

Palmroth, Alekski ; Pitkänen, Sanna ; Hannula, Markus ; Paakinaho, Kaarlo ; Hyttinen, Jari ; Miettinen, Susanna ; Kellomäki, Minna. / **Evaluation of scaffold microstructure and comparison of cell seeding methods using micro-computed tomography-based tools.** In: Journal of the Royal Society. Interface. 2020 ; Vol. 17, No. 165.

Halonen, H. T. ; Ihalainen, T. O. ; Hyväri, L. ; Miettinen, S. ; Hyttinen, J. A.K. / **Cell adhesion and culture medium dependent changes in the high frequency mechanical vibration induced proliferation, osteogenesis, and intracellular organization of human adipose stem cells.** In: Journal of the Mechanical Behavior of Biomedical Materials. 2020 ; Vol. 101.

Ukkonen, Leena ; Sydänheimo, Lauri ; Ma, Shubin ; Björninen, Toni. / **Backscattering-based wireless communication and power transfer to small biomedical implants.** Microfluidics, BioMEMS, and Medical Microsystems XVIII. editor / Bonnie L. Gray ; Holger Becker. SPIE, 2020. (Progress in Biomedical Optics and Imaging - Proceedings of SPIE).

Rebello Calejo, Teresa ; Vuorenpää, Hanna ; Vuorimaa-Laukkanen, Elina ; Kallio, Pasi ; Aalto-Setälä, Katriina ; Miettinen, Susanna ; Skottman, Heli ; Kellomäki, Minna ; Juuti-Uusitalo, Kati. / **Co-culture of human induced pluripotent stem cell-derived retinal pigment epithelial cells and endothelial cells on double collagen-coated honeycomb films.** In: Acta Biomaterialia. 2020 ; Vol. 101. pp. 327-343.

Nymark, Penny ; Bakker, Martine ; Dekkers, Susan ; Franken, Remy ; Fransman, Wouter ; García-Bilbao, Amaia ; Greco, Dario ; Gulumian, Mary ; Hadrup, Niels ; Halappanavar, Sabina ; Hongisto, Vesa ; Hougaard, Karin Sørig ; Jensen, Keld Alstrup ; Kohonen, Pekka ; Koivisto, Antti Joonas ; Dal Maso, Miikka ; Oosterwijk, Thies ; Poikkimäki, Mikko ; Rodriguez-Llopis, Isabel ; Stierum, Rob ; Sørli, Jorid Birkelund ; Grafström, Roland. / **Toward Rigorous Materials Production : New Approach Methodologies Have Extensive Potential to Improve Current Safety Assessment Practices.** In: Small. 2020 ; Vol. 16, No. 6.

Häkkinen, Antti ; Oliveira, Samuel M.D. ; Neeli-Venkata, Ramakanth ; Ribeiro, Andre S. / **Transcription closed and open complex formation coordinate expression of genes with a shared promoter region.** In: Journal of the Royal Society Interface. 2019 ; Vol. 16, No. 161.

Kanerva, M. ; Besharat, Z. ; Pärnänen, T. ; Jokinen, J. ; Honkanen, M. ; Sarlin, E. ; Göthelid, M. ; Schlenzka, D. / **Miniature CoCr laser welds under cyclic shear : Fatigue evolution and crack growth.** In: Journal of the Mechanical Behavior of Biomedical Materials. 2019 ; Vol. 99. pp. 93-103.

Faqhiri, Hamasa ; Hannula, Markus ; Kellomäki, Minna ; Calejo, Maria Teresa ; Massera, Jonathan. / **Effect of melt-derived bioactive glass particles on the properties of chitosan scaffolds.** In: JOURNAL OF FUNCTIONAL BIOMATERIALS . 2019 ; Vol. 10, No. 3.

Vuornos, Kaisa ; Huhtala, Heini ; Kääriäinen, Minna ; Kuismanen, Kirsi ; Hupa, Leena ; Kellomäki, Minna ; Miettinen, Susanna. / **Bioactive glass ions for in vitro osteogenesis and microvascularization in gellan gum-collagen hydrogels.** In: Journal of Biomedical Materials Research - Part B Applied Biomaterials. 2019.

