

Lappalainen, Kari, Guang C. Wang and Jan Kleissl. "Estimation of the largest expected photovoltaic power ramp rates". *Applied Energy*. 2020. 278. <https://doi.org/10.1016/j.apenergy.2020.115636>

Huttunen-Saarivirta, E. et al. "Tribocorrosion behaviour of tin bronze CuSn12 under a sliding motion in NaCl containing environment: Contact to inert vs. reactive counterbody". *Tribology International*. 2020. 151. <https://doi.org/10.1016/j.triboint.2020.106389>

Netzev, Metodi, Alexandre Angleraud, and Roel Pieters. "Soft robotic gripper with compliant cell stacks for industrial part handling". *IEEE Robotics and Automation Letters*. 2020, 5(4). 6821-6828. <https://doi.org/10.1109/LRA.2020.3020546>

Kivioja, Henna and Juha Vinha. "Hot-box measurements to investigate the internal convection of highly insulated loose-fill insulation roof structures". *Energy and Buildings*. 2020. 216. <https://doi.org/10.1016/j.enbuild.2020.109934>

Ryynänen, Tomi et al. "Transparent microelectrode arrays fabricated by ion beam assisted deposition for neuronal cell in vitro recordings". *Micromachines*. 2020. 11(5). <https://doi.org/10.3390/M11050497>

Shevkunov, Igor et al. "Hyperspectral phase imaging based on denoising in complex-valued eigensubspace". *Optics and Lasers in Engineering*. 2020. 127. <https://doi.org/10.1016/j.optlaseng.2019.105973>

Belardini, Alessandro et al. "Circular dichroism in the second harmonic field evidenced by asymmetric Au coated GaAs nanowires". *Micromachines*. 2020, 11(2). 1-8. <https://doi.org/10.3390/mi11020225>

Schoeppner, R.L. et al. "An exploratory study on strengthening and thermal stability of magnetron sputtered W nanoparticles at the interface of Cu/Ni multilayer films". *Materials and Design*. 2020. 195. <https://doi.org/10.1016/j.matdes.2020.108907>

Saarimaa, Ville et al. "Assessment of pitting corrosion in bare and passivated (wet scCO_2 -induced patination and chemical passivation) hot-dip galvanized steel samples with SVET, FTIR, and SEM (EDS)". *Materials and Corrosion*. 2020. <https://doi.org/10.1002/maco.202011653>

Paunonen, Lassi and David Seifert. "Asymptotics and approximation of large systems of ordinary differential equations". *Systems and Control Letters*. 2020. 140. <https://doi.org/10.1016/j.sysconle.2020.104703>

Juoksukangas, Janne et al. "Avoiding the high friction peak in fretting contact". *Rakenteiden Mekaniikka*. 2020, 53(1). 12-19. <https://doi.org/10.23998/rm.76266>

Olin, Miska and Miikka Dal Maso. "CFD modeling the diffusional losses of nanocluster-sized particles and condensing vapors in 90° bends of circular tubes". *Journal of Aerosol Science*. 2020. 150. <https://doi.org/10.1016/j.jaerosci.2020.105618>

Evans, Donald M. et al. "Conductivity control via minimally invasive anti-Frenkel defects in a functional oxide". *Nature Materials*. 2020. <https://doi.org/10.1038/s41563-020-0765-x>

Di Vito, Donato et al. "Deformability analysis and improvement in stretchable electronics systems through finite element analysis"., Carcaterra, Antonio Graziani, Giorgio Paolone, Achille (editors). *Proceedings of XXIV AIMETA Conference 2019*. Lecture Notes in Mechanical Engineering. Springer. 2020, 755-763. https://doi.org/10.1007/978-3-030-41057-5_61

Mäntylä, Antti et al. "FEM-based wear simulation for fretting contacts". *Rakenteiden Mekaniikka*. 2020, 53(1). 20-27. <https://doi.org/10.23998/rm.76261>

Priimägi, Arri and Stefan Hecht, ed. "From Responsive Molecules to Interactive Materials". *Advanced Materials*. 2020. 32(20). <https://doi.org/10.1002/adma.202000215>

- Jowett, Geraldine M. et al. "ILC1 drive intestinal epithelial and matrix remodelling". *Nature Materials*. 2020. <https://doi.org/10.1038/s41563-020-0783-8>
- Singh, Arun Kumar et al. "Introducing Multi-Convexity in Path Constrained Trajectory Optimization for Mobile Manipulators". *European Control Conference 2020, ECC 2020*. IEEE. 2020, 1178-1185.
- Holopainen, Sami. "Käyräviivaiset koordinaatitot kontinuumimekaniikassa". *Rakenteiden Mekaniikka*. 2020, 53(2). 53-66. <https://doi.org/10.23998/rm.83338>
- Vitola, V. et al. "Low temperature afterglow from SrAl₂O₄: Eu, Dy, B containing glass". *Scripta Materialia*. 2020, 190. 86-90. <https://doi.org/10.1016/j.scriptamat.2020.08.023>
- Banichuk, Nikolay, Svetlana Ivanova, and Juha Jeronen "Moving Web and Dynamic Problem of Aerothermoelastic Vibrations and Instability". and Indeitsev, D.A. Krivtsov, A.M. (editors). *Advanced Problems in Mechanics: Proceedings of the 47th International Summer School-Conference on Advanced Problems in Mechanics, APM 2019*. Lecture Notes in Mechanical Engineering. Springer. 2020, 66-71. https://doi.org/10.1007/978-3-030-49882-5_7
- Lauri, Mikko et al. "Multi-sensor next-best-view planning as matroid-constrained submodular maximization". *IEEE Robotics and Automation Letters*. 2020, 5(4). 5323-5330. <https://doi.org/10.1109/LRA.2020.3007445>
- Nommeots-Nomm, A. et al. "Phosphate/oxyfluorophosphate glass crystallization and its impact on dissolution and cytotoxicity". *Materials Science and Engineering C*. 2020. 117. <https://doi.org/10.1016/j.msec.2020.111269>
- Pajarinen, Joni et al. "Probabilistic approach to physical object disentangling". *IEEE Robotics and Automation Letters*. 2020, 5(4). 5510-5517. <https://doi.org/10.1109/LRA.2020.3006789>
- Gusrialdi, Azwirman et al. "Resilient Cooperative Voltage Control for Distribution Network with High Penetration Distributed Energy Resources". *European Control Conference 2020, ECC 2020*. IEEE. 2020, 1533-1539.
- Priimägi, Arri and Stefan Hecht, ed. "Special Issue: From Responsive Materials to Interactive Materials". *Advanced Materials*. 2020. 32(20).
- Chronopoulos, Antonios et al. "Syndecan-4 tunes cell mechanics by activating the kindlin-integrin-RhoA pathway". *Nature Materials*. 2020. <https://doi.org/10.1038/s41563-019-0567-1>
- Zhang, Hang et al. "Viewpoint: Pavlovian Materials—Functional Biomimetics Inspired by Classical Conditioning". *Advanced Materials*. 2020. <https://doi.org/10.1002/adma.201906619>
- Santa-aho, Suvi et al. "Barkhausen Noise Probes and Modelling: A Review". *Journal of Nondestructive Evaluation*. 2019. 38(4). <https://doi.org/10.1007/s10921-019-0636-z>
- Pirjola, Liisa et al. "Potential of renewable fuel to reduce diesel exhaust particle emissions". *Applied Energy*. 2019. 254. <https://doi.org/10.1016/j.apenergy.2019.113636>
- Mäntylä, A. et al. "Prediction of contact condition and surface damage by simulating variable friction coefficient and wear". *Tribology International*. 2019. <https://doi.org/10.1016/j.triboint.2019.106054>
- Mäenpää, Pekka, Mohammad M. Aref, and Jouni Mattila "FORMI: A Fast Holonomic Path Planning and Obstacle Representation Method Based on Interval Analysis". *Proceedings of the IEEE 2019 9th International Conference on Cybernetics and Intelligent Systems and Robotics, Automation and Mechatronics, CIS and RAM 2019*. IEEE International Conference on Cybernetics and Intelligent Systems. IEEE. 2019, 398-403. <https://doi.org/10.1109/CIS-RAM47153.2019.9095822>

