN, Hernandez V, Horley R, Hickey L, Wanzyk L, Chryssou CE, Alvarez-Chavez JA, Turner PW. 2005. Kilowatt-class single-frequency fiber sources. *Durvasula LN, Brown AJW, Nilsson J, Toimittajat. teoksessa Proceedings of SPIE - The International Society for Optical Engineering. Sivut 133-141*. <https://doi.org/10.1117/12.601145>

Ozbay E, Bulu I, Aydin K, Caglayan H, Guven K. 2004. Physics and applications of photonic crystals. *Photonics and Nanostructures - Fundamentals and Applications*. 2(2):87-95. <https://doi.org/10.1016/j.photonics.2004.08.001>

Bulu I, Caglayan H, Ozbay E. 2003. Radiation properties of sources inside photonic crystals. *Physical Review B - Condensed Matter and Materials Physics*. 67(20). <https://doi.org/10.1103/PhysRevB.67.205103>

Rantala TT, Rantala TS, Lantto V. 1999. Surface relaxation of the (110) face of rutile SnO<sub>2</sub>. *Surfase Science*. 420(1):103-109. [https://doi.org/10.1016/S0039-6028\(98\)00833-4](https://doi.org/10.1016/S0039-6028(98)00833-4)

Valkealahti S, Manninen M. 1998. Diffusion on aluminum-cluster surfaces and the cluster growth. *Physical Review B - Condensed Matter and Materials Physics*. 57(24):15533-15540. <https://doi.org/10.1103/PhysRevB.57.15533>

Grigore V, Hatonen J, Kyrya J, Suntio T. 1998. Dynamics of a buck converter with a constant power load. *teoksessa PESC 1998 - 29th Annual IEEE Power Electronics Specialists Conference. Institute of Electrical and Electronics Engineers Inc. Sivut 72-78. (PESC Record - IEEE Annual Power Electronics Specialists Conference)*. <https://doi.org/10.1109/PESC.1998.701881>

Valkealahti S, Manninen M. 1997. Molecular dynamics simulation of crystallization of liquid copper clusters. *Journal of Physics Condensed Matter*. 9(20):4041-4050. <https://doi.org/10.1088/0953-8984/9/20/004>

Lorimer GW, Dicken R, Peura P, Pilkington R, Younes CM, Allen GC, Holt MJ. 1996. The effect of phosphorous and arsenic on the fracture behaviour of a 2,25% Cr-1% Mo Steel. *Materials Science Forum*. 207-209(PART 2):645-648.

Rantala TT, Rantala TS, Lantto V, Vaara J. 1996. Surface relaxation of the (1010) face of wurtzite CdS. *Surfase Science*. 352-354:77-82. [https://doi.org/10.1016/0039-6028\(95\)01094-7](https://doi.org/10.1016/0039-6028(95)01094-7)

Valkealahti S, Näher U, Manninen M. 1995. Epitaxial growth of fcc clusters. *Physical Review B*. 51(16):11039-11042. <https://doi.org/10.1103/PhysRevB.51.11039>

Valkealahti S, Manninen M. 1994. Simulation of cluster growth using a lattice gas model. *Physical Review B*. 50(23):17564-17574. <https://doi.org/10.1103/PhysRevB.50.17564>

Valkealahti S, Manninen M. 1992. Instability of cuboctahedral copper clusters. *Physical Review B*. 45(16):9459-9462. <https://doi.org/10.1103/PhysRevB.45.9459>

Milne D, Wilson JIB, Rantala TT, Lenkkeri J. 1989. Morphological and structural changes in laser CVD of silicon: comparison of theoretical temperature calculations with experimental results. *Applied Surface Science*. 43(1-4):81-86. [https://doi.org/10.1016/0169-4332\(89\)90194-3](https://doi.org/10.1016/0169-4332(89)90194-3)

Valkealahti S, Welch DO. 1989. 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>. *Physica C: Superconductivity and its Applications*. 162-164(PART 1):540-541. [https://doi.org/10.1016/0921-4534\(89\)91145-3](https://doi.org/10.1016/0921-4534(89)91145-3)

Levoska J, Rantala TT, Lenkkeri J. 1989. Numerical simulation of temperature distributions in layered structures during laser processing. *Applied Surface Science*. 36(1-4):12-22. [https://doi.org/10.1016/0169-4332\(89\)90895-7](https://doi.org/10.1016/0169-4332(89)90895-7)

Valkealahti S, Nieminen RM. 1987. Molecular dynamics investigation of the premelting effects of lennard-jones (111) surfaces. *Physica Scripta*. 36(4):646-650. <https://doi.org/10.1088/0031-8949/36/4/007>

Mäkinen J, Vehanen A, Hautojärvi P, Huomo H, Lahtinen J, Nieminen RM, Valkealahti S. 1986. Vacancy-type defect distributions near argon sputtered Al(100) surface studied by variable-energy positrons and molecular dynamics simulations. *Surface Science*. 175(2):385-414. [https://doi.org/10.1016/0039-6028\(86\)90242-6](https://doi.org/10.1016/0039-6028(86)90242-6)

Rantala TT, Rosén A, Hellsing B. 1986. A Finite Cluster Approach to the Electron-Hole Pair Damping of the Adsorbate Vibration: CO Adsorbed on Cu(100). *Studies in Surface Science and Catalysis*. 26(C):173-181. [https://doi.org/10.1016/S0167-2991\(09\)61238-6](https://doi.org/10.1016/S0167-2991(09)61238-6)

Rantala TT, Rosén A. 1986. Electronic damping of adsorbate motion: CO vibration on the Cu(100) surface. *Physical Review B*. 34(2):837-842. <https://doi.org/10.1103/PhysRevB.34.837>

Vehanen A, Mäkinen J, Hautojarvi P, Huomo H, Lahtinen J, Nieminen RM, Valkealahti S. 1985. Near-surface defect profiling with slow positrons: Argon-sputtered Al(110). *Physical Review B*. 32(11):7561-7563. <https://doi.org/10.1103/PhysRevB.32.7561>

Rantala TT. 1983. Spin-density calculations for core-electron photoemission and Auger electron line shapes, x-ray-edge exponents, and solid-state shifts. *Physical Review B*. 28(6):3182-3192. <https://doi.org/10.1103/PhysRevB.28.3182>

Rantala T, Väyrynen J, Kumpula R, Aksela S. 1979. Direct measurement of the kinetic energy shift between the molecular and atomic M<sub>4</sub>.5N<sub>4</sub>.5N<sub>4</sub>.5 Auger spectra of iodine. *Chemical Physics Letters*. 66(2):384-386. [https://doi.org/10.1016/0009-2614\(79\)85040-X](https://doi.org/10.1016/0009-2614(79)85040-X)

Kumpula R, Väyrynen J, Rantala T, Aksela S. 1979. Direct measurement of vapour-metal shifts in photo- and Auger electron spectra of Zn and Cd. *Journal of physics c-Solid state physics*. 12(21). <https://doi.org/10.1088/0022-3719/12/21/001>

Pessa M, Vuoristo A, Vulli M, Aksela S, Väyrynen J, Rantala T, Aksela H. 1979. Solid-state effects in M<sub>4</sub>.5N<sub>4</sub>.5N<sub>4</sub>.5 Auger spectra of elements from In<sub>49</sub> to Te<sub>52</sub>. *Physical Review B*. 20(8):3115-3123. <https://doi.org/10.1103/PhysRevB.20.3115>