

A Finite Cluster Approach to the Electron-Hole Pair Damping of the Adsorbate Vibration: CO Adsorbed on Cu(100)

Rantala, T. T., Rosén, A. & Hellsing, B., 1986, In : Studies in Surface Science and Catalysis. 26, C, p. 173-181 9 p.

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

Sorption and retention of ethylene glycol monoethyl ether (EGME) on silicas

Kellomäki, A., Kuula-Väisänen, P. & Nieminen, P., 1989, In : Journal of Colloid and Interface Science. 129, 2, p. 373-378 6 p.

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

Thermophilic anaerobic digestion of source-sorted household solid waste: the effects of enzyme additions

Rintala, J. A. & Ahring, B. K., Feb 1994, In : Applied Microbiology and Biotechnology. 40, 6, p. 916-919 4 p.

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

A two-stage thermophilic anaerobic process for the treatment of source sorted household solid waste

Rintala, J. A. & Ahring, B. K., Oct 1994, In : Biotechnology Letters. 16, 10, p. 1097-1102 6 p.

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

Start-up and Operation of Laboratory-Scale Thermophilic Upflow Anaerobic Sludge Blanket Reactors Treating Vegetable Processing Wastewaters

Lepistö, S. S. & Rintala, J. A., Mar 1997, In : Journal of Chemical Technology and Biotechnology. 68, 3, p. 331-339 9 p.

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

Biokalvojen rakenteen ja toiminnan simulointi tuo uutta tietoa rasvoista

Translated title of the contribution: : Structure and dynamic properties of biological membranes studied by molecular dynamics simulations: New information on polyunsaturated lipids

Hyvönen, M. T., Rantala, T. T. & Ala-Korpela, M., 1999, In : Kemia - Kemi. 26, 3, p. 222-225 4 p.

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

Anaerobically digested poultry slaughterhouse wastes as fertiliser in agriculture

Salminen, E., Rintala, J., Härkönen, J., Kuitunen, M., Högmander, H. & Oikari, A., 2001, In : Bioresource Technology. 78, 1, p. 81-88 8 p.

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

Biological treatment of pulp and paper mill process and wastewaters under thermophilic conditions - A review

Suvilampi, J., Lepistö, R. & Rintala, J., 2001, In : Paperi ja puu. 83, 4, p. 320-325 6 p.

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

A simulation case study of production planning and control in printed wiring board manufacturing

Korhonen, H. M. E., Heikkilä, J. & Törnwall, J. M., 1 Dec 2001, In : Winter Simulation Conference Proceedings. 2, p. 844-847 4 p.

Research output: Contribution to journal › Conference article › Scientific › peer-review

Anaerobic digestion of organic solid poultry slaughterhouse waste - A review

Salminen, E. & Rintala, J., 2002, In : Bioresource Technology. 83, 1, p. 13-26 14 p.

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

Modeling of anaerobic degradation of solid slaughterhouse waste: Inhibition effects of long-chain fatty acids or ammonia

Lokshina, L. Y., Vavilin, V. A., Salminen, E. & Rintala, J., Apr 2003, In : Applied Biochemistry and Biotechnology. 109, 1-3, p. 15-32 18 p.

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

Comparison of laboratory-scale thermophilic biofilm and activated sludge processes integrated with a mesophilic activated sludge process

Suvilampi, J., Lehtomäki, A. & Rintala, J., Jul 2003, In : Bioresource Technology. 88, 3, p. 207-214 8 p.

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

Modeling solid waste decomposition

Vavilin, V. A., Lokshina, L. Y., Jokela, J. P. Y. & Rintala, J. A., Aug 2004, In : *Bioresource Technology*. 94, 1, p. 69-81 13 p.

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

Hydrolysis rates, methane production and nitrogen solubilisation of grey waste components during anaerobic degradation

Jokela, J. P. Y., Vavilin, V. A. & Rintala, J. A., Mar 2005, In : *Bioresource Technology*. 96, 4, p. 501-508 8 p.

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

Anaerobic on-site treatment of kitchen waste in combination with black water in UASB-septic tanks at low temperatures

Luostarinen, S. & Rintala, J., Jul 2007, In : *Bioresource Technology*. 98, 9, p. 1734-1740 7 p.

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

Statistical modeling of water vapor transmission rates for extrusion-coated papers

Lahtinen, K. & Kuusipalo, J., 2008, *TAPPI 2008 PLACE Conference: Innovations in Flexible Consumer Packaging*.

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

Effects of solid-liquid separation on recovering residual methane and nitrogen from digested dairy cow manure

Kaparaju, P. L. N. & Rintala, J. A., Jan 2008, In : *Bioresource Technology*. 99, 1, p. 120-127 8 p.

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

Anaerobic digestion of grass silage in batch leach bed processes for methane production

Lehtomäki, A., Huttunen, S., Lehtinen, T. M. & Rintala, J. A., May 2008, In : *Bioresource Technology*. 99, 8, p. 3267-3278 12 p.

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

Leachate and gaseous emissions from initial phases of landfilling mechanically and mechanically-biologically treated municipal solid waste residuals

Sormunen, K., Einola, J., Ettala, M. & Rintala, J., May 2008, In : *Bioresource Technology*. 99, 7, p. 2399-2409 11 p.

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

Group-specific quantification of methanotrophs in landfill gas-purged laboratory biofilters by tyramide signal amplification-fluorescence in situ hybridization

Wang, H., Einola, J., Heinonen, M., Kulomaa, M. & Rintala, J., Sep 2008, In : *Bioresource Technology*. 99, 14, p. 6426-6433 8 p.

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

Effects of storage on characteristics and hygienic quality of digestates from four co-digestion concepts of manure and biowaste

Paavola, T. & Rintala, J., Oct 2008, In : *Bioresource Technology*. 99, 15, p. 7041-7050 10 p.

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

Storing energy crops for methane production: Effects of solids content and biological additive

Pakarinen, O., Lehtomäki, A., Rissanen, S. & Rintala, J., Oct 2008, In : *Bioresource Technology*. 99, 15, p. 7074-7082 9 p.

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

The effects of corona and flame treatment: Part 2. PE-HD and PP coated papers

Lahti, J., Tuominen, M., Penttinen, T., Räsänen, J. P. & Kuusipalo, J., 2009, *TAPPI Press - 12th European PLACE Conference 2009*. Vol. 1. p. 278-314 37 p.

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

Impact of crop species on bacterial community structure during anaerobic co-digestion of crops and cow manure

Wang, H., Lehtomäki, A., Tolvanen, K., Puhakka, J. & Rintala, J., Apr 2009, In : *Bioresource Technology*. 100, 7, p. 2311-2315 5 p.

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

Biogas production from boreal herbaceous grasses - Specific methane yield and methane yield per hectare

Seppälä, M., Paavola, T., Lehtomäki, A. & Rintala, J., Jun 2009, In : *Bioresource Technology*. 100, 12, p. 2952-2958 7 p.
Research output: Contribution to journal > Article > Scientific > peer-review

On entropy-based molecular descriptors: Statistical analysis of real and synthetic chemical structures

Dehmer, M., Varmuza, K., Borgert, S. & Emmert-Streib, F., 27 Jul 2009, In : *Journal of Chemical Information and Modeling*. 49, 7, p. 1655-1663 9 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Surface science analysis and surface modification methods for biomaterials research

Kanninen, L., Jokinen, N., Lahtonen, K., Jussila, P., Ali-Löytty, H., Hirsimäki, M., Leppiniemi, J., Hytönen, V., Kulomaa, M., Ahola, N., Paakinaho, K., Kellomäki, M. & Valden, M., 1 Jan 2010, In : *European Cells and Materials*. 20, SUPPL. 3, p. 133 1 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Effect of micro-aeration and leachate replacement on COD solubilization and VFA production during mono-digestion of grass-silage in one-stage leach-bed reactors

Jagadabhi, P. S., Kaparaju, P. & Rintala, J., Apr 2010, In : *Bioresource Technology*. 101, 8, p. 2818-2824 7 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Effect of pre-treatments on barrier properties of layers applied by atomic layer deposition onto polymer-coated substrates

Vähä-Nissi, M., Hirvikorpi, T., Sievänen, J., Salo, E., Harlin, A., Johansson, P. & Kuusipalo, J., 2011, *13th European PLACE Conference 2011*. Vol. 1. p. 447 1 p.
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Enrichment polymer layers for detection of volatile vapors by ATR FT-IR

Giannarco, J. M., Zdyrko, B., Hu, J., Agarwal, A., Kimerling, L., Carlie, N., Petit, L., Richardson, K. & Luzinov, I., 2011, In : *ACS National Meeting Book of Abstracts*.
Research output: Contribution to journal > Article > Scientific > peer-review

Nanoparticle deposition on packaging materials by the liquid flame spray

Teisala, H., Tuominen, M., Aromaa, M., Mäkelä, J. M., Stepien, M., Saarinen, J. J., Toivakka, M. & Kuusipalo, J., 2011, *13th European PLACE Conference 2011*. Vol. 1. 2 p.
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Chimeric avidin shows stability against harsh chemical conditions-biochemical analysis and 3D structure

Määttä, J. A. E., Eisenberg-Domovich, Y., Nordlund, H. R., Hayouka, R., Kulomaa, M. S., Livnah, O. & Hytönen, V. P., Mar 2011, In : *Biotechnology and Bioengineering*. 108, 3, p. 481-490 10 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Osteoconductive properties of poly(96L/4D-lactide)/beta-tricalcium phosphate in long term animal model

Daculsi, G., Goyenvalle, E., Cognet, R., Aguado, E. & Suokas, E. O., Apr 2011, In : *Biomaterials*. 32, 12, p. 3166-3177 12 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Two-stage anaerobic digestion of tomato, cucumber, common reed and grass silage in leach-bed reactors and upflow anaerobic sludge blanket reactors

Jagadabhi, P. S., Kaparaju, P. & Rintala, J., Apr 2011, In : *Bioresource Technology*. 102, 7, p. 4726-4733 8 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Hybrid nanoparticle design based on cationized gelatin and the polyanions dextran sulfate and chondroitin sulfate for ocular gene therapy

Zorzi, G. K., Párraga, J. E., Seijo, B. & Sánchez, A., 7 Jul 2011, In : *MACROMOLECULAR BIOSCIENCE*. 11, 7, p. 905-913 9 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Defined-size DNA triple crossover construct for molecular electronics: Modification, positioning and conductance properties

Linko, V., Leppiniemi, J., Paasonen, S. T., Hytönen, V. P. & Jussi Toppari, J., 8 Jul 2011, In : *Nanotechnology*. 22, 27, 275610.

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

Towards universal enrichment nanocoating for IR-ATR waveguides

Giammarco, J., Zdyrko, B., Petit, L., Musgraves, J. D., Hu, J., Agarwal, A., Kimerling, L., Richardson, K. & Luzinov, I., 28 Aug 2011, In : *Chemical Communications*. 47, 32, p. 9104-9106 3 p.

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

The effect of organic loading rate and retention time on hydrogen production from a methanogenic CSTR

Pakarinen, O., Kaparaju, P. & Rintala, J., Oct 2011, In : *Bioresource Technology*. 102, 19, p. 8952-8957 6 p.

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

Versatile bio-ink for covalent immobilization of chimeric avidin on sol-gel substrates

Heikkinen, J. J., Kivimäki, L., Määttä, J. A. E., Mäkelä, I., Hakalahti, L., Takkinen, K., Kulomaa, M. S., Hytönen, V. P. & Hormi, O. E. O., 15 Oct 2011, In : *Colloids and Surfaces B: Biointerfaces*. 87, 2, p. 409-414 6 p.

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

Screening ethnically diverse human embryonic stem cells identifies a chromosome 20 minimal amplicon conferring growth advantage

Amps, K., Andrews, P. W., Anyfantis, G., Armstrong, L., Avery, S., Baharvand, H., Baker, J., Baker, D., Munoz, M. B., Beil, S., Benvenisty, N., Ben-Yosef, D., Biancotti, J. C., Bosman, A., Brena, R. M., Brison, D., Caisander, G., Camarasa, M. V., Chen, J., Chiao, E., Choi, Y. M., Choo, A. B. H., Collins, D., Colman, A., Crook, J. M., Daley, G. Q., Dalton, A., De Sousa, P. A., Denning, C., Downie, J., Dvorak, P., Montgomery, K. D., Feki, A., Ford, A., Fox, V., Fraga, A. M., Frumkin, T., Ge, L., Gokhale, P. J., Golan-Lev, T., Gourabi, H., Gropp, M., Guangxiu, L., Hampl, A., Harron, K., Healy, L., Herath, W., Holm, F., Hovatta, O., Hyllner, J., Inamdar, M. S., Irwanto, A. K., Ishii, T., Jaconi, M., Jin, Y., Kimber, S., Kiselev, S., Knowles, B. B., Kopper, O., Kukhareenko, V., Kuliev, A., Lagarkova, M. A., Laird, P. W., Lako, M., Laslett, A. L., Lavon, N., Lee, D. R., Lee, J. E., Li, C., Lim, L. S., Ludwig, T. E., Ma, Y., Maltby, E., Mateizel, I., Mayshar, Y., Mileikovsky, M., Minger, S. L., Miyazaki, T., Moon, S. Y., Moore, H., Mummery, C., Nagy, A., Nakatsuji, N., Narwani, K., Oh, S. K. W., Oh, S. K., Olson, C., Otonkoski, T., Pan, F., Park, I. H., Pells, S., Pera, M. F., Pereira, L. V., Qi, O., Raj, G. S., Reubinoff, B., Robins, A., Robson, P., Rossant, J., Salekdeh, G. H., Schulz, T. C., Sermon, K., Mohamed, J. S., Shen, H., Sherrer, E., Sidhu, K., Sivarajah, S., Skottman, H., Spits, C., Stacey, G. N., Strehl, R., Strelchenko, N., Suemori, H., Sun, B., Suuronen, R., Takahashi, K., Tuuri, T., Venu, P., Verlinsky, Y., Oostwaard, D. W. V., Weisenberger, D. J., Wu, Y., Yamanaka, S., Young, L. & Zhou, Q., Dec 2011, In : *Nature Biotechnology*. 29, 12, p. 1132-1144 13 p.

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

Synthesis of depsipeptides from L-amino acids and lactones

Cao, H., Feng, Y., Wang, H., Zhang, L., Khan, M. & Guo, J., Dec 2011, In : *Frontiers of Chemical Science and Engineering*. 5, 4, p. 409-415 7 p.

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

Conductive layers on surface modified natural fibre based substrates for printed functionality

Valtakari, D., Bollström, R., Tuominen, M., Teisala, H., Aromaa, M., Toivakka, M., Kuusipalo, J., Mäkelä, J. M., Uozumi, J. & Saarinen, J. J., 2012, *AICHE 2012 - 2012 AIChE Annual Meeting, Conference Proceedings*.

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

Osteogenic medium is superior to growth factors in differentiation of human adipose stem cells towards boneforming cells in 3D culture

Tirkkonen, L., Haimi, S., Huttunen, S., Wolff, J., Pirhonen, E., Sándor, G. K. & Miettinen, S., 2012, In : *European Cells and Materials*. 25, p. 144-158 15 p.

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

Utilization of agrowaste polymers in PVC/NBR alloys: Tensile, thermal, and morphological properties

Mousa, A., Heinrich, G., Kretzschmar, B., Wagenknecht, U. & Das, A., 2012, In : *INTERNATIONAL JOURNAL OF CHEMICAL ENGINEERING*. 121496.