- Motlagh, Hamid Didari Khamseh et al. "Position Estimation for Drones based on Visual SLAM and IMU in GPS-denied Environment". *ICRoM 2019 - 7th International Conference on Robotics and Mechatronics*. IEEE. 2019, 120-124. <https://doi.org/10.1109/ICRoM48714.2019.9071826>
- Hintikka, Jouko et al. "Running-in in fretting, transition from near-stable friction regime to gross sliding". *Tribology International*. 2019, 143. <https://doi.org/10.1016/j.triboint.2019.106073>
- Mäntyranta, Aino et al. "Tribocorrosion behaviour of two low-alloy steel grades in simulated waste solution". *Tribology International*. 2019, 138. 250-262. <https://doi.org/10.1016/j.triboint.2019.05.032>
- Perttula, Arto et al. "Vehicle type detection and passenger satisfaction analysis using smartphone sensors and digital surveys". *IET Intelligent Transport Systems*. 2019, 13(10). 1499-1506. <https://doi.org/10.1049/iet-its.2018.5349>
- Reshef, Orad et al. "Multiresonant High-Q Plasmonic Metasurfaces". *Nano Letters*. 2019, 19(9). 6429-6434. <https://doi.org/10.1021/acs.nanolett.9b02638>
- Ylönen, Markku et al. "Shedding frequency in cavitation erosion evolution tracking". *International Journal of Multiphase Flow*. 2019, 118. 141-149. <https://doi.org/10.1016/j.ijmultiphaseflow.2019.06.009>
- Lehmusto, Juho et al. "Detection of gaseous species during KCl-induced high-temperature corrosion by the means of CPFAAS and Cl-API-TOF". *Materials and Corrosion*. 2019. <https://doi.org/10.1002/maco.201910964>
- Kreutzer, Joose et al. "Pneumatic unidirectional cell stretching device for mechanobiological studies of cardiomyocytes". *BIOMECHANICS AND MODELING IN MECHANOBIOLOGY*. 2019. <https://doi.org/10.1007/s10237-019-01211-8>
- Thomas, K. et al. "Elevated and cryogenic temperature micropillar compression of magnesium–niobium multilayer films". *Journal of Materials Science*. 2019, 54(15). 10884-10901. <https://doi.org/10.1007/s10853-019-03422-x>
- Szczodra, A. et al. "Fluorine losses in Er³⁺ oxyfluoride phosphate glasses and glass-ceramics". *Journal of Alloys and Compounds*. 2019, 797. 797-803. <https://doi.org/10.1016/j.jallcom.2019.05.151>
- Kezilebieke, Shawulienu et al. "Observation of Coexistence of Yu-Shiba-Rusinov States and Spin-Flip Excitations". *Nano Letters*. 2019, 19(7). 4614-4619. <https://doi.org/10.1021/acs.nanolett.9b01583>
- Juoksukangas, Janne et al. "Characterization of cracks formed in large flat-on-flat fretting contact". *International Journal of Fatigue*. 2019, 124. 361-370. <https://doi.org/10.1016/j.ijfatigue.2019.03.004>
- Sautter, Jürgen D. et al. "Tailoring Second-Harmonic Emission from (111)-GaAs Nanoantennas". *Nano Letters*. 2019, 19(6). 3905-3911. <https://doi.org/10.1021/acs.nanolett.9b01112>
- Vuornos, Kaisa et al. "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*. 2019, 99. 905-918. <https://doi.org/10.1016/j.msec.2019.02.035>
- Koivikko, Anastasia and Veikko Sariola "Fabrication of soft devices with buried fluid channels by using sacrificial 3D printed molds". *2019 2nd IEEE International Conference on Soft Robotics (RoboSoft)*. IEEE. 2019, 509-513. <https://doi.org/10.1109/ROBOSOFT.2019.8722741>
- Sanchez-Guevara, Carmen et al. "Assessing population vulnerability towards summer energy poverty: Case studies of Madrid and London". *Energy and Buildings*. 2019, 190. 132-143. <https://doi.org/10.1016/j.enbuild.2019.02.024>

Rossi, Mattia et al. "Direct model predictive power control of a series-connected modular rectifier". *PRECEDE 2019: 2019 IEEE International Symposium on Predictive Control of Electrical Drives and Power Electronics*. IEEE. 2019, 1-6. <https://doi.org/10.1109/PRECEDE.2019.8753318>

Wendel, Sebastian et al. "Operating point dependent variable switching point predictive current control for PMSM drives". *PRECEDE 2019: 2019 IEEE International Symposium on Predictive Control of Electrical Drives and Power Electronics*. IEEE. 2019, 1-6. <https://doi.org/10.1109/PRECEDE.2019.8753362>

Itävuori, Pekka et al. "Mass balance control of crushing circuits". *Minerals Engineering*. 2019, 135. 37-47. <https://doi.org/10.1016/j.mineng.2019.02.033>

Wu, Di, Eric Coatanea and G. Gary Wang. "Employing Knowledge on Causal Relationship to Assist Multidisciplinary Design Optimization". *Journal of Mechanical Design, Transactions of the ASME*. 2019. 141(4). <https://doi.org/10.1115/1.4042342>

Backas, Joni and Reza Ghabcheloo. "Nonlinear model predictive energy management of hydrostatic drive transmissions". *Proceedings of the Institution of Mechanical Engineers. Part I: Journal of Systems and Control Engineering*. 2019, 233(3). 335-347. <https://doi.org/10.1177/0959651818793454>

Hintikka, Jouko et al. "Stable and unstable friction in fretting contacts". *Tribology International*. 2019, 131. 73-82. <https://doi.org/10.1016/j.triboint.2018.10.014>

Nurmi, Verner et al. "The formation and characterization of fretting-induced degradation layers using quenched and tempered steel". *Tribology International*. 2019, 131. 258-267. <https://doi.org/10.1016/j.triboint.2018.09.012>

Liimatainen, Heikki, Oscar van Vliet and David Aplyn. "The potential of electric trucks – An international commodity-level analysis". *Applied Energy*. 2019, 236. 804-814. <https://doi.org/10.1016/j.apenergy.2018.12.017>

Claude, Sophie et al. "Evaluating retrofit options in a historical city center: Relevance of bio-based insulation and the need to consider complex urban form in decision-making". *Energy and Buildings*. 2019, 182. 196-204. <https://doi.org/10.1016/j.enbuild.2018.10.026>

Pekkanen, Timo T. et al. "Kinetics and thermochemistry of the reaction of 3-methylpropargyl radical with molecular oxygen". *PROCEEDINGS OF THE COMBUSTION INSTITUTE*. 2019, 37(1). 299-306. <https://doi.org/10.1016/j.proci.2018.05.050>

Wani, Owies M. et al. "An Artificial Nocturnal Flower via Humidity-Gated Photoactuation in Liquid Crystal Networks". *Advanced Materials*. 2019. 31(2). <https://doi.org/10.1002/adma.201805985>

Jaurola, Miikka et al. "A TOpti simulation for finding fuel saving by optimising propulsion control and power management". *Journal of Marine Science and Technology (Japan)*. 2019. <https://doi.org/10.1007/s00773-019-00651-2>

Huttunen-Saarivirta, E. et al. "Behaviour of leaded tin bronze in simulated seawater in the absence and presence of tribological contact with alumina counterbody: Corrosion, wear and tribocorrosion". *Tribology International*. 2019, 129. 257-271. <https://doi.org/10.1016/j.triboint.2018.08.021>

Välkangas, Turo et al. "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*. 2019. <https://doi.org/10.1016/j.ijheatmasstransfer.2019.119046>

Cao, Xuepeng, Mohammad M. Aref, and Jouni Mattila "Design and Control of a Flexible Joint as a Hydraulic Series Elastic Actuator for Manipulation Applications". *Proceedings of the IEEE 2019 9th International Conference on Cybernetics and Intelligent Systems and Robotics, Automation and Mechatronics, CIS and RAM 2019*. IEEE International Conference on Cybernetics and Intelligent Systems. IEEE. 2019, 553-558. <https://doi.org/10.1109/CIS-RAM47153.2019.9095773>

Houaoui, A. et al. "Dissolution, bioactivity and osteogenic properties of composites based on polymer and silicate or borosilicate bioactive glass". *Materials Science and Engineering C*. 2019. 107. <https://doi.org/10.1016/j.msec.2019.110340>

Haiko, O. et al. "Effect of microstructure on the abrasive wear resistance of steels with hardness 450 HV". *Tribologia*. 2019, 36(1). 54-57. <https://doi.org/10.30678/FJT.82443>

Suokas, Esa "Effect of polyolefin molecular structure on product properties in extrusion coating". *17th Biennial TAPPI European PLACE Conference 2019*. TAPPI Press. 2019, 89-98.