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. / **Characterisation and in vitro and in vivo evaluation of supercritical-CO₂-foamed β -TCP/PLCL composites for bone applications.** In: European cells & materials. 2019 ; Vol. 38. pp. 35-50.

Wang, Xiaojun ; Molino, Binbin Zhang ; Pitkänen, Sanna ; Ojansivu, Miina ; Xu, Chunlin ; Hannula, Markus ; Hyttinen, Jari ; Miettinen, Susanna ; Hupa, Leena ; Wallace, Gordon. / **3D Scaffolds of Polycaprolactone/Copper-Doped Bioactive Glass : Architecture Engineering with Additive Manufacturing and Cellular Assessments in a Coculture of Bone Marrow Stem Cells and Endothelial Cells.** In: ACS Biomaterials Science and Engineering. 2019 ; Vol. 5, No. 9. pp. 4496-4510.

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. / **An architectural understanding of natural sway frequencies in trees.** In: Journal of the Royal Society. Interface. 2019 ; Vol. 16, No. 155.

Lolicato, Fabio ; Joly, Loic ; Martinez-Seara, Hector ; Fragneto, Giovanna ; Scoppola, Ernesto ; Baldelli Bombelli, Francesca ; Vattulainen, Ilpo ; Akola, Jaakko ; Maccarini, Marco. / **The Role of Temperature and Lipid Charge on Intake/Uptake of Cationic Gold Nanoparticles into Lipid Bilayers**. In: Small. 2019 ; Vol. 15, No. 23.

Vimieiro, Rodrigo B. ; Borges, Lucas R. ; Caron, Renato F. ; Barufaldi, Bruno ; Bakic, Predrag R. ; Maidment, Andrew D.A. ; Vieira, Marcelo A.C. / **Noise measurements from reconstructed digital breast tomosynthesis**. Medical Imaging 2019: Physics of Medical Imaging. editor / Taly Gilat Schmidt ; Guang-Hong Chen ; Hilde Bosmans. SPIE, IEEE, 2019. (Progress in Biomedical Optics and Imaging - Proceedings of SPIE).

Reyes, Guillermo ; Borghei, Maryam ; King, Alistair W. T. ; Lahti, Johanna ; Rojas, Orlando J. / **Solvent Welding and Imprinting Cellulose Nanofiber Films Using Ionic Liquids**. In: Biomacromolecules. 2019 ; Vol. 20, No. 1. pp. 502-514.

Salonius, Eve ; Muhonen, Virpi ; Lehto, Kalle ; Järvinen, Elina ; Pyhältö, Tuomo ; Hannula, Markus ; Aula, Antti S. ; Uppstu, Peter ; Haaparanta, Anne Marie ; Rosling, Ari ; Kellomäki, Minna ; Kiviranta, Ilkka. / **Gas-foamed poly(lactide-co-glycolide) and poly(lactide-co-glycolide) with bioactive glass fibres demonstrate insufficient bone repair in lapine osteochondral defects**. In: Journal of Tissue Engineering and Regenerative Medicine. 2019 ; Vol. 13, No. 3. pp. 406-415.

Tomaskovic-Crook, Eva ; Zhang, Peikai ; Ahtiainen, Annika ; Kaisvuo, Heidi ; Lee, Chong Yong ; Beirne, Stephen ; Aqrawe, Zaid ; Svirskis, Darren ; Hyttinen, Jari ; Wallace, Gordon G. ; Travas-Sejdic, Jadranka ; Crook, Jeremy M. / **Human Neural Tissues from Neural Stem Cells Using Conductive Biogel and Printed Polymer Microelectrode Arrays for 3D Electrical Stimulation**. In: ADVANCED HEALTHCARE MATERIALS. 2019.

Mishra, Ayush ; Ojansivu, Miina ; Autio, Reija ; Vanhatupa, Sari ; Miettinen, Susanna ; Massera, Jonathan. / **In-vitro dissolution characteristics and human adipose stem cell response to novel borophosphate glasses**. In: Journal of Biomedical Materials Research - Part A. 2019.

Veber, Alexander ; Lu, Zhuorui ; Vermillac, Manuel ; Pigeonneau, Franck ; Blanc, Wilfried ; Petit, Laetitia. / **Nano-structured optical fibers made of glass-ceramics, and phase separated and metallic particle-containing glasses**. In: Fibers. 2019 ; Vol. 7, No. 12.