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

Human adipose tissue extract induces angiogenesis and adipogenesis in vitro

Sarkanen, J. R., Kaila, V., Mannerström, B., Rätty, S., Kuokkanen, H., Miettinen, S. & Ylikomi, T., 1 Jan 2012, In : Tissue Engineering Part A. 18, 1-2, p. 17-25 9 p.

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

Demonstration of increased lipid accumulation potential of *Stigeoclonium* sp., Kütz. BUM11007 under nitrogen starved regime: A new source of lipids for biodiesel production

Praveenkumar, R., Johny, K., MubarakAli, D., Vijayan, D., Thajuddin, N. & Gunasekaran, M., Apr 2012, In : Journal of Biobased Materials and Bioenergy. 6, 2, p. 209-213 5 p.

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

Highly exfoliated natural rubber/Clay composites by "propping-open procedure": The influence of fatty-acid chain length on exfoliation

Rooj, S., Das, A., Stöckelhuber, K. W., Reuter, U. & Heinrich, G., Apr 2012, In : Macromolecular Materials and Engineering. 297, 4, p. 369-383 15 p.

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

Structural characteristics and flammability of fire retarding EPDM/layered double hydroxide (LDH) nanocomposites

Wang, D. Y., Das, A., Leuteritz, A., Mahaling, R. N., Jehnichen, D., Wagenknecht, U. & Heinrich, G., 21 Apr 2012, In : RSC Advances. 2, 9, p. 3927-3933 7 p.

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

Molecular mechanisms of ion-specific effects on proteins

Rembert, K. B., Paterová, J., Heyda, J., Hilty, C., Jungwirth, P. & Cremer, P. S., 20 Jun 2012, In : Journal of the American Chemical Society. 134, 24, p. 10039-10046 8 p.

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

Impact of biodiesel application at various blending ratios on passenger cars of different fueling technologies

Kousoulidou, M., Ntziachristos, L., Fontaras, G., Martini, G., Dilara, P. & Samaras, Z., Aug 2012, In : Fuel. 98, p. 88-94 7 p.

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

Biomimetic surface modification of polycarbonateurethane film via phosphorylcholine-graft for resisting platelet adhesion

Gao, W., Feng, Y., Lu, J., Khan, M. & Guo, J., Oct 2012, In : Macromolecular Research. 20, 10, p. 1063-1069 7 p.

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

Fabrication of ssDNA/oligo(ethylene glycol) monolayers and complex nanostructures by an irradiation-promoted exchange reaction

Khan, M. N., Tjong, V., Chilkoti, A. & Zharnikov, M., 8 Oct 2012, In : Angewandte Chemie (International Edition). 51, 41, p. 10303-10306 4 p.

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

Influence of ionic liquids on the dielectric relaxation behavior of CNT based elastomer nanocomposites

Steinhauser, D., Subramaniam, K., Das, A., Heinrich, G. & Klüppel, M., Nov 2012, In : Express Polymer Letters. 6, 11, p. 927-936 10 p.

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

New reports on anti-bacterial and anti-candidal activities of fatty acid methyl esters (FAME) obtained from *Scenedesmus bijugatus* var. *bicellularis* biomass

Mubarakali, D., Praveenkumar, R., Shenbagavalli, T., Mari Nivetha, T., Parveez Ahamed, A., Al-Dhabi, N. A. & Thajuddin, N., 28 Nov 2012, In : RSC Advances. 2, 30, p. 11552-11556 5 p.

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

Improving the effect of a nanoscale barrier coating on BOPP film properties by surface pretreatments

Lahtinen, K., Lahti, J., Johansson, P., Seppänen, T. & Cameron, D. C., 2013, *14th European PLACE Conference 2013*. TAPPI Press, Vol. 1. p. 469-493 25 p.

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

A 'clusters-in-liquid' method for calculating infrared spectra identifies the proton-transfer mode in acidic aqueous solutions

Kulig, W. & Agmon, N., Jan 2013, In : *Nature Chemistry*. 5, 1, p. 29-35 7 p.

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

A potential nonthrombogenic small-diameter vascular scaffold with polyurethane/poly(ethylene glycol) hybrid materials by electrospinning technique

Wang, H., Feng, Y., Zhao, H., Fang, Z., Khan, M. & Guo, J., Feb 2013, In : *Journal Nanoscience and Nanotechnology*. 13, 2, p. 1578-1582 5 p.

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

Chemically tailored dielectric-to-metal transition for the design of metamaterials from nanoimprinted colloidal nanocrystals

Fafarman, A. T., Hong, S. H., Caglayan, H., Ye, X., Diroll, B. T., Paik, T., Engheta, N., Murray, C. B. & Kagan, C. R., 13 Feb 2013, In : *Nano Letters*. 13, 2, p. 350-357 8 p.

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

Fabrication of a sub-10 nm silicon nanowire based ethanol sensor using block copolymer lithography

Rasappa, S., Borah, D., Faulkner, C. C., Lutz, T., Shaw, M. T., Holmes, J. D. & Morris, M. A., 15 Feb 2013, In : *Nanotechnology*. 24, 6, 065503.

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

The sensitivity of random polymer brush-lamellar polystyrene-b-polymethylmethacrylate block copolymer systems to process conditions

Borah, D., Rasappa, S., Sentharamaikkannan, R., Shaw, M. T., Holmes, J. D. & Morris, M. A., 1 Mar 2013, In : *Journal of Colloid and Interface Science*. 393, 1, p. 192-202 11 p.

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

Immobilized bioactive agents onto polyurethane surface with heparin and phosphorylcholine group

Tan, M., Feng, Y., Wang, H., Zhang, L., Khan, M., Guo, J., Chen, Q. & Liu, J., May 2013, In : *Macromolecular Research*. 21, 5, p. 541-549 9 p.

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

Screening pretreatment methods to enhance thermophilic anaerobic digestion of pulp and paper mill wastewater treatment secondary sludge

Bayr, S., Kaparaju, P. & Rintala, J., 1 May 2013, In : *Chemical Engineering Journal*. 223, p. 479-486 8 p.

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

Shape-dependent plasmonic response and directed self-assembly in a new semiconductor building block, indium-doped cadmium oxide (ICO)

Gordon, T. R., Paik, T., Klein, D. R., Naik, G. V., Caglayan, H., Boltasseva, A. & Murray, C. B., 12 Jun 2013, In : *Nano Letters*. 13, 6, p. 2857-2863 7 p.

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

Development and characterization of poly(ϵ -caprolactone) hollow fiber membranes for vascular tissue engineering

Diban, N., Haimi, S., Bolhuis-Versteeg, L., Teixeira, S., Miettinen, S., Poot, A., Grijpma, D. & Stamatialis, D., 1 Jul 2013, In : *Journal of Membrane Science*. 438, p. 29-37 9 p.

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

Mechanisms of acceleration and retardation of water dynamics by ions

Stirnemann, G., Wernersson, E., Jungwirth, P. & Laage, D., 14 Aug 2013, In : *Journal of the American Chemical Society*. 135, 32, p. 11824-11831 8 p.

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

Reversible biofunctionalization of surfaces with a switchable mutant of avidin

Pollheimer, P., Taskinen, B., Scherfler, A., Gusenkov, S., Creus, M., Wiesauer, P., Zauner, D., Schöfberger, W., Schwarzinger, C., Ebner, A., Tampé, R., Stutz, H., Hytönen, V. P. & Gruber, H. J., 16 Oct 2013, In : *Bioconjugate Chemistry*. 24, 10, p. 1656-1668 13 p.

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

Magnetophoretic harvesting of oleaginous *Chlorella* sp. by using biocompatible chitosan/magnetic nanoparticle composites

Lee, K., Lee, S. Y., Na, J. G., Jeon, S. G., Praveenkumar, R., Kim, D. M., Chang, W. S. & Oh, Y. K., Dec 2013, In : *Bioresource Technology*. 149, p. 575-578 4 p.

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

Direct observation of the collapse of the delocalized excess electron in water

Savolainen, J., Uhlig, F., Ahmed, S., Hamm, P. & Jungwirth, P., 2014, In : *Nature Chemistry*. 6, 8, p. 697-701 5 p.

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

Effect of non-rubber components of NR on the carbon nanotube (CNT) localization in SBR/NR blends

Le, H. H., Parsekar, M., Ilich, S., Henning, S., Das, A., Stöckelhuber, K. W., Beiner, M., Ho, C. A., Adhikari, R., Wießner, S., Heinrich, G. & Radosch, H. J., 2014, In : *Macromolecular Materials and Engineering*. 299, 5, p. 569-582 14 p.

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

Fabrication of 3-D nanodimensioned electric double layer capacitor structures using block copolymer templates

Rasappa, S., Borah, D., Sentharamaikkannan, R., Faulkner, C. C., Holmes, J. D. & Morris, M. A., 2014, In : *Journal Nanoscience and Nanotechnology*. 14, 7, p. 5221-5227 7 p.

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

Improving the effect of nanoscale barrier coating on BOPP film properties: Influence of substrate contamination, web handling and pretreatments

Lahti, J., Johansson, P., Lahtinen, K., Cameron, D. C. & Seppänen, T., 2014, *TAPPI PLACE Conference 2014*. TAPPI Press, Vol. 2. p. 1039-1061 23 p.

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

Nickel-based HVOF coatings promoting high temperature corrosion resistance of biomass-fired power plant boilers

Oksa, M., Auerkari, P., Salonen, J. & Varis, T., 2014, In : *Fuel Processing Technology*. 125, p. 236-245 10 p.

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

Repeated use of stable magnetic flocculant for efficient harvest of oleaginous *Chlorella* sp.

Lee, K., Lee, S. Y., Praveenkumar, R., Kim, B., Seo, J. Y., Jeon, S. G., Na, J. G., Park, J. Y., Kim, D. M. & Oh, Y. K., 2014, In : *Bioresource Technology*. 167, p. 284-290 7 p.

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

Stearate Modified Zinc-Aluminum Layered Double Hydroxides and Acrylonitrile Butadiene Rubber Nanocomposites

Eshwaran, S. B., Basu, D., Kutlu, B., Leuteritz, A., Wagenknecht, U., Stöckelhuber, K. W., Naskar, K., Das, A. & Heinrich, G., Jan 2014, In : *Polymer-Plastics Technology and Engineering*. 53, 1, p. 65-73 9 p.

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

Large-area arrays of three-dimensional plasmonic subwavelength-sized structures from azopolymer surface-relief gratings

Moerland, R. J., Koskela, J. E., Kravchenko, A., Simberg, M., Van Der Vegte, S., Kaivola, M., Priimagi, A. & Ras, R. H. A., 1 Jan 2014, In : *Materials Horizons*. 1, 1, p. 74-80 7 p.

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

A 3D Alzheimer's disease culture model and the induction of P21-activated kinase mediated sensing in iPSC derived neurons

Zhang, D., Pekkanen-Mattila, M., Shahsavani, M., Falk, A., Teixeira, A. I. & Herland, A., Feb 2014, In : *Biomaterials*. 35, 5, p. 1420-1428 9 p.

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

Structure and barrier properties of human embryonic stem cell-derived retinal pigment epithelial cells are affected by extracellular matrix protein coating

Sorkio, A., Hongisto, H., Kaarniranta, K., Uusitalo, H., Juuti-Uusitalo, K. & Skottman, H., 1 Feb 2014, In : *Tissue Engineering Part A*. 20, 3-4, p. 622-634 13 p.

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

Assessment of metabolic flux distribution in the thermophilic hydrogen producer *Caloramator celer* as affected by external pH and hydrogen partial pressure

Ciranna, A., Pawar, S. S., Santala, V., Karp, M. & van Niel, E. W. J., 28 Mar 2014, In : *Microbial Cell Factories*. 13, 1, 48.

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

Light-fuelled transport of large dendrimers and proteins

Koskela, J. E., Liljeström, V., Lim, J., Simanek, E. E., Ras, R. H. A., Priimagi, A. & Kostianen, M. A., 14 May 2014, In : *Journal of the American Chemical Society*. 136, 19, p. 6850-6853 4 p.

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

Bioprocessing of enhanced cellulase production from a mutant of *Trichoderma asperellum* RCK2011 and its application in hydrolysis of cellulose

Raghuwanshi, S., Deswal, D., Karp, M. & Kuhad, R. C., 15 May 2014, In : *Fuel*. 124, p. 183-189 7 p.

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

Molecular engineering of avidin and hydrophobin for functional self-assembling interfaces

Kurppa, K., Hytönen, V. P., Nakari-Setälä, T., Kulomaa, M. S. & Linder, M. B., 1 Aug 2014, In : *Colloids and Surfaces B: Biointerfaces*. 120, p. 102-109 8 p.

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

Mixotrophic cultivation of oleaginous *Chlorella* sp. KR-1 mediated by actual coal-fired flue gas for biodiesel production

Praveenkumar, R., Kim, B., Choi, E., Lee, K., Cho, S., Hyun, J. S., Park, J. Y., Lee, Y. C., Lee, H. U., Lee, J. S. & Oh, Y. K., 12 Sep 2014, In : *Bioprocess and Biosystems Engineering*. 37, 10, p. 2083-2094 12 p.

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

Rapid, Brushless Self-assembly of a PS-b-PDMS Block Copolymer for Nanolithography

Rasappa, S., Schulte, L., Borah, D., Morris, M. A. & Ndoni, S., 1 Oct 2014, In : *Colloids and Interface Science Communications*. 2, p. 1-5 5 p.

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

Improved biomass and lipid production in a mixotrophic culture of *Chlorella* sp. KR-1 with addition of coal-fired flue-gas

Praveenkumar, R., Kim, B., Choi, E., Lee, K., Park, J. Y., Lee, J. S., Lee, Y. C. & Oh, Y. K., 1 Nov 2014, In : *Bioresource Technology*. 171, p. 500-505 6 p.

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

Time-resolved fluorescence methods (IUPAC technical report)

Lemmetyinen, H., Tkachenko, N. V., Valeur, B., Hotta, J. I., Ameloot, M., Ernsting, N. P., Gustavsson, T. & Boens, N., 1 Dec 2014, In : *Pure and Applied Chemistry*. 86, 12, p. 1969-1998 30 p.

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

Switchavidin: Reversible biotin-avidin-biotin bridges with high affinity and specificity

Taskinen, B., Zauner, D., Lehtonen, S. I., Koskinen, M., Thomson, C., Kähkönen, N., Kukkurainen, S., Määttä, J. A. E., Ihalainen, T. O., Kulomaa, M. S., Gruber, H. J. & Hytönen, V. P., 17 Dec 2014, In : *Bioconjugate Chemistry*. 25, 12, p. 2233-2243 11 p.

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

Stimuli-responsive photonic polymer coatings

Stumpel, J. E., Broer, D. J. & Schenning, A. P. H. J., 28 Dec 2014, In : *Chemical Communications*. 50, 100, p. 15839-15848 10 p.

Characterisation of novel regenerated cellulosic, viscose, and cotton fibres and the dyeing properties of fabrics

Kamppuri, T., Vehviläinen, M., Puolakka, A., Honkanen, M., Vippola, M. & Rissanen, M., 2015, In : *Coloration Technology*. 131, 5, p. 396-402 7 p.

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

Chemolithotrophic denitrification in biofilm reactors

Di Capua, F., Papirio, S., Lens, P. N. L. & Esposito, G., 2015, In : *Chemical Engineering Journal*. 280, p. 643-657 15 p.

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

Coulomb explosion during the early stages of the reaction of alkali metals with water

Mason, P. E., Uhlig, F., Vaněk, V., Buttersack, T., Bauerecker, S. & Jungwirth, P., 2015, In : *Nature Chemistry*. 7, 3, p. 250-254 5 p.