Ahonen, Toni et al. "Enablers and barriers of smart data-based asset management services in industrial business networks". *Lecture Notes in Mechanical Engineering*. Lecture Notes in Mechanical Engineering. Pleiades Publishing. 2019, 51-60. https://doi.org/10.1007/978-3-319-95711-1_6

Valtonen, Kati et al. "Impact wear and mechanical behavior of steels at subzero temperatures". *Tribology International*. 2019, 129. 476-493. <https://doi.org/10.1016/j.triboint.2018.08.016>

Gao, Qiang et al. "Investigation on positioning control strategy and switching optimization of an equal coded digital valve system". *Proceedings of the Institution of Mechanical Engineers. Part I: Journal of Systems and Control Engineering*. 2019. <https://doi.org/10.1177/0959651819884749>

Cheng, Yu Chieh et al. "Kirigami-Based Light-Induced Shape-Morphing and Locomotion". *Advanced Materials*. 2019. <https://doi.org/10.1002/adma.201906233>

Lahti, Johanna "Market implementation of active and intelligent packaging-opportunities from a socio-economic perspective". *17th Biennial TAPPI European PLACE Conference 2019*. TAPPI Press. 2019, 419-427.

Liikanen, Henri, Mohammad M. Aref, and Jouni Mattila "M-Estimator Application in Real-Time Sensor Fusion for Smooth Position Feedback of Heavy-Duty Field Robots". *Proceedings of the IEEE 2019 9th International Conference on Cybernetics and Intelligent Systems (CIS) and IEEE Conference on Robotics, Automation and Mechatronics (RAM)*. IEEE International Conference on Cybernetics and Intelligent Systems. IEEE. 2019, 368-373. <https://doi.org/10.1109/CIS-RAM47153.2019.9095821>

Lahti, Johanna "Nanocellulose and Polylactic Acid Based Multilayer Coatings for Barrier Applications". *17th Biennial TAPPI European PLACE Conference 2019*. TAPPI Press. 2019, 446-455.

Alanen, Jarmo et al. "Remote diagnostics application software for remote handling equipment". *Fusion Engineering and Design*. 2019. <https://doi.org/10.1016/j.fusengdes.2019.01.125>

Linjamaa, A. et al. "Running-in effects on friction of journal bearings under slow sliding speeds". *Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology*. 2019. <https://doi.org/10.1177/1350650119864758>

Matikainen, V. et al. "Slurry and dry particle erosion wear properties of WC-10Co4Cr and Cr₃C₂-25NiCr hardmetal coatings deposited by HVOF and HVOF spray processes". *Tribologia*. 2019, 36(1-2). 58-61. <https://doi.org/10.30678/FJT.83590>

Lemougna, Patrick N. et al. "Spodumene tailings for porcelain and structural materials: Effect of temperature (1050–1200°C) on the sintering and properties". *Minerals Engineering*. 2019. <https://doi.org/10.1016/j.mineng.2019.105843>

Linjama, Matti. "Variable speed digital hydraulic transformer-based servo drive". *Proceedings of the Institution of Mechanical Engineers. Part I: Journal of Systems and Control Engineering*. 2019. <https://doi.org/10.1177/0959651819869145>

Linjama, Matti. "Variable speed drive with hydraulic boost". *International Journal of Fluid Power*. 2019, 20(1). 99-123. <https://doi.org/10.13052/ijfp1439-9776.2014>

Czaplicki, Robert et al. "Less Is More: Enhancement of Second-Harmonic Generation from Metasurfaces by Reduced Nanoparticle Density". *Nano Letters*. 2018, 18(12). 7709-7714. <https://doi.org/10.1021/acs.nanolett.8b03378>

Ottosen, Niels Saabye, Matti Ristinmaa, and Reijo Kouhia. "Enhanced multiaxial fatigue criterion that considers stress gradient effects". *International Journal of Fatigue*. 2018, 116. 128-139. <https://doi.org/10.1016/j.ijfatigue.2018.05.024>

Far, Mehrnaz Farzam et al. "Flux-Weakening Control for IPMSM Employing Model Order Reduction". *2018 23rd International Conference on Electrical Machines, ICEM 2018*. IEEE. 2018, 1510-1516. <https://doi.org/10.1109/ICELMACH.2018.8506693>

Far, Mehrnaz Farzam et al. "Model Order Reduction of Bearingless Reluctance Motor Including Eccentricity". *2018 23rd International Conference on Electrical Machines, ICEM 2018*. IEEE. 2018, 2243-2249. <https://doi.org/10.1109/ICELMACH.2018.8506758>

Niemelä-Anttonen, Henna et al. "Icephobicity of Slippery Liquid Infused Porous Surfaces under Multiple Freeze–Thaw and Ice Accretion–Detachment Cycles". *Advanced Materials Interfaces*. 2018, 5(20). <https://doi.org/10.1002/admi.201800828>

Šutka, Andris et al. "Solvothermal synthesis derived Co-Ga codoped ZnO diluted magnetic degenerated semiconductor nanocrystals". *Journal of Alloys and Compounds*. 2018, 763. 164-172. <https://doi.org/10.1016/j.jallcom.2018.05.036>

Mäkinen, Petri, Teemu Mononen, and Jouni Mattila "Inertial Sensor-Based State Estimation of Flexible Links Subject to Bending and Torsion". *2018 14th IEEE/ASME International Conference on Mechatronic and Embedded Systems and Applications, MESA 2018*. IEEE. 2018. <https://doi.org/10.1109/MESA.2018.8449188>

Teke, Burak et al. "Real-time and Robust Collaborative Robot Motion Control with Microsoft Kinect ® v2". *2018 14th IEEE/ASME International Conference on Mechatronic and Embedded Systems and Applications, MESA 2018*. IEEE. 2018. <https://doi.org/10.1109/MESA.2018.8449156>

Mahmoodpour, Mehdi et al. "Role-based visualization of industrial IoT-based systems". *2018 14th IEEE/ASME International Conference on Mechatronic and Embedded Systems and Applications, MESA 2018*. IEEE. 2018. <https://doi.org/10.1109/MESA.2018.8449183>

Sippola, Petteri et al. "Experimental and numerical study of wall layer development in a tribocharged fluidized bed". *Journal of Fluid Mechanics*. 2018, 849. 860-884. <https://doi.org/10.1017/jfm.2018.412>

Ghabcheloo, Reza and Shadman Siddiqui "Complete Odometry Estimation of a Vehicle Using Single Automotive Radar and a Gyroscope". *MED 2018 - 26th Mediterranean Conference on Control and Automation*. IEEE. 2018, 855-860. <https://doi.org/10.1109/MED.2018.8442474>

Sajna, M. S. et al. "Enhanced resonant nonlinear absorption and optical limiting in Er³⁺ ions doped multicomponent tellurite glasses". *Materials Research Bulletin*. 2018, 104. 227-235. <https://doi.org/10.1016/j.materresbull.2018.04.026>

Roldán Del Cerro, P. et al. "Persistent luminescent borosilicate glasses using direct particles doping method". *Scripta Materialia*. 2018, 151. 38-41. <https://doi.org/10.1016/j.scriptamat.2018.03.034>

Nommeots-Nomm, A. et al. "Luminescence of Er³⁺ doped oxyfluoride phosphate glasses and glass-ceramics". *Journal of Alloys and Compounds*. 2018, 751. 224-230. <https://doi.org/10.1016/j.jallcom.2018.04.101>