Haapanen, Janne ; Aromaa, Mikko ; Teisala, Hannu ; Juuti, Paxton ; Tuominen, Mikko ; Sillanpää, Markus ; Stepien, Milena ; Saarinen, Jarkko J. ; Toivakka, Martti ; Kuusipalo, Jurkka ; Mäkelä, Jyrki M. / **On the limit of superhydrophobicity : Defining the minimum amount of TiO₂ nanoparticle coating**. In: Materials Research Express. 2019 ; Vol. 6, No. 3.

Fliervoet, Lies A.L. ; Lisitsyna, Ekaterina S. ; Durandin, Nikita A. ; Kotsis, Ilias ; Maas-Bakker, Roel F.M. ; Yliperttula, Marjo ; Hennink, Wim E. ; Vuorimaa-Laukkanen, Elina ; Vermonden, Tina. / **Structure and Dynamics of Thermosensitive pDNA Polyplexes Studied by Time-Resolved Fluorescence Spectroscopy**. In: Biomacromolecules. 2019.

Kroon, Mart ; Talvitie, Elina ; Miettinen, Susanna ; Kellomäki, Minna. / **Cell response to round and star-shaped polylactide fibers**. Paper presented at BioMediTech Research Day 2018, Tampere, Finland.

Pihlman, Hanna ; Keränen, Pauli ; Paakinaho, Kaarlo ; Linden, Jere ; Hannula, Markus ; Manninen, Iida Kaisa ; Hyttinen, Jari ; Manninen, Mikko ; Laitinen-Vapaavuori, Outi. / **Novel osteoconductive β -tricalcium phosphate/poly(L-lactide-co- ϵ -caprolactone) scaffold for bone regeneration : a study in a rabbit calvarial defect**. In: Journal of Materials Science: Materials in Medicine. 2018 ; Vol. 29, No. 10.

Kroon, Mart ; Talvitie, Elina ; Miettinen, Susanna ; Kellomäki, Minna. / **A COMPARATIVE IN VITRO STUDY OF CELL GROWTH ON TEXTILE SCAFFOLDS FOR TISSUE ENGINEERING APPLICATIONS**. Paper presented at ESB2018 - 29th Annual Meeting of European Society for Biomaterials, Maastricht, Netherlands.

Abu Khamidakh, Amna E. ; Rodriguez-Martinez, Alejandra ; Kaarniranta, Kai ; Kallioniemi, Anne ; Skottman, Heli ; Hyttinen, Jari ; Juuti-Uusitalo, Kati. / **Wound healing of human embryonic stem cell-derived retinal pigment epithelial cells is affected by maturation stage**. In: BioMedical Engineering Online. 2018 ; Vol. 17, No. 1.

Kulju, S. ; Riegger, L. ; Koltay, P. ; Mattila, K. ; Hyväluoma, J. / **Fluid flow simulations meet high-speed video : Computer vision comparison of droplet dynamics**. In: Journal of Colloid and Interface Science. 2018 ; Vol. 522. pp. 48-56.

Åkerblom, Markku ; Raumonon, Pasi ; Casella, Eric ; Disney, Mathias I. ; Danson, F. Mark ; Gaulton, Rachel ; Schofield, Lucy A. ; Kaasalainen, Mikko. / **Non-intersecting leaf insertion algorithm for tree structure models**. In: Interface Focus. 2018 ; Vol. 8, No. 2.

Kaasalainen, Sanna ; Åkerblom, Markku ; Nevalainen, Olli ; Hakala, Teemu ; Kaasalainen, Mikko. / **Uncertainty in multispectral lidar signals caused by incidence angle effects**. In: Interface Focus. 2018 ; Vol. 8, No. 2.

Disney, M. I. ; Boni Vicari, M. ; Burt, A. ; Calders, K. ; Lewis, S. L. ; Raumonon, P. ; Wilkes, P. / **Weighing trees with lasers : Advances, challenges and opportunities**. In: Interface Focus. 2018 ; Vol. 8, No. 2.

Ojansivu, M. ; Wang, X. ; Hyväri, L. ; Kellomäki, M. ; Hupa, L. ; Vanhatupa, S. ; Miettinen, S. / **Bioactive glass induced osteogenic differentiation of human adipose stem cells is dependent on cell attachment mechanism and mitogen-activated protein kinases**. In: European Cells and Materials. 2018 ; Vol. 35. pp. 53-71.