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

Efficient preparation of shuffled DNA libraries through recombination (Gateway) cloning

Lehtonen, S. I., Taskinen, B., Ojala, E., Kukkurainen, S., Rahikainen, R., Riihimäki, T. A., Laitinen, O. H., Kulomaa, M. S. & Hytönen, V. P., 2015, In : *Protein Engineering Design and Selection*. 28, 1, p. 23-28 6 p.

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

Enquête de la variabilité cycle-à-cycle du NO dans la combustion homogène

Translated title of the contribution: : Investigation of cycle-to-cycle variability of NO in homogeneous combustion

Karvountzis-Kontakiotis, A. & Ntziachristos, L., 2015, In : *OIL AND GAS SCIENCE AND TECHNOLOGY : REVUE DE L'INSTITUT FRANCAIS DU PETROLE*. 70, 1, p. 111-123 13 p.

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

Fungal treatment of landfill mining fine fraction to increase its stability and end-use potential

Palmroth, M. R. T., Mönkäre, T. J. & Steffen, K. T., 2015, *Book of abstracts of the 6th European Bioremediation Conference*. Kalogerakis, N., Fava, F. & Manousaki, E. (eds.). p. 47 169

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

Metals removal and recovery in bioelectrochemical systems: A review

Nancharaiah, Y. V., Venkata Mohan, S. & Lens, P. N. L., 2015, In : *Bioresource Technology*. 195, p. 102-114 13 p.

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

Multifunctional ultrasmall nanoplatfoms for vascular-targeted interstitial photodynamic therapy of brain tumors guided by real-time MRI

Bechet, D., Auger, F., Couleaud, P., Marty, E., Ravasi, L., Durieux, N., Bonnet, C., Plénat, F., Frochot, C., Mordon, S., Tillement, O., Vanderesse, R., Lux, F., Perriat, P., Guillemain, F. & Barberi-Heyob, M., 2015, In : *NANOMEDICINE: NANOTECHNOLOGY BIOLOGY AND MEDICINE*. 11, 3, p. 657-670 14 p.

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

Water-responsive dual-coloured photonic polymer coatings based on cholesteric liquid crystals

Stumpel, J. E., Broer, D. J. & Schenning, A. P. H. J., 2015, In : *RSC Advances*. 5, 115, p. 94650-94653 4 p.

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

A comparison of five optical surface topography measurement methods

Mettänen, M. & Hirn, U., 1 Jan 2015, In : *TAPPI Journal*. 14, 1, p. 27-38 12 p.

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

Perfluoro-1,1'-biphenyl and perfluoronaphthalene and their derivatives as π -acceptors for anions

Yi, H., Albrecht, M., Valkonen, A. & Rissanen, K., 1 Jan 2015, In : *New Journal of Chemistry*. 39, 1, p. 746-749 4 p.

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

Oxidation half-reaction of aqueous nucleosides and nucleotides via photoelectron spectroscopy augmented by ab initio calculations

Schroeder, C. A., Pluharová, E., Seidel, R., Schroeder, W. P., Faubel, M., Slavíček, P., Winter, B., Jungwirth, P. & Bradforth, S. E., 14 Jan 2015, In : Journal of the American Chemical Society. 137, 1, p. 201-209 9 p.

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

Second-Harmonic Generation from Metal Nanoparticles: Resonance Enhancement versus Particle Geometry

Czaplicki, R., Mäkitalo, J., Siikanen, R., Husu, H., Lehtolahti, J., Kuittinen, M. & Kauranen, M., 14 Jan 2015, In : Nano Letters. 15, 1, p. 530-534 5 p.

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

Second-harmonic generation imaging of semiconductor nanowires with focused vector beams

Bautista, G., Mäkitalo, J., Chen, Y., Dhaka, V., Grasso, M., Karvonen, L., Jiang, H., Huttunen, M. J., Huhtio, T., Lipsanen, H. & Kauranen, M., 6 Feb 2015, In : Nano Letters. 15, 3, p. 1564-1569 6 p.

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

Fluidized-bed denitrification of mining water tolerates high nickel concentrations

Zou, G., Papirio, S., van Hullebusch, E. D. & Puhakka, J. A., 1 Mar 2015, In : Bioresource Technology. 179, p. 284-290 7 p.

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

Multi-stable dynamics of the non-adiabatic repressilator

Potapov, I., Zhurov, B. & Volkov, E., 6 Mar 2015, In : Journal of the Royal Society. Interface. 12, 104, 20141315.

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

Workplace performance of a loose-fitting powered air purifying respirator during nanoparticle synthesis

Koivisto, A. J., Aromaa, M., Koponen, I. K., Fransman, W., Jensen, K. A., Mäkelä, J. M. & Hämeri, K. J., 9 Apr 2015, In : Journal of Nanoparticle Research. 17, 4

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

'miSimBa' - A simulator of synthetic time-lapsed microscopy images of bacterial cells

Martins, L., Fonseca, J. & Ribeiro, A., 17 Apr 2015, *Proceedings - 2015 IEEE 4th Portuguese Meeting on Bioengineering, ENBENG 2015*. The Institute of Electrical and Electronics Engineers, Inc., 7088854

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

Biomimetic collagen I and IV double layer Langmuir-Schaefer films as microenvironment for human pluripotent stem cell derived retinal pigment epithelial cells

Sorkio, A. E., Vuorimaa-Laukkanen, E. P., Hakola, H. M., Liang, H., Ujula, T. A., Valle-Delgado, J. J., Österberg, M., Yliperttula, M. L. & Skottman, H., 1 May 2015, In : Biomaterials. 51, p. 257-269 13 p.

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

A facile route to synthesis of S-doped TiO₂ nanoparticles for photocatalytic activity

McManamon, C., O'Connell, J., Delaney, P., Rasappa, S., Holmes, J. D. & Morris, M. A., 30 May 2015, In : Journal of Molecular Catalysis A: Chemical. 406, p. 51-57!

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

Catalytic effect of Ca and K on CO₂ gasification of spruce wood char

Perander, M., DeMartini, N., Brink, A., Kramb, J., Karlström, O., Hemming, J., Moilanen, A., Konttinen, J. & Hupa, M., 15 Jun 2015, In : Fuel. 150, p. 464-472 9 p.

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

The influence of SrO and CaO in silicate and phosphate bioactive glasses on human gingival fibroblasts

Massera, J., Kokkari, A., Närhi, T. & Hupa, L., 25 Jun 2015, In : Journal of Materials Science: Materials in Medicine. 26, 6, 196.

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

Lipid production by eukaryotic microorganisms isolated from palm oil mill effluent

Marjakangas, J. M., Lakaniemi, A. M., Koskinen, P. E. P., Chang, J. S. & Puhakka, J. A., 5 Jul 2015, In : Biochemical Engineering Journal. 99, p. 48-54 7 p.

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

Lithography-free oxide patterns as templates for self-catalyzed growth of highly uniform GaAs nanowires on Si(111)

Hakkarainen, T. V., Schramm, A., Mäkelä, J., Laukkanen, P. & Guina, M., 18 Jul 2015, In : Nanotechnology. 26, 27, 275301.

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

Electricity production by a microbial fuel cell fueled by brewery wastewater and the factors in its membrane deterioration

Çetinkaya, A. Y., Köroğlu, E. O., Demir, N. M., Baysoy, D. Y., Özkaya, B. & Çakmakçı, M., 20 Jul 2015, In : Chinese Journal of Catalysis. 36, 7, p. 1068-1076 9 p.

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

High quality sub-10 nm graphene nanoribbons by on-chip PS-b-PDMS block copolymer lithography

Rasappa, S., Caridad, J. M., Schulte, L., Cagliani, A., Borah, D., Morris, M. A., Bøggild, P. & Ndoni, S., 29 Jul 2015, In : RSC Advances. 5, 82, p. 66711-66717 7 p.

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

Evaluation of crushing strength of spray-dried MgAl₂O₄ granule beds

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

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

Sol-gel synthesis of quaternary (P₂O₅)₅₅-(CaO)₂₅-(Na₂O)_(20-x)-(TiO₂)_x bioresorbable glasses for bone tissue engineering applications (x = 0, 5, 10, or 15)

Foroutan, F., Walters, N. J., Owens, G. J., Mordan, N. J., Kim, H. W., de Leeuw, N. H. & Knowles, J. C., 1 Aug 2015, In : Biomedical materials (Bristol, England). 10, 4, p. 45025 1 p.

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

Influence of relative humidity and physical load during storage on dustiness of inorganic nanomaterials: implications for testing and risk assessment

Levin, M., Rojas, E., Vanhala, E., Vippola, M., Liguori, B., Kling, K. I., Koponen, I. K., Mølhav, K., Tuomi, T., Gregurec, D., Moya, S. & Jensen, K. A., 14 Aug 2015, In : Journal of Nanoparticle Research. 17, 8, 337.

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

Enhanced photoactive and photoelectrochemical properties of TiO₂ sol-gel coated steel by the application of SiO₂ intermediate layer

Nikkanen, J. P., Huttunen-Saarivirta, E., Salminen, T., Hyvärinen, L., Honkanen, M., Isotahdon, E., Heinonen, S. & Levänen, E., 1 Sep 2015, In : Applied Catalysis B-Environmental. 174-175, p. 533-543 11 p.

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

Searching for a robust strategy for minimizing alkali chlorides in fluidized bed boilers during burning of high SRF-energy-share fuel

Bajamundi, C. J. E., Vainikka, P., Hedman, M., Silvennoinen, J., Heinanen, T., Taipale, R. & Kontinen, J., 1 Sep 2015, In : Fuel. 155, p. 25-36 12 p.

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

Surface Modified Biodegradable Electrospun Membranes as a Carrier for Human Embryonic Stem Cell-Derived Retinal Pigment Epithelial Cells

Sorkio, A., Porter, P. J., Juuti-Uusitalo, K., Meenan, B. J., Skottman, H. & Burke, G. A., 1 Sep 2015, In : Tissue Engineering Part A. 21, 17-18, p. 2301-2314 14 p.

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

Effects of anode potentials on bioelectrogenic conversion of xylose and microbial community compositions

Kokko, M. E., Mäkinen, A. E., Sulonen, M. L. K. & Puhakka, J. A., 5 Sep 2015, In : Biochemical Engineering Journal. 101, p. 248-252 5 p.

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

Molecular Design of Light-Responsive Hydrogels, for in Situ Generation of Fast and Reversible Valves for Microfluidic Applications

Ter Schiphorst, J., Coleman, S., Stumpel, J. E., Ben Azouz, A., Diamond, D. & Schenning, A. P. H. J., 8 Sep 2015, In : *Chemistry of Materials*. 27, 17, p. 5925-5931 7 p.

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

Cultivation of Nannochloropsis for eicosapentaenoic acid production in wastewaters of pulp and paper industry

Polishchuk, A., Valev, D., Tarvainen, M., Mishra, S., Kinnunen, V., Antal, T., Yang, B., Rintala, J. & Tyystjärvi, E., 1 Oct 2015, In : *Bioresource Technology*. 193, p. 469-476 8 p.

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

Submolecular Plasticization Induced by Photons in Azobenzene Materials

Vapaavuori, J., Laventure, A., Bazuin, C. G., Lebel, O. & Pellerin, C., 28 Oct 2015, In : *Journal of the American Chemical Society*. 137, 42, p. 13510-13517 8 p.

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

Comparison of different cationized proteins as biomaterials for nanoparticle-based ocular gene delivery

Zorzi, G. K., Párraga, J. E., Seijo, B. & Sanchez, A., 1 Nov 2015, In : *Colloids and Surfaces B: Biointerfaces*. 135, p. 533-541 9 p.

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

Effect of rubber polarity on selective wetting of carbon nanotubes in ternary blends

Le, H. H., Parsaker, M., Sriharish, M. N., Henning, S., Menzel, M., Wießner, S., Das, A., Do, Q. K., Heinrich, G. & Radosch, H. J., 1 Nov 2015, In : *Express Polymer Letters*. 9, 11, p. 960-971 12 p.

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

Simultaneous nutrient removal and lipid production with *Chlorella vulgaris* on sterilized and non-sterilized anaerobically pretreated piggery wastewater

Marjakangas, J. M., Chen, C. Y., Lakaniemi, A. M., Puhakka, J. A., Whang, L. M. & Chang, J. S., 5 Nov 2015, In : *Biochemical Engineering Journal*. 103, p. 177-184 8 p.

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

Tri-functionality of Fe₃O₄-embedded carbon microparticles in microalgae harvesting

Seo, J. Y., Lee, K., Ramasamy, P., Kim, B., Lee, S. Y., Oh, Y. K. & Park, S. B., 5 Nov 2015, In : *Chemical Engineering Journal*. 280, p. 206-214 9 p.

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

Graphene-intercalated Fe₂O₃/TiO₂ heterojunctions for efficient photoelectrolysis of water

Kaouk, A., Ruoko, T. P., Gönüllü, Y., Kaunisto, K., Mettenböcker, A., Gurevich, E., Lemmetyinen, H., Ostendorf, A. & Mathur, S., 13 Nov 2015, In : *RSC Advances*. 5, 123, p. 101401-101407 7 p.

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

Polypyrrole coating on poly-(lactide/glycolide)-β-tricalcium phosphate screws enhances new bone formation in rabbits

Zhao, M. D., Björninen, M., Cao, L., Wang, H. R., Pelto, J., Li, X. Q., Hyttinen, J., Jiang, Y. Q., Kellomäki, M., Miettinen, S., Sándor, G. K., Seppänen, R., Haimi, S. & Dong, J., 27 Nov 2015, In : *Biomedical Materials*. 10, 6, 065016.

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

Modeling carbon dioxide transport in PDMS-based microfluidic cell culture devices

Mäki, A. J., Peltokangas, M., Kreuzer, J., Auvinen, S. & Kallio, P., 1 Dec 2015, In : *Chemical Engineering Science*. 137, p. 515-524 10 p.

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

The formation and physical properties of the particle emissions from a natural gas engine

Alanen, J., Saukko, E., Lehtoranta, K., Murtonen, T., Timonen, H., Hillamo, R., Karjalainen, P., Kuuluvainen, H., Harra, J., Keskinen, J. & Rönkkö, T., 15 Dec 2015, In : *Fuel*. 162, p. 155-161 7 p.

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

Accelerated deactivation studies of the natural-gas oxidation catalyst-Verifying the role of sulfur and elevated temperature in catalyst aging

Honkanen, M., Kärkkäinen, M., Kolli, T., Heikkinen, O., Viitanen, V., Zeng, L., Jiang, H., Kallinen, K., Huuhtanen, M., Keiski, R. L., Lahtinen, J., Olsson, E. & Vippola, M., 2016, In : *Applied Catalysis B-Environmental*. p. 439-448 10 p.

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

A novel generic algorithm for robust physiological signal classification

Mahdiani, S., Vanhala, J. & Viik, J., 2016, *XIV Mediterranean Conference on Medical and Biological Engineering and Computing 2016: MEDICON 2016, March 31st–April 2nd 2016, Paphos, Cyprus*. Springer Verlag, p. 1038-1043 6 p. (IFMBE Proceedings; vol. 57).

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

A review of transient suppression methods of IIR notch filters used for power-line interference rejection in ECG measurement

Mahdiani, S., Jeyhani, V. & Vehkaoja, A., 2016, *IFMBE Proceedings*. Springer Verlag, Vol. 57. p. 151-156 6 p. (IFMBE Proceedings).

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

A tool for geometrical measurements of orthognathic surgery changes using cone beam computed tomography

Prakash, M., Peltomäki, T. & Eskola, H., 2016, *XIV Mediterranean Conference on Medical and Biological Engineering and Computing 2016: MEDICON 2016, March 31st–April 2nd 2016, Paphos, Cyprus*. Springer Verlag, p. 430-433 4 p. (IFMBE Proceedings; vol. 57).