- Javaheri, Vahid et al. "Computational design of a novel medium-carbon, low-alloy steel microalloyed with niobium". *Journal of Materials Engineering and Performance*. 2018, 27(6). 2978-2992. <https://doi.org/10.1007/s11665-018-3376-9>
- Oluoti, Kehinde, Tharaka Rama K.C. Doddapaneni and Tobias Richards. "Investigating the kinetics and biofuel properties of *Alstonia congensis* and *Ceiba pentandra* via torrefaction". *Energy*. 2018, 150. 134-141. <https://doi.org/10.1016/j.energy.2018.02.086>
- Koivusalo, Laura et al. "Hydrazone crosslinked hyaluronan-based hydrogels for therapeutic delivery of adipose stem cells to treat corneal defects". *Materials Science and Engineering C*. 2018, 85. 68-78. <https://doi.org/10.1016/j.msec.2017.12.013>
- Mohammed, Wael M. et al. "Generic platform for manufacturing execution system functions in knowledge-driven manufacturing systems". *International Journal of Computer Integrated Manufacturing*. 2018, 1-13. <https://doi.org/10.1080/0951192X.2017.1407874>
- Krogerus, Tomi, Mika Hyvönen, and Kalevi Huhtala. "Analysis of common rail pressure signal of dual-fuel large industrial engine for identification of injection duration of pilot diesel injectors". *Fuel*. 2018, 216. 1-9. <https://doi.org/10.1016/j.fuel.2017.11.152>
- Välíkangas, Turo and Reijo Karvinen. "Conjugated Heat Transfer Simulation of a Fin-and-Tube Heat Exchanger". *Heat Transfer Engineering*. 2018, 39(13-14). 1192-1200. <https://doi.org/10.1080/01457632.2017.1363628>
- Soltani, Ayat et al. "Digital image correlation study of the deformation and functioning of the human heart during open-heart surgery". *Mechanics of Biological Systems, Materials and other topics in Experimental and Applied Mechanics - Proceedings of the 2017 Annual Conference on Experimental and Applied Mechanics*. Conference Proceedings of the Society for Experimental Mechanics. Springer New York LLC. 2018, 19-27. https://doi.org/10.1007/978-3-319-63552-1_4
- Vazquez Fernandez, N. et al. "Effects of adiabatic heating estimated from tensile tests with continuous heating". *Dynamic Behavior of Materials - Proceedings of the 2017 Annual Conference on Experimental and Applied Mechanics*. Conference Proceedings of the Society for Experimental Mechanics. Springer New York LLC. 2018, 1-7. https://doi.org/10.1007/978-3-319-62956-8_1
- Vuorinen, E. et al. "Erosive-abrasive wear behavior of carbide-free bainitic and boron steels compared in simulated field conditions". *Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology*. 2018, 232(1). 3-13. <https://doi.org/10.1177/1350650117739125>
- Välíkangas, Turo et al. "Fin-and-tube heat exchanger enhancement with a combined herringbone and vortex generator design". *International Journal of Heat and Mass Transfer*. 2018, 118. 602-616. <https://doi.org/10.1016/j.ijheatmasstransfer.2017.11.006>
- Coatanéa, Eric et al. "Knowledge-based artificial neural network (KB-ANN) in engineering: Associating functional architecture modeling, dimensional analysis and causal graphs to produce optimized topologies for KB-ANNs". *38th Computers and Information in Engineering Conference*. The American Society of Mechanical Engineers ASME. 2018. <https://doi.org/10.1115/DETC201885895>
- Zeng, Hao et al. "Light Robots: Bridging the Gap between Microrobotics and Photomechanics in Soft Materials". *Advanced Materials*. 2018. 30(24). <https://doi.org/10.1002/adma.201703554>
- Doddapaneni, Tharaka Rama Krishna C. et al. "Techno-economic evaluation of integrating torrefaction with anaerobic digestion". *Applied Energy*. 2018, 213. 272-284. <https://doi.org/10.1016/j.apenergy.2018.01.045>
- Jaurola, Miikka et al. "TOpti: a flexible framework for optimising energy management for various ship machinery topologies". *Journal of Marine Science and Technology (Japan)*. 2018. <https://doi.org/10.1007/s00773-018-0617-4>

- Teisala, Hannu et al. "Ultrafast Processing of Hierarchical Nanotexture for a Transparent Superamphiphobic Coating with Extremely Low Roll-Off Angle and High Impalement Pressure". *Advanced Materials*. 2018. 30(14). <https://doi.org/10.1002/adma.201706529>
- Pyrhönen, Veli-Pekka, Hannu Koivisto, and Matti Vilkkö "A Reduced-Order Two-Degree-of-Freedom Composite Nonlinear Feedback Control for a Rotary DC Servo Motor". *Proceedings of the 56th IEEE Conference on Decision and Control*. Melbourne, Australia. 2017, 2065-2071. <https://doi.org/10.1109/CDC.2017.8263951>
- Holmberg, Kenneth et al. "Global energy consumption due to friction and wear in the mining industry". *Tribology International*. 2017, 115. 116-139. <https://doi.org/10.1016/j.triboint.2017.05.010>
- Layek, Rama K. et al. "Noncovalent functionalization of reduced graphene oxide with pluronic F127 and its nanocomposites with gum arabic". *Composites Part B : Engineering*. 2017, 128. 155-163. <https://doi.org/10.1016/j.compositesb.2017.07.010>
- Heininen, Arttu, Jussi Aaltonen, and Kari T. Koskinen "Simulating the Drag Coefficient of a Spherical Autonomous Underwater Vehicle"., Aaltonen, Jussi and Virkkunen, Riikka Koskinen, Kari T. Kuivanen, Risto (editors). *Proceedings of the 2nd Annual SMACC Research Seminar 2017*. Tampere: Tampere University of Technology. 2017, 53-56.
- Boardman, A. D. et al. "Waves in hyperbolic and double negative metamaterials including rogues and solitons". *Nanotechnology*. 2017. 28(44). <https://doi.org/10.1088/1361-6528/aa6792>
- Koivumäki, Janne and Jouni Mattila. "Adaptive and nonlinear control of discharge pressure for variable displacement axial piston pumps". *Journal of Dynamic Systems, Measurement and Control: Transactions of the ASME*. 2017. 139(10). <https://doi.org/10.1115/1.4036537>
- Itävuo, Pekka, Erik Hulthén, and Matti Vilkkö. "Feed-hopper level estimation and control in cone crushers". *Minerals Engineering*. 2017, 110. 82-95. <https://doi.org/10.1016/j.mineng.2017.04.010>
- Palagi, Stefano et al. "Locomotion of light-driven soft microrobots through a hydrogel via local melting". *International Conference on Manipulation, Automation and Robotics at Small Scales, MARSS 2017 - Proceedings*. IEEE. 2017. <https://doi.org/10.1109/MARSS.2017.8001916>
- Kreutzer, Joose et al. "Pneumatically actuated elastomeric device for simultaneous mechanobiological studies & live-cell fluorescent microscopy". *International Conference on Manipulation, Automation and Robotics at Small Scales, MARSS 2017 - Proceedings*. IEEE. 2017. <https://doi.org/10.1109/MARSS.2017.8001929>
- Laurila, M. M. et al. "Statistical analysis of E-jet print parameter effects on Ag-nanoparticle ink droplet size". *Journal of Micromechanics and Microengineering*. 2017. 27(9). <https://doi.org/10.1088/1361-6439/aa7a71>
- Antin, Kim Niklas and Tuomas Pärnänen. "Democratizing composites manufacturing -inexpensive tooling empowers new players". *SAMPE Journal*. 2017, 53(4). 6-10.
- Kivelä, Tuomo et al. "Redundant robotic manipulator path planning for real-time obstacle and self-collision avoidance". and Ferraresi, Carlo Quaglia, Giuseppe (editors). *Advances in Service and Industrial Robotics: Proceedings of the 26th International Conference on Robotics in Alpe-Adria-Danube Region, RAAD 2017*. Mechanisms and Machine Science. Springer International Publishing. 2017, 208-216. https://doi.org/10.1007/978-3-319-61276-8_24
- Stoykova, Elena et al. "Dynamic speckle analysis with smoothed intensity-based activity maps". *Optics and Lasers in Engineering*. 2017, 93. 55-65. <https://doi.org/10.1016/j.optlaseng.2017.01.012>