Wirdatmadja, Stefanus ; Johari, Pedram ; Balasubramaniam, Sasitharan ; Bae, Yongho ; Stachowiak, Michal K. ; Jornet, Josep M. / **Light propagation analysis in nervous tissue for wireless optogenetic nanonetworks**. Optogenetics and Optical Manipulation 2018. SPIE, 2018.

Fedele, Chiara ; De Gregorio, Maria ; Netti, Paolo A. ; Cavalli, Silvia ; Attanasio, Chiara. / **Azopolymer photopatterning for directional control of angiogenesis**. In: Acta Biomaterialia. 2017 ; Vol. 63. pp. 317-325.

Virtanen, Juhani ; Tuukkanen, Sampo. / **Multi-material bio-printing facilities**. Paper presented at BMT and MED Research Day 2017, Tampere, Finland. 1 p.

Virjula, Sanni ; Zhao, Feihu ; Leivo, Joni ; Vanhatupa, Sari ; Kreutzer, Joose ; Vaughan, Ted J. ; Honkala, Anna Maija ; Viehrig, Marlitt ; Mullen, Conleth A. ; Kallio, Pasi ; McNamara, Laoise M. ; Miettinen, Susanna. / **The effect of equiaxial stretching on the osteogenic differentiation and mechanical properties of human adipose stem cells**. In: Journal of the Mechanical Behavior of Biomedical Materials. 2017 ; Vol. 72. pp. 38-48.

Karvinen, Jennika ; Koivisto, Janne T. ; Jönkkäri, Ilari ; Kellomäki, Minna. / **The production of injectable hydrazone crosslinked gellan gum-hyaluronan-hydrogels with tunable mechanical and physical properties**. In: Journal of the Mechanical Behavior of Biomedical Materials. 2017 ; Vol. 71. pp. 383-391.

Moilanen, Carolina ; Björkqvist, Tomas ; Ovaska, Markus ; Koivisto, Juha ; Miksic, Amandine ; Engberg, Birgitta A. ; Salminen, Lauri I. ; Saarenrinne, Pentti ; Alava, Mikko. / **Influence of strain rate, temperature and fatigue on the radial compression behaviour of Norway spruce**. In: Holzforschung. 2017 ; Vol. 71, No. 6. pp. 505-514.

Böttrich, Marcel ; Tanskanen, Jarno M.A. ; Hyttinen, Jari A.K. / **Lead field theory provides a powerful tool for designing microelectrode array impedance measurements for biological cell detection and observation**. In: BioMedical Engineering Online. 2017 ; Vol. 16, No. 1.

Koivisto, Janne T. ; Joki, Tiina ; Parraga, Jenny E. ; Paakkönen, Rami ; Ylä-Outinen, Laura ; Salonen, Laura ; Jönkkäri, Ilari ; Peltola, Marja ; Ihalainen, Teemu O. ; Narkilahti, Susanna ; Kellomäki, Minna. / **Bioamine-crosslinked gellan gum hydrogel for neural tissue engineering**. In: Biomedical Materials. 2017 ; Vol. 12, No. 2.

Hyysalo, Anu ; Ristola, Mervi ; Joki, Tiina ; Honkanen, Mari ; Vippola, Minnamari ; Narkilahti, Susanna. / **Aligned Poly(ϵ -caprolactone) Nanofibers Guide the Orientation and Migration of Human Pluripotent Stem Cell-Derived Neurons, Astrocytes, and Oligodendrocyte Precursor Cells In Vitro**. In: MACROMOLECULAR BIOSCIENCE. 2017 ; Vol. 17, No. 7.

Borges, Lucas R. ; Bakic, Predrag R. ; Foi, Alessandro ; Maidment, Andrew D.A. ; Vieira, Marcelo A.C. / **Pipeline for effective denoising of digital mammography and digital breast tomosynthesis**. Medical Imaging 2017: Physics of Medical Imaging. SPIE, 2017. (Progress in biomedical optics and imaging).

Pammo, Arno ; Schouten, Martijn ; Virtanen, Juhani ; Tuukkanen, Sampo. / **Biomaterials for Electronics**. 1 p.