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

Biological and Bioelectrochemical Recovery of Critical and Scarce Metals

Nancharaiyah, Y. V., Mohan, S. V. & Lens, P. N. L., 2016, In : *Trends in Biotechnology*. 34, 2, p. 137-155 19 p.

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

Cell-wall disruption and lipid/astaxanthin extraction from microalgae: *Chlorella* and *Haematococcus*

Kim, D. Y., Vijayan, D., Praveenkumar, R., Han, J. I., Lee, K., Park, J. Y., Chang, W. S., Lee, J. S. & Oh, Y. K., 2016, In : *Bioresource Technology*. 199, p. 300-310

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

Composites of high-temperature thermomechanical pulps and polylactic acid

Solala, I., Koistinen, A., Siljander, S., Vuorinen, J. & Vuorinen, T., 2016, In : *BioResources*. 11, 1, p. 1125-1140 16 p.

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

Decoding the Morphological Diversity in Two Dimensional Crystalline Porous Polymers by Core Planarity Modulation

Halder, A., Kandambeth, S., Biswal, B. P., Kaur, G., Roy, N. C., Addicoat, M., Salunke, J. K., Banerjee, S., Vanka, K., Heine, T., Verma, S. & Banerjee, R., 2016, In : *Angewandte Chemie (International Edition)*. 55, 27, p. 7806-7810 5 p.

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

Enhanced adsorption of orthophosphate and copper onto hydrochar derived from sewage sludge by KOH activation

Spataru, A., Jain, R., Chung, J. W., Gerner, G., Krebs, R. & Lens, P. N. L., 2016, In : *RSC Advances*. 6, 104, p. 101827-101834 8 p.

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

Fire-safe and environmentally friendly nanocomposites based on layered double hydroxides and ethylene propylene diene elastomer

Basu, D., Das, A., Wang, D. Y., George, J. J., Stöckelhuber, K. W., Boldt, R., Leuteritz, A. & Heinrich, G., 2016, In : *RSC Advances*. 6, 31, p. 26425-26436 12 p.

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

Functional model for organisational and safety culture

Porkka, P. L., 2016, *Chemical Engineering Transactions*. Italian Association of Chemical Engineering AIDIC, p. 907-912 6 p. (Chemical Engineering Transactions; vol. 48).

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

High-Yield Excited Triplet States in Pentacene Self-Assembled Monolayers on Gold Nanoparticles through Singlet Exciton Fission

Kato, D., Sakai, H., Tkachenko, N. V. & Hasobe, T., 2016, In : *Angewandte Chemie (International Edition)*. 55, 17, p. 5230-5234

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

Metrics for polyphonic sound event detection

Mesaros, A., Heittola, T. & Virtanen, T., 2016, In : *Applied Sciences*. 6, 6, 162.

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

Nanoscale barrier coating on BOPP packaging film by ALD

Lahti, J., 2016, *TAPPI PLACE Conference 2016: Exploring New Frontiers*. TAPPI Press, p. 493-505 13 p.

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

Nonlinear transmittance and optical power limiting in magnesium ferrite nanoparticles: effects of laser pulsewidth and particle size

Perumbilavil, S., Sridharan, K., Abraham, A. R., Janardhanan, H. P., Kalarikkal, N. & Philip, R., 2016, In : *RSC Advances*. 6, 108, p. 106754-106761 8 p.

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

Optimal short distance electrode locations for impedance pneumography measurement from the frontal thoracic area

Jeyhani, V., Vuorinen, T., Noponen, K., Mäntysalo, M. & Vehkaoja, A., 2016, *XIV Mediterranean Conference on Medical and Biological Engineering and Computing 2016: MEDICON 2016, March 31st-April 2nd 2016, Paphos, Cyprus*. Springer Verlag, p. 1138-1143 6 p. (IFMBE Proceedings; vol. 57).

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

Preferential adsorption of Cu in a multi-metal mixture onto biogenic elemental selenium nanoparticles

Jain, R., Dominic, D., Jordan, N., Rene, E. R., Weiss, S., van Hullebusch, E. D., Hübner, R. & Lens, P. N. L., 2016, In : *Chemical Engineering Journal*. 284, p. 917-925

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

Remarkable Dependence of the Final Charge Separation Efficiency on the Donor-Acceptor Interaction in Photoinduced Electron Transfer

Higashino, T., Yamada, T., Yamamoto, M., Furube, A., Tkachenko, N. V., Miura, T., Kobori, Y., Jono, R., Yamashita, K. & Imahori, H., 2016, In : *Angewandte Chemie (International Edition)*. 55, 2, p. 629-633

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

Roll-to-roll application of photocatalytic TiO₂ nanoparticles for printed functionality

Saarinen, J. J., Valtakari, D., Bollström, R., Stepien, M., Haapanen, J., Mäkelä, J. M. & Toivakka, M., 2016, *Advanced Manufacturing, Electronics and Microsystems: TechConnect Briefs 2016*. TechConnect, Vol. 4. p. 47-50 4 p.

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

Superfluorinated Ionic Liquid Crystals Based on Supramolecular, Halogen-Bonded Anions

Cavallo, G., Terraneo, G., Monfredini, A., Saccone, M., Priimägi, A., Pilati, T., Resnati, G., Metrangolo, P. & Bruce, D. W., 2016, In : *Angewandte Chemie (International Edition)*. 55, 21, p. 6300-6304

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

Two models for hydraulic cylinders in flexible multibody simulations

Ylinen, A., Mäkinen, J. & Kouhia, R., 2016, *Computational Methods for Solids and Fluids: Multiscale Analysis, Probability Aspects and Model Reduction*. Springer, p. 463-493 31 p. (Computational Methods in Applied Sciences; vol. 41).

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

X-ray microtomography of collagen and polylactide samples in liquids

Hannula, M., Haaparanta, A. M., Tamminen, I., Aula, A., Kellomäki, M. & Hyttinen, J., 2016, *XIV Mediterranean Conference on Medical and Biological Engineering and Computing 2016: MEDICON 2016, March 31st–April 2nd 2016, Paphos, Cyprus*. Springer Verlag, p. 420-424 5 p. (IFMBE Proceedings; vol. 57).

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

Importance of maintenance data quality in extended warranty simulation

Mahlamäki, K., Niemi, A., Jokinen, J. & Borgman, J., 1 Jan 2016, In : *International Journal of COMADEM*. 19, 1, p. 3-10 8 p.

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

Human Adipose Stem Cells Differentiated on Braided Polylactide Scaffolds is a Potential Approach for Tendon Tissue Engineering

Vuornos, K., Björninen, M., Talvitie, E., Paakinaho, K., Kellomäki, M., Huhtala, H., Miettinen, S., Seppänen-Kaijansinkko, R. & Haimi, S., 1 Mar 2016, In : *Tissue Engineering Part A*. 22, 5-6, p. 513-523 11 p.

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

Metal chalcogenide quantum dots: Biotechnological synthesis and applications

Mal, J., Nancharaiyah, Y. V., Van Hullebusch, E. D. & Lens, P. N. L., Apr 2016, In : *RSC Advances*. 6, 47, p. 41477-41495 19 p.

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

Effect of heavy metal co-contaminants on selenite bioreduction by anaerobic granular sludge

Mal, J., Nancharaiyah, Y. V., van Hullebusch, E. D. & Lens, P. N. L., 1 Apr 2016, In : *Bioresource Technology*. 206, p. 1-8 8 p.

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

Wetting hysteresis induced by temperature changes: Supercooled water on hydrophobic surfaces

Heydari, G., Sedighi Moghaddam, M., Tuominen, M., Fielden, M., Haapanen, J., Mäkelä, J. M. & Claesson, P. M., 15 Apr 2016, In : *Journal of Colloid and Interface Science*. 468, p. 21-33 13 p.

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

Development of Magnetic Losses During Accelerated Corrosion Tests for Nd-Fe-B Magnets Used in Permanent Magnet Generators

Isotahdon, E., Huttunen-Saarivirta, E. & Kuokkala, V-T., 1 Jun 2016, In : *Corrosion*. 72, 6, p. 732-741 10 p.

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

Framework for optimization and scheduling of a copper production plant

Suominen, O., Mörsky, V., Ritala, R. & Vilkkö, M., 25 Jun 2016, *26th European Symposium on Computer Aided Process Engineering, 2016*. Elsevier Science B.V., Vol. 38. p. 1243-1248 6 p. (Computer Aided Chemical Engineering).

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

Hydrothermal carbonization of pulp mill streams

Wikberg, H., Ohra-aho, T., Honkanen, M., Kanerva, H., Harlin, A., Vippola, M. & Laine, C., 1 Jul 2016, In : *Bioresource Technology*. 212, p. 236-244 9 p.

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

Modeling of the catalytic effects of potassium and calcium on spruce wood gasification in CO₂

Kramb, J., DeMartini, N., Perander, M., Moilanen, A. & Kontinen, J., 1 Jul 2016, In : *Fuel Processing Technology*. 148, p. 50-59 10 p.

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

Spontaneous formation of three-dimensionally ordered Bi-rich nanostructures within GaAs_{1-x}Bi_x/GaAs quantum wells

Luna, E., Wu, M., Hanke, M., Puustinen, J., Guina, M. & Trampert, A., 1 Jul 2016, In : *Nanotechnology*. 27, 32, 325603.

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

The influence of high-temperature sulfuric acid solution ageing on the properties of laminated vinyl-ester joints

Lindgren, M., Wallin, M., Kakkonen, M., Saarela, O. & Vuorinen, J., 1 Jul 2016, In : International Journal of Adhesion and Adhesives. 68, p. 298-304 7 p.

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

The Influence of Phosphorus Exposure on a Natural-Gas-Oxidation Catalyst

Kärkkäinen, M., Kolli, T., Honkanen, M., Heikkinen, O., Väliheikki, A., Huuhtanen, M., Kallinen, K., Lahtinen, J., Vippola, M. & Keiski, R. L., 1 Jul 2016, In : Topics in Catalysis. 59, 10-12, p. 1044-1048 5 p.

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

Designing of Elastomer Nanocomposites: From Theory to Application

Stöckelhuber, K. W. (ed.), Das, A. (ed.) & Klüppel, M. (ed.), 17 Aug 2016, Springer International Publishing. (Advances in Polymer Science; vol. 275)

Research output: Book/Report > Anthology > Scientific > peer-review

Nanostructured Ionomeric Elastomers

Basu, D., Das, A., Stöckelhuber, K. W. & Wießner, S., 17 Aug 2016, *Designing of Elastomer Nanocomposites: From Theory to Applications*. Stöckelhuber, K. W., Das, A. & Klüppel, M. (eds.). Springer International Publishing, p. 235-266 32 p. (Advances in Polymer Science; vol. 275).

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

Recent advances in nutrient removal and recovery in biological and bioelectrochemical systems

Nancharaiyah, Y. V., Venkata Mohan, S. & Lens, P. N. L., Sep 2016, In : Bioresource Technology. 215, p. 173-185

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

3D micro-nano structured hybrid scaffolds: An investigation into the role of nanofiber coating on viability, proliferation and differentiation of seeded mesenchymal stem cells

Pilehrood, M. K., Atashi, A., Sadeghi-Aliabadi, H., Nousiainen, P. & Harlin, A., 1 Sep 2016, In : Journal Nanoscience and Nanotechnology. 16, 9, p. 9000-9007 8 p.

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

Long-term stability of bioelectricity generation coupled with tetrathionate disproportionation

Sulonen, M. L. K., Lakaniemi, A. M., Kokko, M. E. & Puhakka, J. A., 1 Sep 2016, In : Bioresource Technology. 216, p. 876-882 7 p.

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

Elimination of arsenic-containing emissions from gasification of chromated copper arsenate wood

Kramb, J., Konttinen, J., Backman, R., Salo, K. & Roberts, M., 1 Oct 2016, In : Fuel. 181, p. 319-324 6 p.

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

Increased survival rate by local release of diclofenac in a murine model of recurrent oral carcinoma

Will, O. M., Purcz, N., Chalaris, A., Heneweer, C., Boretius, S., Purcz, L., Nikkola, L., Ashammakhi, N., Kalthoff, H., Glüer, C. C., Wiltfang, J., Açil, Y. & Tiwari, S., 12 Oct 2016, In : International Journal of Nanomedicine. 11, p. 5311-5321 11 p.

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

Grain orientation dependent Nb-Ti microalloying mediated surface segregation on ferritic stainless steel

Ali-Löytty, H., Hannula, M., Honkanen, M., Östman, K., Lahtonen, K. & Valden, M., Nov 2016, In : Corrosion Science. 112, p. 204-213

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

Magnesium aminoclay enhances lipid production of mixotrophic *Chlorella* sp. KR-1 while reducing bacterial populations

Kim, B., Praveenkumar, R., Lee, J., Nam, B., Kim, D. M., Lee, K., Lee, Y. C. & Oh, Y. K., 1 Nov 2016, In : Bioresource Technology. 219, p. 608-613 6 p.

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

Mild pressure induces rapid accumulation of neutral lipid (triacylglycerol) in *Chlorella* spp.

Ramasamy, P., Kim, B., Lee, J., Vijayan, D., Lee, K., Nam, B., Jeon, S. G., Kim, D. M. & Oh, Y. K., 1 Nov 2016, In : *Bioresource Technology*. 220, p. 661-665 5 p.

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

The effect of low-temperature pretreatment on the solubilization and biomethane potential of microalgae biomass grown in synthetic and wastewater media

Kinnunen, V. & Rintala, J., 1 Dec 2016, In : *Bioresource Technology*. 221, p. 78-84 7 p.

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

Particle emissions characterization from a medium-speed marine diesel engine with two fuels at different sampling conditions

Ntziachristos, L., Saukko, E., Lehtoranta, K., Rönkkö, T., Timonen, H., Simonen, P., Karjalainen, P. & Keskinen, J., 15 Dec 2016, In : *Fuel*. 186, p. 456-465 10 p.

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

Aligned Poly(ϵ -caprolactone) Nanofibers Guide the Orientation and Migration of Human Pluripotent Stem Cell-Derived Neurons, Astrocytes, and Oligodendrocyte Precursor Cells In Vitro

Hyysalo, A., Ristola, M., Joki, T., Honkanen, M., Vippola, M. & Narkilahti, S., 2017, In : *MACROMOLECULAR BIOSCIENCE*. 17, 7, 1600517.

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

Biological removal of selenate and ammonium by activated sludge in a sequencing batch reactor

Mal, J., Nancharaiah, Y. V., van Hullebusch, E. D. & Lens, P. N. L., 2017, In : *Bioresource Technology*. 229, p. 11-19 9 p.

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

Cultivation of *Scenedesmus acuminatus* in different liquid digestates from anaerobic digestion of pulp and paper industry biosludge

Tao, R., Lakaniemi, A-M. & Rintala, J. A., 2017, In : *Bioresource Technology*. 245, A, p. 706-713 8 p.

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

Day-to-day repeatability of the results of the finger-toe-plot analysis

Peltokangas, M., Telembeci, A. A., Verho, J., Lekkala, J., Vehkaoja, A. & Oksala, N., 2017, *EMBE and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017*. Springer Verlag, p. 534-537 4 p. (IFMBE Proceedings; vol. 65).

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

Dynamic response to process disturbances—A comparison between TMB/SMB models in transient regime

Nogueira, I. B. R., Ribeiro, A. M., Rodrigues, A. E. & Loureiro, J. M., 2017, In : *Computers and Chemical Engineering*. 99, p. 230-244 15 p.