- Laakkonen, P. and A. Quadrat. "A fractional representation approach to the robust regulation problem for SISO systems". *Systems and Control Letters*. 2017, 103. 32-37. <https://doi.org/10.1016/j.sysconle.2017.02.006>
- Lanz, M. and R. Tuokko. "Concepts, methods and tools for individualized production". *PRODUCTION ENGINEERING*. 2017, 11(2). 205-212. <https://doi.org/10.1007/s11740-017-0728-5>
- Sekki, Tiina, Miimu Airaksinen, and Arto Saari. "Effect of energy measures on the values of energy efficiency indicators in Finnish daycare and school buildings". *Energy and Buildings*. 2017, 139. 124-132. <https://doi.org/10.1016/j.enbuild.2017.01.005>
- Mashayekhi, Mohammad et al. "Chip-by-chip configurable interconnection using digital printing techniques". *Journal of Micromechanics and Microengineering*. 2017. 27(4). <https://doi.org/10.1088/1361-6439/aa5ef3>
- Seidt, J. D. et al. "Synchronous Full-Field Strain and Temperature Measurement in Tensile Tests at Low, Intermediate and High Strain Rates". *Experimental Mechanics*. 2017, 57(2). 219–229. <https://doi.org/10.1007/s11340-016-0237-z>
- Suokas, Esa "Effect of air gap on the adhesion of PET layer on cardboard substrate in extrusion coating". *16th TAPPI European PLACE Conference 2017*. TAPPI Press. 2017, 529-544.
- Lahti, Johanna, Taina Kamppuri, and Jurkka Kuusipalo "Novel bio-based materials for active and intelligent packaging". *16th TAPPI European PLACE Conference 2017*. TAPPI Press. 2017.
- Lahti, Johanna, Jurkka Kuusipalo, and Sanna Auvinen "Novel equipment to simulate hot air heat sealability of packaging materials". *16th TAPPI European PLACE Conference 2017*. TAPPI Press. 2017, 237-248.
- Kuusipalo, Jurkka and Johanna Lahti "Tampere University of Technology, laboratory of materials science, paper converting and packaging technology Tampere, Finland". *16th TAPPI European PLACE Conference 2017: Basel; Switzerland; 22 May 2017 through 24 May 2017*. TAPPI Press. 2017.
- Isotahdon, Elisa, Elina Huttunen-Saarivirta, and Veli Kuokkala. "Characterization of the microstructure and corrosion performance of Ce-alloyed Nd-Fe-B magnets". *Journal of Alloys and Compounds*. 2017, 692. 190-197. <https://doi.org/10.1016/j.jallcom.2016.09.058>
- Huova, Mikko et al. "Digital hydraulic multi-pressure actuator – the concept, simulation study and first experimental results". *International Journal of Fluid Power*. 2017, 18(3). 141-152. <https://doi.org/10.1080/14399776.2017.1302775>
- Wu, Di, Eric Coatanea and G. Gary Wang "Dimension reduction and decomposition using causal graph and qualitative analysis for aircraft concept design optimization". *43rd Design Automation Conference*. The American Society of Mechanical Engineers ASME. 2017. <https://doi.org/10.1115/DETC201767601>
- Wang, Xiaoju et al. "Do properties of bioactive glasses exhibit mixed alkali behavior?". *Journal of Materials Science*. 2017, 52(15). 8986–8997. <https://doi.org/10.1007/s10853-017-0915-y>
- Haiko, O. et al. "Effect of finish rolling and quench stop temperatures on impact-abrasive wear resistance of 0.35 % carbon direct-quenched steel". *Tribologia*. 2017, 35(1-2). 5-21.
- Mikkonen, Antti and Reijo Karvinen "Heat Transfer of Impinging Jet: Effect of Compressibility and Turbulent Kinetic Energy Production". *IX International Conference on Computational Heat and Mass Transfer (ICCHMT 2016)*. 2017.
- Lindroos, Matti et al. "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*. 2017, 125. 68-76. <https://doi.org/10.1016/j.ijsolstr.2017.07.015>

Taddeo, Raffaele, Sumitra Prajapati and Raghida Lepistö. "Optimizing ammonium adsorption on natural zeolite for wastewaters with high loads of ammonium and solids". *Journal of Porous Materials*. 2017, 24(6). 1545–1554. <https://doi.org/10.1007/s10934-017-0394-1>

Koivuluoto, Heli et al. "Structures and properties of laser-assisted cold-sprayed aluminum coatings". *THERMEC 2016*. Materials Science Forum. Trans Tech Publications Ltd. 2017, 984-989. <https://doi.org/10.4028/www.scientific.net/MSF.879.984>

Mishra, A. et al. "Thermal, structural and in vitro dissolution of antimicrobial copper-doped and slow resorbable iron-doped phosphate glasses". *Journal of Materials Science*. 2017, 52(15). 8957–8972. <https://doi.org/10.1007/s10853-017-0805-3>

Hintikka, Jouko, Arto Lehtovaara and Antti Mäntylä. "Third Particle Ejection Effects on Wear with Quenched and Tempered Steel Fretting Contact". *TRIBOLOGY TRANSACTIONS*. 2017, 60(1). 70-78. <https://doi.org/10.1080/10402004.2016.1146813>

Barreca, Davide et al. "Vapor Phase Fabrication of Nanoheterostructures Based on ZnO for Photoelectrochemical Water Splitting". *Advanced Materials Interfaces*. 2017. 4(18). <https://doi.org/10.1002/admi.201700161>

Carfora, D. et al. "Multicriteria selection in concept design of a divertor remote maintenance port in the EU DEMO reactor using an AHP participative approach". *Fusion Engineering and Design*. 2016, 112. 324-331. <https://doi.org/10.1016/j.fusengdes.2016.08.023>

Juoksukangas, Janne, Arto Lehtovaara and Antti Mäntylä. "Experimental and numerical investigation of fretting fatigue behavior in bolted joints". *Tribology International*. 2016, 103. 440-448. <https://doi.org/10.1016/j.triboint.2016.07.021>

Järvinen, Henri et al. "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*. 2016, 676. 109-120. <https://doi.org/10.1016/j.msea.2016.08.096>

Juoksukangas, J., A. Lehtovaara and A. Mäntylä. "A comparison of relative displacement fields between numerical predictions and experimental results in fretting contact". *Proceedings of the Institution of Mechanical Engineers Part J: Journal of Engineering Tribology*. 2016, 230(10). 1273-1287. <https://doi.org/10.1177/1350650116633573>

Sekki, Tiina et al. "Consideration of energy consumption, energy costs, and space occupancy in Finnish daycare centres and school buildings". *Energy and Buildings*. 2016, 129. 199-206. <https://doi.org/10.1016/j.enbuild.2016.08.015>

Mikkonen, Antti and Reijo Karvinen "Solar Panel Breakage During Heavy Rain Caused by Thermal Stress". *Engineered Transparency 2016: Glass in Architecture and Structural Engineering*. Wiley. 2016.