Will, Olga Maria ; Purcz, Nicolai ; Chalaris, Athena ; Heneweer, Carola ; Boretius, Susann ; Purcz, Larissa ; Nikkola, Lila ; Ashammakhi, Nureddin ; Kalthoff, Holger ; Glüer, Claus Christian ; Wiltfang, Jörg ; Açil, Yahya ; Tiwari, Sanjay. / **Increased survival rate by local release of diclofenac in a murine model of recurrent oral carcinoma**. In: International Journal of Nanomedicine. 2016 ; Vol. 11. pp. 5311-5321.

Lenk, Kerstin ; Priwitzer, Barbara ; Ylä-Outinen, Laura ; Tietz, Lukas H B ; Narkilahti, Susanna ; Hyttinen, Jari A.K. / **Simulation of developing human neuronal cell networks**. In: BioMedical Engineering Online. 2016 ; Vol. 15, No. 1.

Calejo, Maria Teresa ; Ilmarinen, Tanja ; Jongprasitkul, Hatai ; Skottman, Heli ; Kellomäki, Minna. / **Honeycomb porous films as permeable scaffold materials for human embryonic stem cell-derived retinal pigment epithelium**. In: Journal of Biomedical Materials Research. Part A. 2016 ; Vol. 104, No. 7. pp. 1646-1656.

Lindgren, M. ; Wallin, M. ; Kakkonen, M. ; Saarela, O. ; Vuorinen, J. / **The influence of high-temperature sulfuric acid solution ageing on the properties of laminated vinyl-ester joints**. In: International Journal of Adhesion and Adhesives. 2016 ; Vol. 68. pp. 298-304.

Sharma, Ramakant ; Bhalerao, Sagar ; Gupta, Dipti. / **Effect of incorporation of CdS NPs on performance of PTB7 : PCBM organic solar cells**. In: Organic Electronics: physics, materials, applications. 2016 ; Vol. 33. pp. 274-280.

Heydari, Golrokh ; Sedighi Moghaddam, Maziar ; Tuominen, Mikko ; Fielden, Matthew ; Haapanen, Janne ; Mäkelä, Jyrki M. ; Claesson, Per M. / **Wetting hysteresis induced by temperature changes : Supercooled water on hydrophobic surfaces**. In: Journal of Colloid and Interface Science. 2016 ; Vol. 468. pp. 21-33.

Vuornos, Kaisa ; Björninen, Miina ; Talvitie, Elina ; Paakinaho, Kaarlo ; Kellomäki, Minna ; Huhtala, Heini ; Miettinen, Susanna ; Seppänen-Kajiansinkko, Riitta ; Haimi, Suvi. / **Human Adipose Stem Cells Differentiated on Braided Polylactide Scaffolds is a Potential Approach for Tendon Tissue Engineering**. In: Tissue Engineering Part A. 2016 ; Vol. 22, No. 5-6. pp. 513-523.

Bansod, Naresh D. ; Kapgade, Bharat P. ; Das, Chayan ; Das, Amit ; Basu, Debdipta ; Debnath, Subhas Chandra. / **Compatibilization of natural rubber/nitrile rubber blends by sol-gel nano-silica generated by in situ method**. In: JOURNAL OF SOL-GEL SCIENCE AND TECHNOLOGY. 2016 ; Vol. 80, No. 2. pp. 548-559.

Lahti, Johanna ; Lavonen, Juho ; Lahtinen, Kimmo ; Johansson, Petri ; Seppänen, Tarja ; Cameron, David C. / **Improved properties for packaging materials by nanoscale surface modification and ALD barrier coating**. TAPPI International Conference on Nanotechnology for Renewable Materials 2016. Vol. 2 TAPPI Press, 2016. pp. 684-706

Hiltunen, M. ; Pelto, J. ; Ellä, V. ; Kellomäki, M. / **Uniform and electrically conductive biopolymer-doped polypyrrole coating for fibrous PLA**. In: Journal of Biomedical Materials Research. Part B: Applied Biomaterials. 2016 ; Vol. 104, No. 8. pp. 1721-1729.