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

Electrode comparison for textile-integrated electrocardiogram and impedance pneumography measurement

Tuohimäki, K., Mahdiani, S., Jeyhani, V., Vehkaoja, A., Iso-Ketola, P., Vanhala, J., Viik, J. & Mäntysalo, M., 2017, *EMBE and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017*. Springer Verlag, Vol. 65. p. 302-305 4 p. (IFMBE Proceedings; vol. 65).

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

EMBE & NBC 2017: Joint Conference of the European Medical and Biological Engineering Conference (EMBE) and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics (NBC), Tampere, Finland, June 2017

Eskola, H. (ed.), Väisänen, O. (ed.), Viik, J. (ed.) & Hyttinen, J. (ed.), 2017, Springer. 1139 p. (IFMBE Proceedings; vol. 65)

Research output: Book/Report > Anthology > Scientific > peer-review

Liquid flame spray—a hydrogen-oxygen flame based method for nanoparticle synthesis and functional nanocoatings
Mäkelä, J. M., Haapanen, J., Harra, J., Juuti, P. & Kujanpää, S., 2017, In : KONA POWDER AND PARTICLE JOURNAL. 2017, 34, p. 141-154 14 p.

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

Short-term stability of combined finger and toe photoplethysmogram analysis

Peltokangas, M., Huotari, M., Verho, J., Mattila, V. M., Rönning, J., Romsa, P., Lekkala, J., Vehkaoja, A. & Oksala, N., 2017, *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017*. Springer Verlag, p. 342-345 4 p. (IFMBE Proceedings; vol. 65).

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

Supramolecular control of liquid crystals by doping with halogen-bonding dyes

Vapaavuori, J., Siiskonen, A., Dichiarante, V., Forni, A., Saccone, M., Pilati, T., Pellerin, C., Shishido, A., Metrangolo, P. & Priimagi, A., 2017, In : RSC Advances. 7, 64, p. 40237-40242 6 p.

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

Two cations, two mechanisms: Interactions of sodium and calcium with zwitterionic lipid membranes

Javanainen, M., Melcrová, A., Magarkar, A., Jurkiewicz, P., Hof, M., Jungwirth, P. & Martinez-Seara, H., 2017, In : Chemical Communications. 53, 39, p. 5380-5383 4 p.

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

Effect of air gap on the adhesion of PET layer on cardboard substrate in extrusion coating

Suokas, E., 1 Jan 2017, *16th TAPPI European PLACE Conference 2017*. TAPPI Press, p. 529-544 16 p.

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

Novel bio-based materials for active and intelligent packaging

Lahti, J., Kamppuri, T. & Kuusipalo, J., 1 Jan 2017, *16th TAPPI European PLACE Conference 2017*. TAPPI Press, 1 p.

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

Novel equipment to simulate hot air heat sealability of packaging materials

Lahti, J., Kuusipalo, J. & Auvinen, S., 1 Jan 2017, *16th TAPPI European PLACE Conference 2017*. TAPPI Press, p. 237-248 12 p.

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

Tampere University of Technology, laboratory of materials science, paper converting and packaging technology Tampere, Finland

Kuusipalo, J. & Lahti, J., 1 Jan 2017, *16th TAPPI European PLACE Conference 2017: Basel; Switzerland; 22 May 2017 through 24 May 2017*. TAPPI Press, Vol. May-2017. 1 p.

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

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

Siiskonen, A. & Priimagi, A., 1 Feb 2017, In : Journal of Molecular Modeling. 23, 2, 50.

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

Hierarchical Self-Assembly of Halogen-Bonded Block Copolymer Complexes into Upright Cylindrical Domains

Milani, R., Houbenov, N., Fernandez-Palacio, F., Cavallo, G., Luzio, A., Haataja, J., Giancane, G., Saccone, M., Priimagi, A., Metrangolo, P. & Ikkala, O., 9 Mar 2017, In : Chem. 2, 3, p. 417-426 10 p.

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

Calcium Directly Regulates Phosphatidylinositol 4,5-Bisphosphate Headgroup Conformation and Recognition

Bilkova, E., Pleskot, R., Rissanen, S., Sun, S., Czogalla, A., Cwiklik, L., Róg, T., Vattulainen, I., Cremer, P. S., Jungwirth, P. & Coskun, Ü., 22 Mar 2017, In : Journal of the American Chemical Society. 139, 11, p. 4019-4024 6 p.

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

Bioamine-crosslinked gellan gum hydrogel for neural tissue engineering

Koivisto, J. T., Joki, T., Parraga, J. E., Paakkönen, R., Ylä-Outinen, L., Salonen, L., Jönkkäri, I., Peltola, M., Ihalainen, T. O., Narkilahti, S. & Kellomäki, M., 24 Mar 2017, In : *Biomedical Materials*. 12, 2, 025014.

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

Electron microscopic studies of natural gas oxidation catalyst – Effects of thermally accelerated aging on catalyst microstructure

Honkanen, M., Hansen, T. W., Jiang, H., Kärkkäinen, M., Huuhtanen, M., Heikkinen, O., Kallinen, K., Lahtinen, J., Keiski, R. L., Wagner, J. B. & Vippola, M., 1 May 2017, In : *Journal of Catalysis*. 349, p. 19-29 11 p.

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

The effects of calcium and potassium on CO₂ gasification of birch wood in a fluidized bed

Kramb, J., Gómez-Barea, A., DeMartini, N., Romar, H., Doddapaneni, T. R. K. C. & Kontinen, J., 15 May 2017, In : *Fuel*. 196, p. 398-407 10 p.

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

Dissolution-induced nanowire synthesis on hot-dip galvanized surface in supercritical carbon dioxide

Kaleva, A., Saarimaa, V., Heinonen, S., Nikkanen, J.-P., Markkula, A., Väisänen, P. & Levänen, E., 11 Jul 2017, In : *Nanomaterials*. 7, 7, 181.

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

Effects of different nickel species on autotrophic denitrification driven by thiosulfate in batch tests and a fluidized-bed reactor

Di Capua, F., Milone, I., Lakaniemi, A.-M., Hullebusch, E. D. V., Lens, P. N. L. & Esposito, G., 1 Aug 2017, In : *Bioresource Technology*. 238, p. 534-541 8 p.

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

Exhaust emissions of non-road mobile machine: Real-world and laboratory studies with diesel and HVO fuels

Pirjola, L., Rönkkö, T., Saukko, E., Parviainen, H., Malinen, A., Alanen, J. & Saveljeff, H., 15 Aug 2017, In : *Fuel*. 202, p. 154-164 11 p.

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

Membrane Binding of Recoverin: From Mechanistic Understanding to Biological Functionality

Timr, Š., Pleskot, R., Kadlec, J., Kohagen, M., Magarkar, A. & Jungwirth, P., 23 Aug 2017, In : *ACS Central Science*. 3, 8, p. 868-874 7 p.

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

Understanding selenium biogeochemistry in engineered ecosystems: Transformation and analytical methods

Jain, R., Van Hullebusch, E. D., Lenz, M. & Farges, F., 2 Sep 2017, *Bioremediation of Selenium Contaminated Wastewater*. Springer International Publishing, p. 33-56 24 p.

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

New Evidence for the Mechanism of Action of a Type-2 Diabetes Drug Using a Magnetic Bead-Based Automated Biosensing Platform

Uddin, R., Nur-E-Habiba, N., Rena, G., Hwu, E. T. & Boisen, A., 22 Sep 2017, In : *ACS Sensors*. 2, 9, p. 1329-1336 8 p.

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

Starch-poly(vinyl alcohol) barrier coatings for flexible packaging paper and their effects of phase interactions

Christophliemk, H., Ullsten, H., Johansson, C. & Järnström, L., 1 Oct 2017, In : *Progress in Organic Coatings*. 111, p. 13-22 10 p.

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

Waves in hyperbolic and double negative metamaterials including rogues and solitons

Boardman, A. D., Alberucci, A., Assanto, G., Grimalsky, V. V., Kibler, B., McNiff, J., Nefedov, I. S., Rapoport, Y. G. & Valagiannopoulos, C. A., 9 Oct 2017, In : *Nanotechnology*. 28, 44, 444001.

DoGlycans-Tools for Preparing Carbohydrate Structures for Atomistic Simulations of Glycoproteins, Glycolipids, and Carbohydrate Polymers for GROMACS

Danne, R., Poojari, C., Martinez-Seara, H., Rissanen, S., Lolicato, F., Róg, T. & Vattulainen, I., 23 Oct 2017, In : *Journal of Chemical Information and Modeling*. 57, 10, p. 2401-2406 6 p.

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

Production of long chain alkyl esters from carbon dioxide and electricity by a two-stage bacterial process

Lehtinen, T., Efimova, E., Tremblay, P. L., Santala, S., Zhang, T. & Santala, V., 1 Nov 2017, In : *Bioresource Technology*. 243, p. 30-36 7 p.

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

Oxygen and water vapor transmission rates of starch-poly(vinyl alcohol) barrier coatings for flexible packaging paper

Christophliemk, H., Johansson, C., Ullsten, H. & Järnström, L., 1 Dec 2017, In : *Progress in Organic Coatings*. 113, p. 218-224 7 p.

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

Photodynamic self-disinfecting surface using pyridinium phthalocyanine

George, L., Müller, A., Röder, B., Santala, V. & Efimov, A., 1 Dec 2017, In : *Dyes and Pigments*. 147, p. 334-342 9 p.

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

Deactivation of Pt/SiO₂-ZrO₂ diesel oxidation catalysts by sulphur, phosphorus and their combinations

Väliheikki, A., Kärkkäinen, M., Honkanen, M., Heikkinen, O., Kolli, T., Kallinen, K., Huuhtanen, M., Vippola, M., Lahtinen, J. & Keiski, R. L., 5 Dec 2017, In : *Applied Catalysis B-Environmental*. 218, p. 409-419 11 p.

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

A case study of focal bayesian EEG inversion for whitney element source spaces: Mesh-based vs. cartesian orientations

Miinalainen, T. & Pursiainen, S., 2018, *EMBECE and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017*. Springer Verlag, p. 1065-1068 4 p. (IFMBE Proceedings; vol. 65).

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

Addressing closed-chain dynamics for high-precision control of hydraulic cylinder actuated manipulators

Koivumäki, J., Zhu, W. H. & Mattila, J., 2018, *BATH/ASME 2018 Symposium on Fluid Power and Motion Control, FPMC 2018*. ASME

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

Adsorption of furfural from torrefaction condensate using torrefied biomass

Doddapaneni, T. R. K. C., Jain, R., Praveenkumar, R., Rintala, J., Romar, H. & Konttinen, J., 2018, In : *Chemical Engineering Journal*. 334, p. 558-568 11 p.

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

Altered synaptic signaling due to β -amyloid interference in astrocytes: A modeling study

Havela, R., Manninen, T. & Linne, M. L., 2018, *EMBECE and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017*. Springer Verlag, p. 679-682 4 p. (IFMBE Proceedings; vol. 65).

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

A neural network strategy for learning of nonlinearities toward feed-forward control of pressure-compensated hydraulic valves with a significant dead zone

Nurmi, J., Aref, M. M. & Mattila, J., 2018, *BATH/ASME 2018 Symposium on Fluid Power and Motion Control, FPMC 2018*. ASME

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

Artificial eye blink pacemaker - A first investigation into the blink production using constant-interval electrical stimulation
Lylykangas, J., Ilves, M., Venesvirta, H., Rantanen, V., Mäkelä, E., Vehkaoja, A., Verho, J., Lekkala, J., Rautiainen, M. & Surakka, V., 2018, *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017*. Springer Verlag, p. 522-525 4 p. (IFMBE Proceedings; vol. 65).

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

A strategy for dissecting the kinetics of transcription repression mechanisms

Palma, C. S. D., Startceva, S., Neeli-Venkata, R., Zare, M., Goncalves, N. S. M., Fonseca, J. M., Oliveira, S. M. D. & Ribeiro, A. S., 2018, *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017*. Springer Verlag, p. 1097-1100 4 p. (IFMBE Proceedings; vol. 65).

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

Atrial fibrillation detection from wrist photoplethysmography data using artificial neural networks

Rezaei Yousefi, Z., Parak, J., Tarniceriu, A., Harju, J., Yli-Hankala, A., Korhonen, I. & Vehkaoja, A., 2018, *World Congress on Medical Physics and Biomedical Engineering 2018*. Springer, Vol. 2. p. 399-404 6 p. (IFMBE Proceedings; vol. 68).

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

Automated pipeline for brain ROI analysis with results comparable to previous freehand measures in clinical settings

Ilvesmäki, T., Hakulinen, U. & Eskola, H., 2018, *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017*. Springer Verlag, p. 635-638 4 p. (IFMBE Proceedings; vol. 65).

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

Auto-regression-driven, reallocation particle filtering approaches in PPG-based respiration rate estimation

Pirhonen, M., Suominen, O. & Vehkaoja, A., 2018, *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017*. Springer Verlag, p. 1020-1024 5 p. (IFMBE Proceedings; vol. 65).

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

Bilateral teleoperation of a hydraulic robotic manipulator in contact with physical and virtual constraints

Lampinen, S., Koivumäki, J. & Mattila, J., 2018, *BATH/ASME 2018 Symposium on Fluid Power and Motion Control, FPMC 2018*. ASME

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

Bioactive glass induced osteogenic differentiation of human adipose stem cells is dependent on cell attachment mechanism and mitogen-activated protein kinases

Ojansivu, M., Wang, X., Hyväri, L., Kellomäki, M., Hupa, L., Vanhatupa, S. & Miettinen, S., 2018, In : *European Cells and Materials*. 35, p. 53-71 19 p.

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

Characterization of chloride channels in human embryonic stem cell derived retinal pigment epithelium

Korkka, I., Johansson, J. K., Skottman, H., Hyttinen, J. & Nymark, S., 2018, *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017*. Springer Verlag, p. 454-457 4 p. (IFMBE Proceedings; vol. 65).

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

Comparison of linear and non-linear heart rate variability indices between preterm infants at their theoretical term age and full term newborns

Helander, E., Khodor, N., Kallonen, A., Värri, A., Patural, H., Carrault, G. & Pladys, P., 2018, *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017*. Springer Verlag, p. 153-156 4 p. (IFMBE Proceedings; vol. 65).

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

Composition and role of the attached and planktonic microbial communities in mesophilic and thermophilic xylose-fed microbial fuel cells

Dessi, P., Porca, E., Haavisto, J., Lakaniemi, A-M., Collins, G. & Lens, P. N. L., 2018, In : RSC Advances. 8, 6, p. 3069-3080 12 p.

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

Computational model for multifocal imaging in optical projection tomography and numerical analysis of all-in-focus fusion in tomographic image reconstruction

Koskela, O., Pursiainen, S., Belay, B., Montonen, T., Figueiras, E. & Hyttinen, J., 2018, *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017*. Springer Verlag, p. 282-285 4 p. (IFMBE Proceedings; vol. 65).

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

Conjugated Heat Transfer Simulation of a Fin-and-Tube Heat Exchanger

Välikangas, T. & Karvinen, R., 2018, In : Heat Transfer Engineering. 39, 13-14, p. 1192-1200 9 p.

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

Connectivity analysis of full montage EEG in traumatic brain injury patients in the ICU

Lipping, T., Erkintalo, N., Särkelä, M., Takala, R. S. K., Katila, A., Frantzén, J., Posti, J. P., Müller, M. & Tenovuo, O., 2018, *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017*. Springer Verlag, p. 97-100 4 p. (IFMBE Proceedings; vol. 65).