Lindgren, M., S. Santa-aho, and M. Vippola. "Barkhausen noise response of three different welded duplex stainless steels". *Insight*. 2016, 58(9). 480-486. <https://doi.org/10.1784/insi.2016.58.9.480>

Ellman, Asko, Robert Wendrich and Tarja Tiainen "Framework and feasibility study for pairwise comparison tool". *Proceedings of the ASME 2016 Computers and Information in Engineering Conference IDETC/CIE 2016*. Charlotte, North Carolina: ASME. 2016. <https://doi.org/10.1115/DETC2016-59886>

Luna, E. et al. "Spontaneous formation of three-dimensionally ordered Bi-rich nanostructures within GaAs_{1-x}Bi_x/GaAs quantum wells". *Nanotechnology*. 2016. 27(32). <https://doi.org/10.1088/0957-4484/27/32/325603>

Rodríguez Ripoll, Manel et al. "The role of niobium in improving toughness and corrosion resistance of high speed steel laser hardfacings". *Materials and Design*. 2016, 99. 509-520. <https://doi.org/10.1016/j.matdes.2016.03.081>

Philippi, P. C. et al. "High-order lattice-Boltzmann". *Journal of the Brazilian Society of Mechanical Sciences and Engineering*. 2016, 38(5). 1401-1419. <https://doi.org/10.1007/s40430-015-0441-2>

Kuzmin, Mikhail et al. "Toward the Atomically Abrupt Interfaces of SiO_x/Semiconductor Junctions". *Advanced Materials Interfaces*. 2016, 3(11). <https://doi.org/10.1002/admi.201500510>

Janka, Leo et al. "Improving the toughness of thermally sprayed Cr₃C₂-NiCr hardmetal coatings by laser post-treatment". *Materials and Design*. 2016, 98. 135-142. <https://doi.org/10.1016/j.matdes.2016.03.007>

Hokka, M. et al. "Effects of strain rate and confining pressure on the compressive behavior of Kuru granite". *International Journal of Impact Engineering*. 2016, 91. 183-193. <https://doi.org/10.1016/j.ijimpeng.2016.01.010>

Kanerva, Ulla et al. "Chemical synthesis of WC-Co from water-soluble precursors: The effect of carbon and cobalt additions to WC synthesis". *International Journal of Refractory Metals and Hard Materials*. 2016, 56. 69-75. <https://doi.org/10.1016/j.ijrmhm.2015.11.014>

Korkiakoski, Samuli et al. "Influence of specimen type and reinforcement on measured tension-tension fatigue life of unidirectional GFRP laminates". *International Journal of Fatigue*. 2016, 85. 114-129. <https://doi.org/10.1016/j.ijfatigue.2015.12.008>

Andersson, P. et al. "Static friction measurements on steel against uncoated and coated cast iron". *Tribologia*. 2016, 34(1-2). 5-40.

Paris, Henri et al. "Comparative environmental impacts of additive and subtractive manufacturing technologies". *CIRP Annals: Manufacturing Technology*. 2016, 65(1). 29-32. <https://doi.org/10.1016/j.cirp.2016.04.036>

Hartikainen, Juha, Kari Kolari, and Reijo Kouhia "Development and numerical implementation of an anisotropic continuum damage model for concrete". *Advances in Fracture and Damage Mechanics XV*. Key Engineering Materials. Trans Tech Publications Ltd. 2016, 115-118. <https://doi.org/10.4028/www.scientific.net/KEM.713.115>

Hokka, Mikko et al. "DIC measurements of the human heart during cardiopulmonary bypass surgery". *Conference Proceedings of the Society for Experimental Mechanics Series*. Springer New York LLC. 2016, 51-59. https://doi.org/10.1007/978-3-319-21455-9_6

Hilliaho, Kimmo et al. "Effects of added glazing on Balcony indoor temperatures: Field measurements". *Energy and Buildings*. 2016, 128. 458-472. <https://doi.org/10.1016/j.enbuild.2016.07.025>

Mäkinen, Jari et al. "End-plate connections in Bi-axial bending - Measurements"., Mazzolani, F. M. and Squillace, A. Faggiano, B. Bellucci, F. (editors). *13th International Aluminium Conference, Sustainability, Durability and Structural Advantages*, : INALCO 2016; Naples; Italy; 21 September 2016 through 23 September 2016. Key Engineering Materials. Trans Tech Publications Ltd. 2016, 275-280. <https://doi.org/10.4028/www.scientific.net/KEM.710.275>

Lahti, Johanna "Nanoscale barrier coating on BOPP packaging film by ALD". *TAPPI PLACE Conference 2016: Exploring New Frontiers*. TAPPI Press. 2016, 493-505.

Hintikka, Jouko, Arto Lehtovaara and Antti Mäntylä. "Normal displacements in non-Coulomb friction conditions during fretting". *Tribology International*. 2016, 94. 633-639. <https://doi.org/10.1016/j.triboint.2015.10.029>

Bolelli, Giovanni et al. "Wear and impact behaviour of High Velocity Air-Fuel sprayed Fe-Cr-Ni-B-C alloy coatings". *Tribology International*. 2016, 95. 372-390. <https://doi.org/10.1016/j.triboint.2015.11.036>

Ihalainen, Teemu O. et al. "Differential basal-to-apical accessibility of lamin A/C epitopes in the nuclear lamina regulated by changes in cytoskeletal tension". *Nature Materials*. 2015, 14(12). 1252-1261. <https://doi.org/10.1038/nmat4389>

Fedorik, Filip et al. "Improving the thermal performance of concrete-sandwich envelopes in relation to the moisture behaviour of building structures in boreal conditions". *Energy and Buildings*. 2015, 107. 226-233. <https://doi.org/10.1016/j.enbuild.2015.08.020>

Bourhis, Kevin et al. "Erbium-doped borosilicate glasses containing various amounts of P2O5 and Al2O3: Influence of the silica content on the structure and thermal, physical, optical and luminescence properties". *Materials Research Bulletin*. 2015, 70. 47-54. <https://doi.org/10.1016/j.materresbull.2015.04.017>

Sekki, Tiina, Miimu Airaksinen, and Arto Saari. "Impact of building usage and occupancy on energy consumption in Finnish daycare and school buildings". *Energy and Buildings*. 2015, 105. 247-257. <https://doi.org/10.1016/j.enbuild.2015.07.036>

Gashti, E. Hassani Nezhad, M. Malaska and K. Kujala. "Analysis of thermo-active pile structures and their performance under groundwater flow conditions". *Energy and Buildings*. 2015, 105. 1-8. <https://doi.org/10.1016/j.enbuild.2015.07.026>

Syrjärinne, Paula et al. "Analysing traffic fluency from bus data". *IET Intelligent Transport Systems*. 2015, 9(6). 566-572. <https://doi.org/10.1049/iet-its.2014.0192>

Haaparanta, Anne-Marie et al. "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*. 2015, 56. 457-466. <https://doi.org/10.1016/j.msec.2015.07.013>

Hakkarainen, T. V. et al. "Lithography-free oxide patterns as templates for self-catalyzed growth of highly uniform GaAs nanowires on Si(111)". *Nanotechnology*. 2015. 26(27). <https://doi.org/10.1088/0957-4484/26/27/275301>

Carfora, D. et al. "Divertor remote handling for DEMO: Concept design and preliminary FMECA studies". *Fusion Engineering and Design*. 2015, 98-99. 1437-1441. <https://doi.org/10.1016/j.fusengdes.2015.06.056>

Hintikka, Jouko, Arto Lehtovaara and Antti Mäntylä. "Fretting-induced friction and wear in large flat-on-flat contact with quenched and tempered steel". *Tribology International*. 2015, 92. 191-202. <https://doi.org/10.1016/j.triboint.2015.06.008>

Mendes, Miguel Rodrigues, Narayan Puthanmadam Subramaniyam and Katrina Wendel-Mitoraj "Evaluating the electrode measurement sensitivity of subdermal electroencephalography electrodes". *International IEEE/EMBS Conference on Neural Engineering, NER*. IEEE COMPUTER SOCIETY PRESS. 2015, 1092-1095. <https://doi.org/10.1109/NER.2015.7146818>

Tanskanen, Jarno M. A., Fikret E. Kapucu, and Jari A. K. Hyttinen "On the threshold based neuronal spike detection, and an objective criterion for setting the threshold". *International IEEE/EMBS Conference on Neural Engineering, NER*. IEEE COMPUTER SOCIETY PRESS. 2015, 1016-1019. <https://doi.org/10.1109/NER.2015.7146799>

Subramaniyam, Narayan Puthanmadam et al. "Recurrence network analysis of wide band oscillations of local field potentials from the primary motor cortex reveals rich dynamics.". *International IEEE/EMBS Conference on Neural Engineering, NER*. IEEE COMPUTER SOCIETY PRESS. 2015, 960-963. <https://doi.org/10.1109/NER.2015.7146785>