Kuuliala, L. ; Pippuri, T. ; Hultman, J. ; Auvinen, S.-M. ; Kolppo, K. ; Nieminen, T. ; Karp, Matti ; Björkroth, J. ; Kuusipalo, J. ; Jääskeläinen, E. / **Preparation and antimicrobial characterization of silver-containing packaging materials for meat**. In: Food Packaging and Shelf Life. 2015 ; Vol. 6. pp. 53-60.

Zhao, Ming Dong ; Björninen, Miina ; Cao, Lu ; Wang, Hui Ren ; Pelto, Jani ; Li, Xiang Qian ; Hyttinen, Jari ; Jiang, Yun Qi ; Kellomäki, Minna ; Miettinen, Susanna ; Sándor, George K. ; Seppänen, Riitta ; Haimi, Suvi ; Dong, Jian. / **Polypyrrole coating on poly-(lactide/glycolide)- β -tricalcium phosphate screws enhances new bone formation in rabbits**. In: Biomedical Materials. 2015 ; Vol. 10, No. 6.

Al Qaysi, Mustafa ; Walters, Nick J. ; Foroutan, Farzad ; Owens, Gareth J. ; Kim, Hae Won ; Shah, Rishma ; Knowles, Jonathan C. / **Strontium- and calcium-containing, titanium-stabilised phosphate-based glasses with prolonged degradation for orthopaedic tissue engineering**. In: Journal of Biomaterials Applications. 2015 ; Vol. 30, No. 3. pp. 300-310.

Sorkio, Anni ; Porter, Patrick J. ; Juuti-Uusitalo, Kati ; Meenan, Brian J. ; Skottman, Heli ; Burke, George A. / **Surface Modified Biodegradable Electrospun Membranes as a Carrier for Human Embryonic Stem Cell-Derived Retinal Pigment Epithelial Cells**. In: Tissue Engineering Part A. 2015 ; Vol. 21, No. 17-18. pp. 2301-2314.

Foroutan, Farzad ; Walters, Nick J. ; Owens, Gareth J. ; Mordan, Nicola J. ; Kim, Hae Won ; de Leeuw, Nora H. ; Knowles, Jonathan C. / **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)**. In: Biomedical materials (Bristol, England). 2015 ; Vol. 10, No. 4. pp. 45025.

Ojansivu, Miina ; Vanhatupa, Sari ; Björkvik, Leena ; Häkkänen, Heikki ; Kellomäki, Minna ; Autio, Reija ; Ihalainen, Janne A. ; Hupa, Leena ; Miettinen, Susanna. / **Bioactive glass ions as strong enhancers of osteogenic differentiation in human adipose stem cells**. In: Acta Biomaterialia. 2015 ; Vol. 21. pp. 190-203.

Isoniemi, Tommi ; Tuukkanen, Sampo ; Cameron, David C. ; Simonen, Janne ; Toppari, J. Jussi. / **Measuring optical anisotropy in poly(3,4-ethylene dioxythiophene) : poly(styrene sulfonate) films with added graphene**. In: Organic Electronics. 2015 ; Vol. 25. pp. 317-323.

Massera, J. ; Kokkari, A. ; Närhi, T. ; Hupa, L. / **The influence of SrO and CaO in silicate and phosphate bioactive glasses on human gingival fibroblasts**. In: Journal of Materials Science: Materials in Medicine. 2015 ; Vol. 26, No. 6.

Ribeiro, Clarisse ; Pärssinen, Jenita ; Sencadas, Vítor ; Correia, Vítor ; Miettinen, S. ; Hytönen, Vesa P. ; Lanceros-Méndez, Senentxu. / **Dynamic piezoelectric stimulation enhances osteogenic differentiation of human adipose stem cells**. In: Journal of Biomedical Materials Research. Part A. 2015 ; Vol. 103, No. 6. pp. 2172-2175.

Borah, Dipu ; Rasappa, Sozaraj ; Salaun, Mathieu ; Zellsman, Marc ; Lorret, Olivier ; Liontos, George ; Ntetsikas, Konstantinos ; Avgeropoulos, Apostolos ; Morris, Michael A. / **Soft graphoepitaxy for large area directed self-assembly of polystyrene-block-poly(dimethylsiloxane) block copolymer on nanopatterned poss substrates fabricated by nanoimprint lithography**. In: Advanced Functional Materials. 2015 ; Vol. 25, No. 22. pp. 3425-3432.