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

Coronary artery disease diagnosis by means of heart rate variability analysis using respiratory information

Hernando, D., Kähkönen, M., Lázaro, J., Lehtinen, R., Nieminen, T., Nikus, K., Lehtimäki, T., Bailón, R. & Viik, J., 2018, *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017*. Springer Verlag, p. 270-273 4 p. (IFMBE Proceedings; vol. 65).

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

Correlation of depth of anesthesia indexes with MAC in volatile anesthesia

Olejarczyk, E., Lipping, T. & Marciniak, R., 2018, *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017*. Springer Verlag, p. 972-975 4 p. (IFMBE Proceedings; vol. 65).

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

Decomposition of persistent luminescent microparticles in corrosive phosphate glass melt

Ojha, N., Nguyen, H., Laihinne, T., Salminen, T., Lastusaari, M. & Petit, L., 2018, In : Corrosion Science. 135, p. 207-214

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

Detection and assessment of sleep-disordered breathing with emfit mattress

Tenhunen, M., Hyttinen, J., Viik, J., Perez-Macias, J. M. & Himanen, S. L., 2018, *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017*. Springer Verlag, p. 173-176 4 p. (IFMBE Proceedings; vol. 65).

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

Direct position control of electro-hydraulic excavator

Danaee, S., Nurmi, J., Minav, T., Mattila, J. & Pietola, M., 2018, *BATH/ASME 2018 Symposium on Fluid Power and Motion Control, FPMC 2018*. ASME

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

Dry electrode sizes in recording ECG and heart rate in wearable applications

Joutsen, A. S., Kaappa, E. S., Karinsalo, T. J. & Vanhala, J., 2018, *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017*. Springer Verlag, p. 735-738 4 p. (IFMBE Proceedings; vol. 65).

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

Effect of driver and work cycle on losses of a loader

Tikkanen, S., Ahola, V. & Koskela, E., 2018, *BATH/ASME 2018 Symposium on Fluid Power and Motion Control, FPMC 2018*. ASME

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

Effect of N/S ratio on anoxic thiosulfate oxidation in a fluidized bed reactor: Experimental and artificial neural network model analysis

Khanongnuch, R., Di Capua, F., Lakaniemi, A-M., Rene, E. R. & Lens, P. N. L., 2018, In : *Process Biochemistry*. 68, p. 171-181

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

Effects of nitroglycerin to ballistocardiography by EMFI

Alametsä, J. & Viik, J., 2018, *World Congress on Medical Physics and Biomedical Engineering 2018*. Springer, Vol. 2. p. 541-545 5 p. (IFMBE Proceedings; vol. 68).

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

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

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

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

Electric field of eeg during anesthesia

Jäntti, V., Subramaniyam, N. P., Kamata, K., Ylinen, T., Yli-Hankala, A., Kauppinen, P. & Väisänen, O., 2018, *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017*. Springer Verlag, p. 354-357 4 p. (IFMBE Proceedings; vol. 65).

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

Evaluating different shapes of cranial fixation mini-plates using finite element method

Chamrad, J., Marcián, P., Narra, N. & Borák, L., 2018, *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017*. Springer Verlag, p. 747-750 4 p. (IFMBE Proceedings; vol. 65).

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

Evaluation of the accuracy and reliability for photoplethysmography based heart rate and beat-to-beat detection during daily activities

Pietilä, J., Mehrang, S., Tolonen, J., Helander, E., Jimison, H., Pavel, M. & Korhonen, I., 2018, *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017*. Springer Verlag, p. 145-148 4 p. (IFMBE Proceedings; vol. 65).

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

Fin-and-tube heat exchanger enhancement with a combined herringbone and vortex generator design

Välikangas, T., Singh, S., Sørensen, K. & Condra, T., 2018, In : *International Journal of Heat and Mass Transfer*. 118, p. 602-616 15 p.

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

Finite element mapping for efficient image reconstruction in rotational electrical impedance tomography

Koskela, O., Lehti-Polojärvi, M., Seppänen, A., Figueiras, E. & Hyttinen, J., 2018, *World Congress on Medical Physics and Biomedical Engineering 2018*. Springer, Vol. 2. p. 901-904 4 p. (IFMBE Proceedings; vol. 68).

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

Floating frame of reference formulation for a flexible manipulator with hydraulic actuation - Modelling and experimental validation

Mäkinen, P., Dmitrochenko, O. & Mattila, J., 2018, *BATH/ASME 2018 Symposium on Fluid Power and Motion Control, FPMC 2018*. ASME

High resolution E-jet printed temperature sensor on artificial skin

Vuorinen, T., Laurila, M. M., Mangayil, R., Karp, M. & Mäntysalo, M., 2018, *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017*. Springer Verlag, p. 839-842 4 p. (IFMBE Proceedings; vol. 65).
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

Human activity recognition using a single optical heart rate monitoring wristband equipped with triaxial accelerometer

Mehrang, S., Pietilä, J., Tolonen, J., Helander, E., Jimison, H., Pavel, M. & Korhonen, I., 2018, *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017*. Springer Verlag, p. 587-590 4 p. (IFMBE Proceedings; vol. 65).

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

Identification of feasible pathway information for c-di-GMP binding proteins in cellulose production

Hassan, S. S., Mangayil, R., Aho, T., Yli-Harja, O. & Karp, M., 2018, *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017*. Springer Verlag, p. 667-670 4 p. (IFMBE Proceedings; vol. 65).

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

Impacts of laminin and polyethyleneimine surface coatings on morphology of differentiating human SH-SY5Y cells and networks

Teppola, H., Sarkanen, J. R., Jalonen, T. O. & Linne, M. L., 2018, *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017*. Springer Verlag, p. 298-301 4 p. (IFMBE Proceedings; vol. 65).

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

Learned vs. hand-designed features for ECG beat classification: A comprehensive study

Ince, T., Zabihi, M., Kiranyaz, S. & Gabbouj, M., 2018, *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017*. Springer Verlag, p. 551-554 4 p. (IFMBE Proceedings; vol. 65).

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

Linearity of simultaneously recorded impedance pneumography and direct pneumotachography in thoracic surgery patients

Jauhiainen, M., Gracia, J., Seppä, V. P., Mahrberg, H., Tuomisto, L., Laurikka, J. & Viik, J., 2018, *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017*. Springer Verlag, p. 1077-1080 4 p. (IFMBE Proceedings; vol. 65).

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

Low-latency EMG onset and termination detection for facial pacing

Kontunen, A., Rantanen, V., Vehkaoja, A., Ilves, M., Lylykangas, J., Mäkelä, E., Rautiainen, M., Surakka, V. & Lekkala, J., 2018, *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017*. Springer Verlag, p. 1016-1019 4 p. (IFMBE Proceedings; vol. 65).

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

Model-based control of a digital hydraulic transformer-based hybrid actuator

Linjama, M., 2018, *BATH/ASME 2018 Symposium on Fluid Power and Motion Control, FPFC 2018*. ASME

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

Multiresolution MAPEM method for 3D reconstruction of symmetrical particles with electron microscopy

Acar, E., Baikoghli, M. A., Stark, M., Peltonen, S., Ruotsalainen, U. & Cheng, R. H., 2018, *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017*. Springer Verlag, p. 141-144 4 p. (IFMBE Proceedings; vol. 65).

Nocturnal use of light compression garments and recovery

Jokinen, V. I., Korpela, J., Lehtinen, E., Perttunen, J. & Viik, J., 2018, *EMBECE and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017*. Springer Verlag, p. 125-128 4 p. (IFMBE Proceedings; vol. 65).

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

Nonlinear dynamics of heart rate variability in children with asthmatic symptoms

Milagro, J., Gil, E., Bolea, J., Seppä, V. P., Malmberg, L. P., Pelkonen, A. S., Kotaniemi-Syrjänen, A., Mäkelä, M. J., Viik, J. & Bailón, R., 2018, *EMBECE and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017*. Springer Verlag, Vol. 65. p. 815-818 4 p. (IFMBE Proceedings; vol. 65).

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

Nonlinear local projection filter for impedance pneumography

Gracia, J., Seppä, V. P., Pelkonen, A., Kotaniemi-Syrjänen, A., Mäkelä, M., Malmberg, P. & Viik, J., 2018, *EMBECE and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017*. Singapore: Springer Verlag, p. 306-309 4 p. (IFMBE Proceedings; vol. 65).

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

Optical projection tomography imaging of single cells in 3D gellan gum hydrogel

Belay, B., Koivisto, J. T., Vuornos, K., Montonen, T., Koskela, O., Lehti-Polojärvi, M., Miettinen, S., Kellomäki, M., Figueiras, E. & Hyttinen, J., 2018, *EMBECE and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017*. Springer Verlag, p. 996-999 4 p. (IFMBE Proceedings; vol. 65).

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

Optimization of ^{99m}Tc -sestamibi/ ^{123}I subtraction SPECT/CT protocol for parathyroid scintigraphy

Tunninen, V., Kauppinen, T. & Eskola, H., 2018, *EMBECE and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017*. Springer Verlag, p. 847-851 5 p. (IFMBE Proceedings; vol. 65).

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

Pathvalue: Pathways with value

Losoi, P. & Aho, T., 2018, *EMBECE and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017*. Springer Verlag, p. 583-586 4 p. (IFMBE Proceedings; vol. 65).

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

Performance analysis of novel flexible electrodes for wearable ECG/heart rate monitoring

Kaappa, E. S., Joutsen, A. S. & Vanhala, J., 2018, *EMBECE and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017*. Springer Verlag, p. 237-240 4 p. (IFMBE Proceedings; vol. 65).

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

Physical characteristics of collimators for dual-isotope imaging with ^{99m}Tc and ^{123}I

Tunninen, V., Kauppinen, T. & Eskola, H., 2018, *EMBECE and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017*. Springer Verlag, p. 245-249 5 p. (IFMBE Proceedings; vol. 65).

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

Predicting gene expression levels from histone modification signals with convolutional recurrent neural networks

Zhu, L., Kesseli, J., Nykter, M. & Huttunen, H., 2018, *EMBECE and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017*. Springer Verlag, p. 555-558 4 p. (IFMBE Proceedings; vol. 65).

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

Regeneration of sulfur-poisoned Pd-based catalyst for natural gas oxidation

Honkanen, M., Wang, J., Kärkkäinen, M., Huuhtanen, M., Jiang, H., Kallinen, K., Keiski, R. L., Akola, J. & Vippola, M., 2018, In : *Journal of Catalysis*. 358, p. 253-265 13 p.

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

Reproducible preparation method of hydrogels for cell culture applications – Case study with spermidine crosslinked gellan gum

Gering, C., Koivisto, J. T., Parraga, J. E. & Kellomäki, M., 2018, *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017*. Springer Verlag, p. 811-814 4 p. (IFMBE Proceedings; vol. 65).

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

Stimulation waveform selection to suppress functional electrical stimulation artifact from surface EMG signals

Rantanen, V., Vehkaoja, A. & Verho, J., 2018, *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017*. Springer Verlag, p. 422-425 4 p. (IFMBE Proceedings; vol. 65).

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

Temperature effect on the baseline noise in MEA measurements

Ryynänen, T. & Lekkala, J., 2018, *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017*. Springer Verlag, p. 5-8 4 p. (IFMBE Proceedings; vol. 65).

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

Texture-property relations of bioamine crosslinked gellan gum hydrogels

Koivisto, J. T., Koskela, O., Montonen, T., Parraga, J. E., Joki, T., Ylä-Outinen, L., Narkilahti, S., Figueiras, E., Hyttinen, J. & Kellomäki, M., 2018, *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017*. Springer Verlag, p. 189-192 4 p. (IFMBE Proceedings; vol. 65).

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

Time characteristics of prolonged partial obstruction periods using an Emfit mattress

Perez-Macias, J. M., Viik, J., Värri, A., Himanen, S-L. & Tenhunen, M., 2018, *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017*. Springer Verlag, p. 775-778 4 p. (IFMBE Proceedings; vol. 65).

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

Twelve years follow-up of ballistocardiography

Alametsä, J. & Viik, J., 2018, *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017*. Springer Verlag, p. 1117-1120 4 p. (IFMBE Proceedings; vol. 65).

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

Wearable RFID perspiration sensor tags for well-being applications – From laboratory to field use

Mulholland, K., Virkki, J., Raunonen, P. & Merilampi, S., 2018, *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017*. Springer Verlag, p. 1012-1015 4 p. (IFMBE Proceedings; vol. 65).

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

Upconversion from fluorophosphate glasses prepared with NaYF₄:Er³⁺, Yb³⁺ nanocrystals

Ojha, N., Tuomisto, M., Lastusaari, M. & Petit, L., 1 Jan 2018, In : *RSC Advances*. 8, 34, p. 19226-19236 11 p.

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

Design, synthesis, and structure-property relationships of Er³⁺-doped TiO₂ luminescent particles synthesized by sol-gel

Lopez-Iscoa, P., Pugliese, D., Boetti, N. G., Janner, D., Baldi, G., Petit, L. & Milanese, D., 2 Jan 2018, In : *Nanomaterials*. 8, 1, 20.

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

Improved fatty aldehyde and wax ester production by overexpression of fatty acyl-CoA reductases

Lehtinen, T., Efimova, E., Santala, S. & Santala, V., 8 Feb 2018, In : *Microbial Cell Factories*. 17, 1, 19.

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

Improved Stability of Atomic Layer Deposited Amorphous TiO₂ Photoelectrode Coatings by Thermally Induced Oxygen Defects

Hannula, M., Ali-Löytty, H., Lahtonen, K., Sarlin, E., Saari, J. & Valden, M., 27 Feb 2018, In : *Chemistry of Materials*. 30, 4, p. 1199-1208 10 p.

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

Soft hydrazone crosslinked hyaluronan- and alginate-based hydrogels as 3D supportive matrices for human pluripotent stem cell-derived neuronal cells

Karvinen, J., Joki, T., Ylä-Outinen, L., Koivisto, J. T., Narkilahti, S. & Kellomäki, M., 1 Mar 2018, In : *Reactive and Functional Polymers*. 124, p. 29-39 11 p.

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

Aqueous synthesis of Z-scheme photocatalyst powders and thin-film photoanodes from earth abundant elements

Šutka, A., Vanags, M., Joost, U., Šmits, K., Ruža, J., Ločs, J., Kleperis, J. & Juhna, T., 1 Apr 2018, In : *Journal of Environmental Chemical Engineering*. 6, 2, p. 2606-2615 10 p.

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

Non-intersecting leaf insertion algorithm for tree structure models

Åkerblom, M., Raunonen, P., Casella, E., Disney, M. I., Danson, F. M., Gaulton, R., Schofield, L. A. & Kaasalainen, M., 6 Apr 2018, In : *Interface Focus*. 8, 2, 20170045.

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

Uncertainty in multispectral lidar signals caused by incidence angle effects

Kaasalainen, S., Åkerblom, M., Nevalainen, O., Hakala, T. & Kaasalainen, M., 6 Apr 2018, In : *Interface Focus*. 8, 2, 20170033.

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

Weighing trees with lasers: Advances, challenges and opportunities

Disney, M. I., Boni Vicari, M., Burt, A., Calders, K., Lewis, S. L., Raunonen, P. & Wilkes, P., 6 Apr 2018, In : *Interface Focus*. 8, 2, 20170048.

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

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

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

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

Characteristics of nFOG, an aerosol-based wet thin film coating technique

Harra, J., Tuominen, M., Juuti, P., Rissler, J., Koivuluoto, H., Haapanen, J., Niemelä-Anttonen, H., Stenroos, C., Teisala, H., Lahti, J., Kuusipalo, J., Vuoristo, P. & Mäkelä, J. M., May 2018, In : *Journal of Coatings Technology Research*. 15, 3, p. 623-632 10 p.