Le, Taoran et al. "Smart Skins: Could they be the ultimate sensing tool? Today's industry and personal medical care both strongly demand accurate, reliable, robust, low-cost". *IEEE Nanotechnology Magazine*. 2015, 9(2). 4-10. <https://doi.org/10.1109/MNANO.2015.2410474>

Wu, Haosheng et al. "Transfer printing of metallic microstructures on adhesion-promoting hydrogel substrates". *Advanced Materials*. 2015, 27(22). 3398-3404. <https://doi.org/10.1002/adma.201500954>

Isotahdon, E. et al. "Corrosion mechanisms of sintered Nd-Fe-B magnets in the presence of water as vapour, pressurised vapour and liquid". *Journal of Alloys and Compounds*. 2015, 626. 349-359. <https://doi.org/10.1016/j.jallcom.2014.12.048>

Bautista, Godofredo et al. "Second-harmonic generation imaging of semiconductor nanowires with focused vector beams". *Nano Letters*. 2015, 15(3). 1564-1569. <https://doi.org/10.1021/nl503984b>

Ratia, Vilma et al. "Effect of Multiple Impacts on the Deformation of Wear-Resistant Steels". *Tribology Letters*. 2015. 57(2). <https://doi.org/10.1007/s11249-014-0460-7>

Czaplicki, R. et al. "Second-Harmonic Generation from Metal Nanoparticles: Resonance Enhancement versus Particle Geometry". *Nano Letters*. 2015, 15(1). 530-534. <https://doi.org/10.1021/nl503901e>

Mettänen, Marja and Ulrich Hirn. "A comparison of five optical surface topography measurement methods". *TAPPI Journal*. 2015, 14(1). 27-38.

Sekki, Tiina, Miimu Airaksinen, and Arto Saari. "Measured energy consumption of educational buildings in a Finnish city". *Energy and Buildings*. 2015, 87. 105-115. <https://doi.org/10.1016/j.enbuild.2014.11.032>

Martinez, Francisco et al. "Branched thiophene oligomer/polymer bulk heterojunction organic solar cell". *Materials Research Society Symposium Proceedings*. MATERIALS RESEARCH SOCIETY. 2015, 19-25. <https://doi.org/10.1557/opl.2015.529>

Palazzo, Gerardo et al. "Detection beyond Debye's length with an electrolyte-gated organic field-effect transistor". *Advanced Materials*. 2015, 27(5). 911-916. <https://doi.org/10.1002/adma.201403541>

Lindroos, Matti et al. "Experimental study on the behavior of wear resistant steels under high velocity single particle impacts". *International Journal of Impact Engineering*. 2015, 78. 114-127. <https://doi.org/10.1016/j.ijimpeng.2014.12.002>

Barreca, Davide et al. "Fe₂O₃-TiO₂ Nano-heterostructure Photoanodes for Highly Efficient Solar Water Oxidation". *Advanced Materials Interfaces*. 2015. 2(17). <https://doi.org/10.1002/admi.201500313>

Hokka, M. et al. "High Temperature Tension HSB Device Based on Direct Electrical Heating", Song, Bo Casem, Daniel Kimberley, Jamie (editors). *Dynamic Behavior of Materials, Volume 1: Proceedings of the 2014 Annual Conference on Experimental and Applied Mechanics*. Conference Proceedings of the Society for Experimental Mechanics Series. Springer. 2015, 227-233. https://doi.org/10.1007/978-3-319-06995-1_34

Pylkkänen, Kari et al. "Measurements and Modeling of Frost Depth in Railway Tracks". *Proceedings of the International Conference on Cold Regions Engineering: 16th International Conference on Cold Regions Engineering 2015*. American Society of Civil Engineers ASCE. 2015, 123-134. <https://doi.org/10.1061/9780784479315.012>

Mäkelä, Jyrki M. et al. "Roll-to-roll coating by liquid flame spray nanoparticle deposition". *Materials Research Society Symposium Proceedings*. MATERIALS RESEARCH SOCIETY. 2015, 37-42. <https://doi.org/10.1557/opl.2015.530>

Björling, M. et al. "The correlation between gear contact friction and ball on disc friction measurements". *Tribology International*. 2015, 83. 114-119. <https://doi.org/10.1016/j.triboint.2014.11.007>

Lindroos, Matti et al. "The deformation, strain hardening, and wear behavior of chromium-alloyed hadfield steel in abrasive and impact conditions". *Tribology Letters*. 2015. 57(3). <https://doi.org/10.1007/s11249-015-0477-6>

Seppälä, Jari and Mikko Salmenperä "Towards dependable automation". *Cyber Security: Analytics, Technology and Automation: Part IV*. Intelligent Systems, Control and Automation: Science and Engineering. Springer International Publishing. 2015, 229-249. https://doi.org/10.1007/978-3-319-18302-2_15

Sariola, Veikko and Metin Sitti. "Mechanically Switchable Elastomeric Microfibrillar Adhesive Surfaces for Transfer Printing". *Advanced Materials Interfaces*. 2014. 1(4). <https://doi.org/10.1002/admi.201300159>

Borah, Dipu et al. "Graphoepitaxial Directed Self-Assembly of Polystyrene-Block-Polydimethylsiloxane Block Copolymer on Substrates Functionalized with Hexamethyldisilazane to Fabricate Nanoscale Silicon Patterns". *Advanced Materials Interfaces*. 2014. 1(3). <https://doi.org/10.1002/admi.201300102>

Teisala, Hannu, Mikko Tuominen, and Jurkka Kuusipalo. "Superhydrophobic Coatings on Cellulose-Based Materials: Fabrication, Properties, and Applications". *Advanced Materials Interfaces*. 2014, 1(1). 1-20. <https://doi.org/10.1002/admi.201300026>

Saintsing, Christy D., Benjamin S. Cook and Manos M. Tentzeris "An origami inspired reconfigurable spiral antenna". *38th Mechanisms and Robotics Conference*. The American Society of Mechanical Engineers ASME. 2014. <https://doi.org/10.1115/DETC201435353>

Coatanéa, Eric et al. "Graph based representation and analyses for conceptual stages". *34th Computers and Information in Engineering Conference*. The American Society of Mechanical Engineers ASME. 2014. <https://doi.org/10.1115/DETC201435652>

Tzounis, Lazaros et al. "High performance natural rubber composites with a hierarchical reinforcement structure of carbon nanotube modified natural fibers". *Materials and Design*. 2014, 58. 1-11. <https://doi.org/10.1016/j.matdes.2014.01.071>

Lahti, Johanna et al. "Improving the effect of nanoscale barrier coating on BOPP film properties: Influence of substrate contamination, web handling and pretreatments". *TAPPI PLACE Conference 2014*. TAPPI Press. 2014, 1039-1061.

Gordon, Thomas R. et al. "Shape-dependent plasmonic response and directed self-assembly in a new semiconductor building block, indium-doped cadmium oxide (ICO)". *Nano Letters*. 2013, 13(6). 2857-2863. <https://doi.org/10.1021/nl4012003>

Colace, L., F. Santoni, and G. Assanto. "A near-infrared optoelectronic approach to detection of road conditions". *Optics and Lasers in Engineering*. 2013, 51(5). 633-636. <https://doi.org/10.1016/j.optlaseng.2013.01.003>

Liimatainen, Ville, Veikko Sariola and Quan Zhou. "Controlling liquid spreading using microfabricated undercut edges". *Advanced Materials*. 2013, 25(16). 2275-2278. <https://doi.org/10.1002/adma.201204696>

Magliulo, Maria et al. "Electrolyte-gated organic field-effect transistor sensors based on supported biotinylated phospholipid bilayer". *Advanced Materials*. 2013, 25(14). 2090-2094. <https://doi.org/10.1002/adma.201203587>

Cochrane, Cédric et al. "New design of textile light diffusers for photodynamic therapy". *Materials Science and Engineering C: Materials for Biological Applications*. 2013, 33(3). 1170-1175. <https://doi.org/10.1016/j.msec.2012.12.007>

Rasappa, Sozaraj et al. "Fabrication of a sub-10 nm silicon nanowire based ethanol sensor using block copolymer lithography". *Nanotechnology*. 2013. 24(6). <https://doi.org/10.1088/0957-4484/24/6/065503>

Fafarman, Aaron T. et al. "Chemically tailored dielectric-to-metal transition for the design of metamaterials from nanoimprinted colloidal nanocrystals". *Nano Letters*. 2013, 13(2). 350-357. <https://doi.org/10.1021/nl303161d>

Debnath, Subhas Ch et al. "Naturally occurring amino acids: A suitable substitute of N-N'-di-phenyl guanidine (DPG) in silica tyre formulation?". *KGK: KAUTSCHUK GUMMI KUNSTSTOFFE*. 2013, 66(1-2). 25-31.