Sorkio, Anni E. ; Vuorimaa-Laukkanen, Elina P. ; Hakola, Hanna M. ; Liang, Huamin ; Ujula, Tiina A. ; Valle-Delgado, Juan José ; Österberg, Monika ; Yliperttula, Marjo L. ; Skottman, Heli. / **Biomimetic collagen I and IV double layer Langmuir-Schaefer films as microenvironment for human pluripotent stem cell derived retinal pigment epithelial cells**. In: Biomaterials . 2015 ; Vol. 51. pp. 257-269.

Vignion-Dewalle, Anne Sophie ; Betrouni, Nacim ; Tylcz, Jean Baptiste ; Vermandel, Maximilien ; Mortier, Laurent ; Mordon, Serge. / **Comparison of three light doses in the photodynamic treatment of actinic keratosis using mathematical modeling**. In: JOURNAL OF BIOMEDICAL OPTICS. 2015 ; Vol. 20, No. 5.

Potapov, Ilya ; Zhurov, Boris ; Volkov, Evgeny. / **Multi-stable dynamics of the non-adiabatic repressilator**. In: Journal of the Royal Society. Interface. 2015 ; Vol. 12, No. 104.

Pärssinen, Jenita ; Hammarén, Henrik ; Rahikainen, Rolle ; Sencadas, Vítor ; Ribeiro, Clarisse ; Vanhatupa, Sari ; Miettinen, Susanna ; Lanceros-Méndez, Senentxu ; Hytönen, Vesa P. / **Enhancement of adhesion and promotion of osteogenic differentiation of human adipose stem cells by poled electroactive poly(vinylidene fluoride)**. In: Journal of Biomedical Materials Research. Part A. 2015 ; Vol. 103, No. 3. pp. 919-928.

Li, Zhuo ; Le, Taoran ; Wu, Zhenkun ; Yao, Yagang ; Li, Liyi ; Tentzeris, Manos ; Moon, Kyoung Sik ; Wong, C. P. / **Rational design of a printable, highly conductive silicone-based electrically conductive adhesive for stretchable radio-frequency antennas**. In: Advanced Functional Materials. 2015 ; Vol. 25, No. 3. pp. 464-470.

Ahtiainen, Katja ; Sippola, Laura ; Nurminen, Manu ; Mannerström, Bettina ; Haimi, Suvi ; Suuronen, Riitta ; Hyttinen, Jari ; Ylikomi, Timo ; Kellomäki, Minna ; Miettinen, Susanna. / **Effects of chitosan and bioactive glass modifications of knitted and rolled polylactide-based 96/4L/D scaffolds on chondrogenic differentiation of adipose stem cells**. In: Journal of Tissue Engineering and Regenerative Medicine. 2015 ; Vol. 9, No. 1. pp. 55-65.

Leroy, Henri Arthur ; Vermandel, Maximilien ; Tétard, Marie Charlotte ; Lejeune, Jean Paul ; Mordon, Serge ; Reyns, Nicolas. / **Interstitial photodynamic therapy and glioblastoma : Light fractionation study on a preclinical model: Preliminary results.** Optical Techniques in Neurosurgery, Neurophotonics, and Optogenetics II. Vol. 9305 SPIE, 2015.

Stumpel, Jelle E. ; Gil, Elda Renedo ; Spoelstra, Anne B. ; Bastiaansen, Cees W M ; Broer, Dirk J. ; Schenning, Albertus P H J. / **Stimuli-Responsive Materials Based on Interpenetrating Polymer Liquid Crystal Hydrogels.** In: Advanced Functional Materials. 2015 ; Vol. 25, No. 22. pp. 3314–3320.

Kulkova, Julia ; Moritz, Niko ; Suokas, Esa O. ; Strandberg, Niko ; Leino, Kari A. ; Laitio, Timo T. ; Aro, Hannu T. / **Osteointegration of PLGA implants with nanostructured or micro-sized β -TCP particles in a minipig model.** In: Journal of the Mechanical Behavior of Biomedical Materials. 2014 ; Vol. 40. pp. 190-200.