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

Switchable light reflectance in dilute magneto-optical colloids based on nickel ferrite nanowires

Sutka, A., Timusk, M., Joost, U., Ignatans, R. & Maiorov, M., 2 May 2018, In : *e-Journal of Surface Science and Nanotechnology*. 16, p. 119-121 3 p.

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

Wet etching of dilute nitride GaInNAs, GaInNAsSb, and GaNAsSb alloys lattice-matched to GaAs

Raappana, M., Polojärvi, V., Aho, A., Mäkelä, J., Aho, T., Tukiainen, A., Laukkanen, P. & Guina, M., 15 May 2018, In : *Corrosion Science*. 136, p. 268-274 7 p.

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

A Ceramide-Regulated Element in the Late Endosomal Protein LAPT4B Controls Amino Acid Transporter Interaction
Zhou, K., Dichlberger, A., Martinez-Seara, H., Nyholm, T. K. M., Li, S., Kim, Y. A., Vattulainen, I., Ikonen, E. & Blom, T., 23 May 2018, In : ACS Central Science. 4, 5, p. 548-558 11 p.

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

Effect of Co-Adsorbate and Hole Transporting Layer on the Photoinduced Charge Separation at the TiO₂-Phthalocyanine Interface

Virkki, K., Tervola, E., Medel, M., Torres, T. & Tkachenko, N. V., 31 May 2018, In : ACS Omega. 3, 5, p. 4947-4958 12 p.

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

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

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

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

The effects of laser patterning 10CeTzP-Al₂O₃ nanocomposite disc surfaces: Osseous differentiation and cellular arrangement in vitro

Goyos-Ball, L., Prado, C., Díaz, R., Fernández, E., Ismailov, A., Kumpulainen, T., Levänen, E., Torrecillas, R. & Fernández, A., Jun 2018, In : Ceramics International. 44, 8, p. 9472-9478

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

Effects of wastewater constituents and operational conditions on the composition and dynamics of anodic microbial communities in bioelectrochemical systems

Kokko, M., Epple, S., Gescher, J. & Kerzenmacher, S., 1 Jun 2018, In : Bioresource Technology. 258, p. 376-389 14 p.

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

The effect of carbon and nickel additions on the precursor synthesis of Cr₃C₂-Ni nanopowder

Kaunisto, K., Kotilainen, M., Karhu, M., Lagerbom, J., Vuorinen, T., Honkanen, M., Vippola, M. & Turunen, E., 1 Jun 2018, In : Ceramics International. 44, 8, p. 9338-9346

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

Effect of surfactant type and sonication energy on the electrical conductivity properties of nanocellulose-CNT nanocomposite films

Siljander, S., Keinänen, P., Rätty, A., Ramakrishnan, K. R., Tuukkanen, S., Kunnari, V., Harlin, A., Vuorinen, J. & Kanerva, M., 20 Jun 2018, In : International Journal of Molecular Sciences. 19, 6, 1819.

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

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

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

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

High Bending-Mode Sensitivity of Printed Piezoelectric Poly(vinylidene fluoride-co-trifluoroethylene) Sensors

Rajala, S., Schouten, M., Krijnen, G. & Tuukkanen, S., 23 Jul 2018, In : ACS Omega. 3, 7, p. 8067-8073 7 p.

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

A new method to optimize natural convection heat sinks

Lampio, K. & Karvinen, R., Aug 2018, In : Heat and Mass Transfer/Waerme- und Stoffuebertragung. 54, 8, p. 2571-2580

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

Selenate removal in biofilm systems: Effect of nitrate and sulfate on selenium removal efficiency, biofilm structure and microbial community

Tan, L. C., Espinosa-Ortiz, E. J., Nancharaiyah, Y. V., van Hullebusch, E. D., Gerlach, R. & Lens, P. N., Aug 2018, In : Journal of Chemical Technology and Biotechnology. 93, 8, p. 2380-2389

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

Photoinduced Energy Transfer in ZnCdSeS Quantum Dot-Phthalocyanines Hybrids

Mandal, S., Garcia Iglesias, M., Ince, M., Torres, T. & Tkachenko, N. V., 31 Aug 2018, In : ACS Omega. 3, 8, p. 10048-10057 10 p.

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

Effects of pyrolysis temperature on the hydrologically relevant porosity of willow biochar

Hyväluoma, J., Hannula, M., Arstila, K., Wang, H., Kulju, S. & Rasa, K., Sep 2018, In : Journal of Analytical and Applied Pyrolysis. 134

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

Performance of a biotrickling filter for the anaerobic utilization of gas-phase methanol coupled to thiosulphate reduction and resource recovery through volatile fatty acids production

Eregowda, T., Matanhike, L., Rene, E. R. & Lens, P. N. L., 1 Sep 2018, In : Bioresource Technology. 263, p. 591-600 10 p.

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

Electro-concentration for chemical-free nitrogen capture as solid ammonium bicarbonate

Jermakka, J., Thompson Brewster, E., Ledezma, P. & Freguia, S., 12 Sep 2018, In : Separation and Purification Technology. 203, p. 48-55 8 p.

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

Temperature control as key factor for optimal biohydrogen production from thermomechanical pulping wastewater

Dessi, P., Porca, E., Lakaniemi, A-M., Collins, G. & Lens, P. N. L., 15 Sep 2018, In : Biochemical Engineering Journal. 137, p. 214-221 8 p.

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

Molecular Communications Pulse-based Jamming Model for Bacterial Biofilm Suppression

Martins, D. P., Leetanasaksakul, K., Barros, M. T., Thamchaipenet, A., Donnelly, W. & Balasubramaniam, S., Oct 2018, In : IEEE Transactions on Nanobioscience. 17, 4, p. 533-542 12 p.

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

Novel osteoconductive β -tricalcium phosphate/poly(L-lactide-co- ϵ -caprolactone) scaffold for bone regeneration: a study in a rabbit calvarial defect

Pihlman, H., Keränen, P., Paakinaho, K., Linden, J., Hannula, M., Manninen, I. K., Hyttinen, J., Manninen, M. & Laitinen-Vapaavuori, O., 1 Oct 2018, In : Journal of Materials Science: Materials in Medicine. 29, 10, 156.

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

Tribocorrosion behaviour of aluminium bronze in 3.5 wt.% NaCl solution

Huttunen-Saarivirta, E., Isotahdon, E., Metsäjoki, J., Salminen, T., Carpén, L. & Ronkainen, H., 1 Nov 2018, In : Corrosion Science. 144, p. 207-223 17 p.

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

Chromatographic studies of n-Propyl Propionate: Adsorption equilibrium, modelling and uncertainties determination

Nogueira, I. B. R., Faria, R. P. V., Requião, R., Koivisto, H., Martins, M. A. F., Rodrigues, A. E., Loureiro, J. M. & Ribeiro, A. M., 2 Nov 2018, In : Computers and Chemical Engineering. 119, p. 371-382 12 p.

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

Molecular-Scale Ligand Effects in Small Gold-Thiolate Nanoclusters

Chevrier, D. M., Raich, L., Rovira, C., Das, A., Luo, Z., Yao, Q., Chatt, A., Xie, J., Jin, R., Akola, J. & Zhang, P., 14 Nov 2018, In : Journal of the American Chemical Society. 140, 45, p. 15430-15436 7 p.

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

High-Yield Generation of Triplet Excited States by an Efficient Sequential Photoinduced Process from Energy Transfer to Singlet Fission in Pentacene-Modified CdSe/ZnS Quantum Dots

Sakai, H., Inaya, R., Tkachenko, N. V. & Hasobe, T., 16 Nov 2018, In : *Chemistry - A European Journal*. 24, 64, p. 17062-17071 10 p.

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

Aminobenzylated 4-Nitrophenols as Antibacterial Agents Obtained from 5-Nitrosalicylaldehyde through a Petasis Borono-Mannich Reaction

Rimpiläinen, T., Andrade, J., Nunes, A., Ntungwe, E., Fernandes, A. S., Vale, J. R., Rodrigues, J., Gomes, J. P., Rijo, P. & Candeias, N. R., 29 Nov 2018, In : *ACS Omega*. 3, 11, p. 16191-16202 12 p.

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

The importance of controlled mismatch of biomechanical compliances of implantable scaffolds and native tissue for articular cartilage regeneration

Gasik, M., Zühlke, A., Haaparanta, A-M., Muhonen, V., Laine, K., Bilotsky, Y., Kellomäki, M. & Kiviranta, I., 30 Nov 2018, In : *Frontiers in Bioengineering and Biotechnology*. 6, NOV, 187.

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

Dynamic decoupling of biomass and wax ester biosynthesis in *Acinetobacter baylyi* by an autonomously regulated switch

Santala, S., Efimova, E. & Santala, V., 1 Dec 2018, In : *Metabolic Engineering Communications*. 7, e00078.

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

Less Is More: Enhancement of Second-Harmonic Generation from Metasurfaces by Reduced Nanoparticle Density

Czaplicki, R., Kiviniemi, A., Huttunen, M. J., Zang, X., Stolt, T., Vartiainen, I., Butet, J., Kuittinen, M., Martin, O. J. F. & Kauranen, M., 12 Dec 2018, In : *Nano Letters*. 18, 12, p. 7709-7714 6 p.

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

Activity Level and Body Mass Index as Predictors of Physical Workload During Working Career

Mänttari, S. K., Oksa, J. A. H., Virkkala, J. & Pietilä, J. A. K., 2019, In : *Safety and Health at Work*.

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

Characterization of the anisotropic deformation of the right ventricle during open heart surgery

Soltani, A., Lahti, J., Järvelä, K., Laurikka, J., Kuokkala, V. T. & Hokka, M., 2019, In : *COMPUTER METHODS IN BIOMECHANICS AND BIOMEDICAL ENGINEERING*. 12 p.

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

Cost-optimal energy performance measures in a new daycare building in cold climate

Sankelo, P., Jokisalo, J., Nyman, J., Vinha, J. & Sirén, K., 2019, In : *International Journal of Sustainable Energy*. 38, 2, p. 104-122 19 p.

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

μ CT based characterization of biomaterial scaffold microstructure under compression

Hannula, M., Narra, N., Paakinaho, K., Haaparanta, A-M., Kellomäki, M. & Hyttinen, J., 2019, *World Congress on Medical Physics and Biomedical Engineering 2018*. Springer, p. 165-169 5 p. (IFMBE Proceedings; vol. 68, no. 3).

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

Deposition of dry particles on a fin-and-tube heat exchanger by a coupled soft-sphere DEM and CFD

Välikangas, T., Hærvig, J., Kuuluvainen, H., Dal Maso, M., Peltonen, P. & Vuorinen, V., 2019, In : *International Journal of Heat and Mass Transfer*. 19 p., 119046.

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

Effect of apartment building energy renovation on hourly power demand

Hirvonen, J., Jokisalo, J., Heljo, J. & Kosonen, R., 2019, In : *International Journal of Sustainable Energy*.

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

Effect of polyolefin molecular structure on product properties in extrusion coating

Suokas, E., 2019, *17th Biennial TAPPI European PLACE Conference 2019*. TAPPI Press, p. 89-98 10 p.

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

Electrical stimulation of eye blink in individuals with dry eye symptoms caused by chronic unilateral facial palsy

Lylykangas, J., Ilves, M., Venesvirta, H., Rantanen, V., Mäkelä, E., Vehkaoja, A., Verho, J., Lekkala, J., Rautiainen, M. & Surakka, V., 2019, *CMBEBIH 2019 - Proceedings of the International Conference on Medical and Biological Engineering*. Badnjevic, A., Gurbeta Pokvić, L., Škrbić, R., Badnjevic, A. & Gurbeta Pokvić, L. (eds.). Springer Verlag, p. 7-11 5 p. (IFMBE Proceedings; vol. 73).

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

Enablers and barriers of smart data-based asset management services in industrial business networks

Ahonen, T., Hanski, J., Hyvärinen, M., Kortelainen, H., Uusitalo, T., Vainio, H., Kunttu, S. & Koskinen, K., 2019, *Lecture Notes in Mechanical Engineering*. Pleiades Publishing, p. 51-60 10 p. (Lecture Notes in Mechanical Engineering).

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

High-speed production of antibacterial fabrics using liquid flame spray

Brobbe, K. J., Haapanen, J., Tuominen, M., Mäkelä, J., Gunell, M., Eerola, E., Saarinen, J. J. & Toivakka, M., 2019, In : *Textile Research Journal*.

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

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

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

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

Large-scale efficient water harvesting using bioinspired micro-patterned copper oxide nanoneedle surfaces and guided droplet transport

Sharma, V., Yiannacou, K., Karjalainen, M., Lahtonen, K., Valden, M. & Sariola, V., 2019, In : *Nanoscale Advances*. 1, 10, p. 4025-4040 16 p.

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

Market implementation of active and intelligent packaging-opportunities from a socio-economic perspective

Lahti, J., 2019, *17th Biennial TAPPI European PLACE Conference 2019*. TAPPI Press, p. 419-427 9 p.

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

Mechanical impact stimulation platform tailored for high-resolution light microscopy

Halonen, H. T., Hyttinen, J. A. K. & Ihalainen, T. O., 2019, In : *HEALTH AND TECHNOLOGY*.

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

Nanocellulose and Polylactic Acid Based Multilayer Coatings for Barrier Applications

Lahti, J., 2019, *17th Biennial TAPPI European PLACE Conference 2019*. TAPPI Press, p. 446-455 10 p.

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

Quality and Capacity Analysis of Molecular Communications in Bacterial Synthetic Logic Circuits

Martins, D. P., Barros, M. T. & Balasubramaniam, S., 2019, (Accepted/In press) In : *IEEE Transactions on Nanobioscience*.

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

Reliability evaluation of wearable radio frequency identification tags: Design and fabrication of a two-part textile antenna

Chen, X., Ukkonen, L. & Virkki, J., 2019, In : *Textile Research Journal*. 89, 4

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

Structure and Dynamics of Thermosensitive pDNA Polyplexes Studied by Time-Resolved Fluorescence Spectroscopy

Fliervoet, L. A. L., Lisitsyna, E. S., Durandin, N. A., Kotsis, I., Maas-Bakker, R. F. M., Yliperttula, M., Hennink, W. E., Vuorimaa-Laukkanen, E. & Vermonden, T., 2019, In : *Biomacromolecules*.

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

Synergistic Computational-Experimental Discovery of Highly Selective PtCu Nanocluster Catalysts for Acetylene Semihydrogenation

Ayodele, O. B., Cai, R., Wang, J., Ziouani, Y., Liang, Z., Spadaro, M. C., Kovnir, K., Arbiol, J., Akola, J., Palmer, R. E. & Kolen'Ko, Y. V., 2019, In : ACS CATALYSIS. p. 451-457 7 p.

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

Textile-integrated three-dimensional printed and embroidered structures for wearable wireless platforms

He, H., Chen, X., Ukkonen, L. & Virkki, J., 2019, In : Textile Research Journal. 89, 4

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

The electrical conductivity of human cerebrospinal fluid in vivo

Latikka, J. & Eskola, H., 2019, *World Congress on Medical Physics and Biomedical Engineering 2018*. Springer, p. 773-776 4 p. (IFMBE Proceedings; vol. 68, no. 1).

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

Towards the EU emissions targets of 2050: optimal energy renovation measures of Finnish apartment buildings

Hirvonen, J., Jokisalo, J., Heljo, J. & Kosonen, R., 2019, In : International Journal of Sustainable Energy. 38, 7

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

Volatile fatty acid adsorption on anion exchange resins: kinetics and selective recovery of acetic acid

Eregowda, T., Rene, E. R., Rintala, J. & Lens, P. N. L., 2019, In : Separation Science and Technology (Philadelphia).