Lahtinen, Kimmo et al. "Improving the effect of a nanoscale barrier coating on BOPP film properties by surface pretreatments". *14th European PLACE Conference 2013*. TAPPI Press. 2013, 469-493.

Ronkainen, Helena et al. "Materials for electronics by thermal spraying". *Physical and Numerical Simulation of Materials Processing VII*. Materials Science Forum. 2013, 451-456. <https://doi.org/10.4028/www.scientific.net/MSF.762.451>

Alatalo, Matti et al. "Modeling of steels and steel surfaces using quantum mechanical first principles methods". *Physical and Numerical Simulation of Materials Processing VII*. Materials Science Forum. 2013, 445-450. <https://doi.org/10.4028/www.scientific.net/MSF.762.445>

Mokammel, Faisal et al. "Towards an approach for evaluating the quality of requirements". *33rd Computers and Information in Engineering Conference*. American Society of Mechanical Engineers. 2013. <https://doi.org/10.1115/DETC2013-13708>

Wang, Heyun et al. "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*. 2012, 32(8). 2306-2315. <https://doi.org/10.1016/j.msec.2012.07.001>

Kouhia, Reijo et al. "Implementation of a direct procedure for critical point computations using preconditioned iterative solvers". *Computers & Structures*. 2012, 108-109. 110-117. <https://doi.org/10.1016/j.compstruc.2012.02.009>

Subramaniam, Kalaivani, Amit Das and Gert Heinrich. "Highly conducting polychloroprene composites based on multi-walled carbon nanotubes and 1-butyl 3-methyl imidazolium bis(trifluoromethylsulphonyl)imide". *KGK: KAUTSCHUK GUMMI KUNSTSTOFFE*. 2012, 65(7-8). 44-46.

Ahmed, Rumman et al. "Redox-active, organometallic surface-relief gratings from azobenzene-containing polyferrocenylsilane block copolymers". *Advanced Materials*. 2012, 24(7). 926-931. <https://doi.org/10.1002/adma.201103793>

Caraffi, Claudio et al. "A system for real-time detection and tracking of vehicles from a single car-mounted camera". *2012 15th International IEEE Conference on Intelligent Transportation Systems, ITSC 2012*. 2012, 975-982. <https://doi.org/10.1109/ITSC.2012.6338748>

Yang, Dazhi et al. "Biomimetic hemo-compatible surfaces of polyurethane by grafting copolymer brushes of poly(ethylene glycol) and poly(phosphorylcholine methacrylate)". *Multifunctional Polymer-Based Materials*. 2012, 171-176. <https://doi.org/10.1557/opl.2012.702>

Borah, Dipu et al. "Block copolymer self-assembly on ethylene glycol (EG) self-assembled monolayer (SAM) for nanofabrication". *Nanoscale Materials Modification by Photon, Ion, and Electron Beams*. 2012, 8-13. <https://doi.org/10.1557/opl.2012.1224>

Malas, Asish et al. "Development of expanded graphite filled natural rubber vulcanizates in presence and absence of carbon black: Mechanical, thermal and morphological properties". *Materials and Design*. 2012, 39. 410-417. <https://doi.org/10.1016/j.matdes.2012.03.007>

Rasilo, Paavo, Anouar Belahcen and Antero Arkkio "Effect of rotor pole-shoe construction on losses of inverter-fed synchronous motors". *Proceedings - 2012 20th International Conference on Electrical Machines, ICEM 2012*. 2012, 1282-1286. <https://doi.org/10.1109/ICEIMach.2012.6350042>

Kurnitski, Jarek et al. "Cost optimal and nearly zero (nZEB) energy performance calculations for residential buildings with REHVA definition for nZEB national implementation". *Energy and Buildings*. 2011, 43(11). 3279-3288. <https://doi.org/10.1016/j.enbuild.2011.08.033>

Kravchenko, Aleksandr et al. "Optical interference lithography using azobenzene-functionalized polymers for micro-and nanopatterning of silicon". *Advanced Materials*. 2011, 23(36). 4174-4177. <https://doi.org/10.1002/adma.201101888>

Chang, Bo et al. "Self-alignment of RFID dies on four-pad patterns with water droplet for sparse self-assembly". *Journal of Micromechanics and Microengineering*. 2011. 21(9). <https://doi.org/10.1088/0960-1317/21/9/095024>

Linko, Veikko et al. "Defined-size DNA triple crossover construct for molecular electronics: Modification, positioning and conductance properties". *Nanotechnology*. 2011. 22(27). <https://doi.org/10.1088/0957-4484/22/27/275610>

Tuurna, S. et al. "Optimised selection of new protective coatings for biofuel boiler applications". *Materials and Corrosion-Werkstoffe und Korrosion*. 2011, 62(7). 642-649. <https://doi.org/10.1002/maco.201005898>

Lisjak, Darja et al. "Hexaferrite/polyethylene Composite coatings prepared with flame spraying". *Materials Letters*. 2011, 65(3). 534-536. <https://doi.org/10.1016/j.matlet.2010.10.076>

Chang, Bo et al. "Self-alignment in the stacking of microchips with mist-induced water droplets". *Journal of Micromechanics and Microengineering*. 2011. 21(1). <https://doi.org/10.1088/0960-1317/21/1/015016>

Vähä-Nissi, M. et al. "Effect of pre-treatments on barrier properties of layers applied by atomic layer deposition onto polymer-coated substrates". *13th European PLACE Conference 2011*. 2011, 447.

Medyna, Galina, Eric Coatanea and Dominique Millet "Evaluation of parts of a boat cabin based on exergy - Focusing on environmental and economic assessments". *ASME 2011 International Mechanical Engineering Congress and Exposition, IMECE 2011*. PARTS A AND B udg., AMER SOC MECHANICAL ENGINEERS. 2011, 1083-1092.

Teisala, Hannu et al. "Nanoparticle deposition on packaging materials by the liquid flame spray". *13th European PLACE Conference 2011*. 2011.

Christophe, François et al. "Semantic analysis of function-solution duality". *ASME 2011 International Mechanical Engineering Congress and Exposition, IMECE 2011*. 2011, 611-619. <https://doi.org/10.1115/IMECE2011-63546>

Coatanéa, Eric et al. "A framework for building behavioral models for design-stage failure identification using dimensional analysis". *Proceedings of the ASME Design Engineering Technical Conference*. AMER SOC MECHANICAL ENGINEERS. 2010, 591-601. <https://doi.org/10.1115/DETC2010-28864>

Lahti, Johanna et al. "The effects of corona and flame treatment: Part 2. PE-HD and PP coated papers". *TAPPI Press - 12th European PLACE Conference 2009*. 2009, 278-314.

Coatanéa, Eric et al. "Measurement theory and dimensional analysis: Methodological impact on the comparison and evaluation process". *19th International Conference on Design Theory and Methodology and 1st International Conference on Micro and Nano Systems, presented at - 2007 ASME International Design Engineering Technical Conferences and Computers and Information in Engineering Conference, IDETC/CIE2007*. AMER SOC MECHANICAL ENGINEERS. 2008, 173-182. <https://doi.org/10.1115/DETC2007-34364>

Lahtinen, Kimmo and Jurkka Kuusipalo "Statistical modeling of water vapor transmission rates for extrusion-coated papers". *TAPPI 2008 PLACE Conference: Innovations in Flexible Consumer Packaging*. 2008.

Lorimer, G. W. et al. "The effect of phosphorous and arsenic on the fracture behaviour of a 2,25% Cr-1% Mo Steel". *Materials Science Forum*. 1996, 207-209(PART 2). 645-648.