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

A Pentacene-based Nanotube Displaying Enriched Electrochemical and Photochemical Activities

Kuroda, K., Yazaki, K., Tanaka, Y., Akita, M., Sakai, H., Hasobe, T., Tkachenko, N. V. & Yoshizawa, M., Jan 2019, In : Angewandte Chemie - International Edition. 58, 4, p. 1115-1119

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

Kinetics and thermochemistry of the reaction of 3-methylpropargyl radical with molecular oxygen

Pekkanen, T. T., Timonen, R. S., Lendvay, G., Rissanen, M. P. & Eskola, A. J., 1 Jan 2019, In : PROCEEDINGS OF THE COMBUSTION INSTITUTE. 37, 1, p. 299-306 8 p.

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

Solvent Welding and Imprinting Cellulose Nanofiber Films Using Ionic Liquids

Reyes, G., Borghei, M., King, A. W. T., Lahti, J. & Rojas, O. J., 14 Jan 2019, In : Biomacromolecules. 20, 1, p. 502-514

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

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

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

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

Synthetic metabolic pathway for the production of 1-alkenes from lignin-derived molecules

Luo, J., Lehtinen, T., Efimova, E., Santala, V. & Santala, S., 11 Mar 2019, In : Microbial Cell Factories. 18, 1, 13 p., 48.

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

Understanding the Role of Lipids in Signaling Through Atomistic and Multiscale Simulations of Cell Membranes

Manna, M., Nieminen, T. & Vattulainen, I., 6 May 2019, In : ANNUAL REVIEW OF BIOPHYSICS. 48, p. 421-439 19 p.

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

Miniaturized stimulator for imaging of live cell responses to high frequency mechanical vibration

Halonen, H. T., Hyttinen, J. A. K. & Ihalainen, T. O., 11 May 2019, *CMBEBIH 2019 - Proceedings of the International Conference on Medical and Biological Engineering*. Badnjevic, A., Gurbeta Pokvić, L., Škrbić, R., Badnjevic, A. & Gurbeta Pokvić, L. (eds.). Springer Verlag, p. 21-27 7 p. (IFMBE Proceedings; vol. 73).

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

Tailoring Second-Harmonic Emission from (111)-GaAs Nanoantennas

Sautter, J. D., Xu, L., Miroshnichenko, A. E., Lysevych, M., Volkovskaya, I., Smirnova, D. A., Camacho-Morales, R., Zangeneh Kamali, K., Karouta, F., Vora, K., Tan, H. H., Kauranen, M., Staude, I., Jagadish, C., Neshev, D. N. & Rahmani, M., 12 Jun 2019, In : Nano Letters. 19, 6, p. 3905-3911 7 p.

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

An architectural understanding of natural sway frequencies in trees

Jackson, T., Shenkin, A., Moore, J., Bunce, A., van Emmerik, T., Kane, B., Burcham, D., James, K., Selker, J., Calders, K., Origo, N., Disney, M., Burt, A., Wilkes, P., Raunonen, P., Gonzalez de Tanago Menaca, J., Lau, A., Herold, M., Goodman, R. C., Fourcaud, T. & Malhi, Y., 28 Jun 2019, In : Journal of the Royal Society. Interface. 16, 155, 1 p.

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

Observation of Coexistence of Yu-Shiba-Rusinov States and Spin-Flip Excitations

Kezilebieke, S., Žitko, R., Dvorak, M., Ojanen, T. & Liljeroth, P., 10 Jul 2019, In : Nano Letters. 19, 7, p. 4614-4619 6 p.

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

Alkane and wax ester production from lignin-related aromatic compounds

Salmela, M., Lehtinen, T., Efimova, E., Santala, S. & Santala, V., 1 Aug 2019, In : Biotechnology and Bioengineering. 116, 8, p. 1934-1945 12 p.

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

Photochemistry of dithiophosphate $\text{Ni}(\text{S}_2\text{P}(\text{i-Bu})_2)_2$ complex in CCl_4 . Transient species and TD-DFT calculations

Solovyev, A. I., Mikheylyis, A. V., Plyusnin, V. F., Shubin, A. A., Grivin, V. P., Larionov, S. V., Tkachenko, N. V. & Lemmetyinen, H., 1 Aug 2019, In : Journal of Photochemistry and Photobiology A: Chemistry. 381, 111857.

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

Characterisation and in vitro and in vivo evaluation of supercritical-CO₂-foamed β -TCP/PLCL composites for bone applications

Pitkänen, S., Paakinaho, K., Pihlman, H., Ahola, N., Hannula, M., Asikainen, S., Manninen, M., Morelius, M., Keränen, P., Hyttinen, J., Kellomäki, M., Laitinen-Vapaavuori, O. & Miettinen, S., 5 Aug 2019, In : European cells & materials. 38, p. 35-50 16 p.

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

Chlorine induced high-temperature corrosion mechanisms in HVOF and HVOF sprayed Cr_3C_2 -based hardmetal coatings

Fantozzi, D., Matikainen, V., Uusitalo, M., Koivuluoto, H. & Vuoristo, P., 14 Aug 2019, In : Corrosion Science. 108166.

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

Influence of ions to modulate hydrazone and oxime reaction kinetics to obtain dynamically cross-linked hyaluronic acid hydrogels

Wang, S., Nawale, G. N., Oommen, O. P., Hilborn, J. & Varghese, O. P., 21 Aug 2019, In : Polymer Chemistry. 10, 31, p. 4322-4327 6 p.

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

Shedding frequency in cavitation erosion evolution tracking

Ylönen, M., Franc, J. P., Miettinen, J., Saarenrinne, P. & Fivel, M., 1 Sep 2019, In : International Journal of Multiphase Flow. 118, p. 141-149 9 p.

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

Multiresonant High-Q Plasmonic Metasurfaces

Reshef, O., Saad-Bin-Alam, M., Huttunen, M. J., Carlow, G., Sullivan, B. T., Ménard, J. M., Dolgaleva, K. & Boyd, R. W., 11 Sep 2019, In : Nano Letters. 19, 9, p. 6429-6434 6 p.

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

Effects of anode materials on electricity production from xylose and treatability of TMP wastewater in an up-flow microbial fuel cell

Haavisto, J., Dessì, P., Chatterjee, P., Honkanen, M., Noori, M. T., Kokko, M., Lakaniemi, A. M., Lens, P. N. L. & Puhakka, J. A., 15 Sep 2019, In : *Chemical Engineering Journal*. 372, p. 141-150 10 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Controlled Orientations of Neighboring Tetracene Units by Mixed Self-Assembled Monolayers on Gold Nanoclusters for High-Yield and Long-Lived Triplet Excited States through Singlet Fission

Saegusa, T., Sakai, H., Nagashima, H., Kobori, Y., Tkachenko, N. V. & Hasobe, T., 18 Sep 2019, In : *Journal of the American Chemical Society*. 141, 37, p. 14720-14727 8 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Effects of elevated pressures on the activity of acidophilic bioleaching microorganisms

Hajdu-Rahkama, R., Ahoranta, S., Lakaniemi, A-M. & Puhakka, J. A., 15 Oct 2019, In : *Biochemical Engineering Journal*. 150, 107286.
Research output: Contribution to journal > Article > Scientific > peer-review

Power production and microbial community composition in thermophilic acetate-fed up-flow and flow-through microbial fuel cells

Dessi, P., Chatterjee, P., Mills, S., Kokko, M., Lakaniemi, A-M., Collins, G. & Lens, P. N. L., 1 Dec 2019, In : *Bioresource Technology*. 294, 122115.
Research output: Contribution to journal > Article > Scientific > peer-review

Transcription closed and open complex formation coordinate expression of genes with a shared promoter region

Häkkinen, A., Oliveira, S. M. D., Neeli-Venkata, R. & Ribeiro, A. S., 1 Dec 2019, In : *Journal of the Royal Society Interface*. 16, 161, 11 p., 20190507.
Research output: Contribution to journal > Article > Scientific > peer-review

Applications of nanocellulose/nanocarbon composites: Focus on biotechnology and medicine

Bacakova, L., Pajorova, J., Tomkova, M., Matejka, R., Broz, A., Stepanovska, J., Prazak, S., Skogberg, A., Siljander, S. & Kallio, P., 2020, In : *Nanomaterials*. 10, 2, 32 p., 196.
Research output: Contribution to journal > Review Article > Scientific > peer-review

CFD modeling the diffusional losses of nanocluster-sized particles and condensing vapors in 90° bends of circular tubes

Olin, M. & Dal Maso, M., 2020, In : *Journal of Aerosol Science*. 150, 10 p., 105618.
Research output: Contribution to journal > Article > Scientific > peer-review

Deformability analysis and improvement in stretchable electronics systems through finite element analysis

Di Vito, D., Mosallaei, M., Vahed, B. K., Kanerva, M. & Mäntysalo, M., 2020, *Proceedings of XXIV AIMETA Conference 2019*. Carcaterra, A., Graziani, G. & Paolone, A. (eds.). Springer, p. 755-763 9 p. (Lecture Notes in Mechanical Engineering).

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

Ectopic Beat Detection from Wrist Optical Signals for Sinus Rhythm and Atrial Fibrillation Subjects

Haddad, S., Harju, J., Tarniceriu, A., Halkola, T., Parak, J., Korhonen, I., Yli-Hankala, A. & Vehkaoja, A., 2020, *15th Mediterranean Conference on Medical and Biological Engineering and Computing – MEDICON 2019 - Proceedings of MEDICON 2019*. Henriques, J., de Carvalho, P. & Neves, N. (eds.). Springer, p. 150-158 9 p. (IFMBE Proceedings; vol. 76).

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

Efficient Conversion of Light to Chemical Energy: Directional, Chiral Photoswitches with Very High Quantum Yields

Moormann, W., Tellkamp, T., Stadler, E., Röhricht, F., Näther, C., Puttreddy, R., Rissanen, K., Gescheidt, G. & Herges, R., 2020, In : *Angewandte Chemie - International Edition*. 59, 35, p. 15081-15086 6 p.

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

Enhancing CT 3D Images by Independent Component Analysis of Projection Images

Hannula, M., Hyttinen, J. A. K. & Tanskanen, J. M. A., 2020, *15th Mediterranean Conference on Medical and Biological Engineering and Computing – MEDICON 2019 - Proceedings of MEDICON 2019*. Henriques, J., de Carvalho, P. & Neves, N. (eds.). Springer, p. 381-389 9 p. (IFMBE Proceedings; vol. 76).

In-flight wind field identification and prediction of parafoil systems

Gao, H., Tao, J., Dehmer, M., Emmert-Streib, F., Sun, Q., Chen, Z., Xie, G. & Zhou, Q., 2020, In : Applied Sciences (Switzerland). 10, 6, 15 p., 1958.

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

Investigation of well-defined pinholes in TiO₂ electron selective layers used in planar heterojunction perovskite solar cells

Masood, M. T., Qudsiya, S., Hadadian, M., Weinberger, C., Nyman, M., Ahläng, C., Dahlström, S., Liu, M., Vivo, P., Österbacka, R. & Smätt, J. H., 2020, In : Nanomaterials. 10, 1, 16 p., 181.

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

Kinetics and modelling of thiosulphate biotransformations by haloalkaliphilic *Thioalkalivibrio versutus*

Hajdu-Rahkama, R., Özkaya, B., Lakaniemi, A. M. & Puhakka, J. A., 2020, In : Chemical Engineering Journal. 401, 9 p., 126047.

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

Modelling of a pressure swing adsorption unit by deep learning and artificial intelligence tools

Oliveira, L. M. C., Koivisto, H., Iwakiri, I. G. I., Loureiro, J. M., Ribeiro, A. M. & Nogueira, I. B. R., 2020, In : Chemical Engineering Science. 224, 115801.

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

Moving Web and Dynamic Problem of Aerothermoelastic Vibrations and Instability

Banichuk, N., Ivanova, S. & Jeronen, J., 2020, *Advanced Problems in Mechanics: Proceedings of the 47th International Summer School-Conference on Advanced Problems in Mechanics, APM 2019*. Indeitsev, D. A. & Krivtsov, A. M. (eds.). Springer, p. 66-71 6 p. (Lecture Notes in Mechanical Engineering).

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

The thermal contact resistance of a steel-ceramic interface with oxide intermediates

Silvonen, J., Levänen, E. & Uusitalo, M., 2020, In : Cogent Engineering. 7, 1, 1720057.

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

Transparent Yb³⁺ doped phosphate glass-ceramics

Hongisto, M., Veber, A., Boetti, N. G., Danto, S., Jubera, V. & Petit, L., 1 Jan 2020, In : Ceramics International.

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

Evaluation of scaffold microstructure and comparison of cell seeding methods using micro-computed tomography-based tools

Palmroth, A., Pitkänen, S., Hannula, M., Paakinaho, K., Hyttinen, J., Miettinen, S. & Kellomäki, M., 1 Apr 2020, In : Journal of the Royal Society. Interface. 17, 165, 12 p., 20200102.

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

Mixed carbon substrates: a necessary nuisance or a missed opportunity?

Liu, N., Santala, S. & Stephanopoulos, G., 1 Apr 2020, In : CURRENT OPINION IN BIOTECHNOLOGY. 62, p. 15-21 7 p.

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

Utilizing Neurons for Digital Logic Circuits: A Molecular Communications Analysis

Adonias, G. L., Yastrebova, A., Barros, M. T., Koucheryavy, Y., Cleary, F. & Balasubramaniam, S., 1 Apr 2020, In : IEEE Transactions on Nanobioscience. 19, 2, p. 224-236 13 p.

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

Utilizing Gelatinized Starchy Waste from Rice Noodle Factory as Substrate for L(+)-Lactic Acid Production by Amyolytic Lactic Acid Bacterium *Enterococcus faecium* K-1

Unban, K., Khanongnuch, R., Kanpiengjai, A., Shetty, K. & Khanongnuch, C., May 2020, In : Applied Biochemistry and Biotechnology.

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

Modular Instrumentation for Controlling and Monitoring In-Vitro Cultivation Environment and Image-based Functionality Measurements of Human Stem Cells

Kattipparambil Rajan, D., 27 May 2020, Tampere University. (Tampere University Dissertations; vol. 256)

Research output: Book/Report › Doctoral thesis › Collection of Articles

Additive manufacturing of monolithic supercapacitors with biopolymer separator

Arvani, M., Keskinen, J., Railanmaa, A., Siljander, S., Björkqvist, T., Tuukkanen, S. & Lupo, D., 1 Jun 2020, In : Journal of Applied Electrochemistry. 50, 6, p. 689-697 9 p.

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

Nucleation and growth behavior of Er³⁺ doped oxyfluorophosphate glasses

Ojha, N., Szczodra, A., Boetti, N. G., Massera, J. & Petit, L., 7 Jul 2020, In : RSC Advances. 10, 43, p. 25703-25716 14 p.

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

Optimization of photogenerated charge carrier lifetimes in air grown TiO₂ for photonic applications

Khan, R., Ali-Löytty, H., Saari, J., Valden, M., Tukiainen, A., Lahtonen, K. & Tkachenko, N. V., 10 Aug 2020, In : Nanomaterials. 10, 8, 9 p., 1567.

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

Formation of corrosion products on zinc in wet supercritical and subcritical CO₂: In-situ spectroscopic study

Kaleva, A., Tassaing, T., Saarimaa, V., Le Bourdon, G., Väisänen, P., Markkulä, A. & Levänen, E., 1 Sep 2020, In : Corrosion Science. 174, 10 p.

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