Sorkio, Anni ; Hongisto, Heidi ; Kaarniranta, Kai ; Uusitalo, Hannu ; Juuti-Uusitalo, Kati ; Skottman, Heli. / **Structure and barrier properties of human embryonic stem cell-derived retinal pigment epithelial cells are affected by extracellular matrix protein coating.** In: Tissue Engineering Part A. 2014 ; Vol. 20, No. 3-4. pp. 622-634.

Zhang, Dawei ; Pekkanen-Mattila, Mari ; Shahsavani, Mansoureh ; Falk, Anna ; Teixeira, Ana I. ; Herland, Anna. / **A 3D Alzheimer's disease culture model and the induction of P21-activated kinase mediated sensing in iPSC derived neurons.** In: Biomaterials. 2014 ; Vol. 35, No. 5. pp. 1420-1428.

Turunen, Sanna ; Käpylä, Elli ; Lähteenmäki, Minna ; Ylä-Outinen, Laura ; Narkilahti, Susanna ; Kellomäki, Minna. / **Direct laser writing of microstructures for the growth guidance of human pluripotent stem cell derived neuronal cells.** In: Optics and Lasers in Engineering. 2014 ; Vol. 55. pp. 197-204.

Ylä-Outinen, Laura ; Joki, Tiina ; Varjola, Mari ; Skottman, Heli ; Narkilahti, Susanna. / **Three-dimensional growth matrix for human embryonic stem cell-derived neuronal cells.** In: Journal of Tissue Engineering and Regenerative Medicine. 2014 ; Vol. 8, No. 3. pp. 186-194.

Borah, Dipu ; Rasappa, Sozaraj ; Senthamarakannan, Ramsankar ; Shaw, Matthew T. ; Holmes, Justin D. ; Morris, Michael A. / **The sensitivity of random polymer brush-lamellar polystyrene-b-polymethylmethacrylate block copolymer systems to process conditions.** In: Journal of Colloid and Interface Science. 2013 ; Vol. 393, No. 1. pp. 192-202.

Diban, Nazely ; Haimi, Suvi ; Bolhuis-Versteeg, Lydia ; Teixeira, Sandra ; Miettinen, Susanna ; Poot, André ; Grijpma, Dirk ; Stamatialis, Dimitrios. / **Hollow fibers of poly(lactide-co-glycolide) and poly(ϵ -caprolactone) blends for vascular tissue engineering applications.** In: Acta Biomaterialia. 2013 ; Vol. 9, No. 5. pp. 6450-6458.

Lahtinen, K. ; Maydannik, P. ; Kääriäinen, T. ; Seppänen, T. ; Cameron, D. C. ; Johansson, P. ; Kraft, M. ; Kuusipalo, J. / **Roll-to-roll atomic layer deposition for flexible substrates.** TAPPI International Conference on Nanotechnology 2013. TAPPI Press, 2013. pp. 726-739

Stepien, Milena ; Chinga-Carrasco, Gary ; Saarinen, Jarkko J. ; Teisala, Hannu ; Tuominen, Mikko ; Aromaa, Mikko ; Haapanen, Janne ; Kuusipalo, Jurkka ; Mäkelä, Jyrki M. ; Toivakka, Martti. / **Wear resistance of nanoparticle coatings on paperboard.** TAPPI International Conference on Nanotechnology 2013. TAPPI Press, 2013. pp. 821-829

Kapgate, Bharat P. ; Das, Chayan ; Das, Amit ; Basu, Debdipta ; Reuter, Uta ; Heinrich, Gert. / **Effect of sol-gel derived in situ silica on the morphology and mechanical behavior of natural rubber and acrylonitrile butadiene rubber blends.** In: JOURNAL OF SOL-GEL SCIENCE AND TECHNOLOGY. 2012 ; Vol. 63, No. 3. pp. 501-509.

Paci, Michelangelo ; Sartiani, Laura ; Del Lungo, Martina ; Jaconi, Marisa ; Mugelli, Alessandro ; Cerbai, Elisabetta ; Severi, Stefano. / **Mathematical modelling of the action potential of human embryonic stem cell derived cardiomyocytes.** In: BioMedical Engineering Online. 2012 ; Vol. 11.

Priimagi, Arri ; Cavallo, Gabriella ; Forni, Alessandra ; Gorynsztejn-Leben, Mikael ; Kaivola, Matti ; Metrangolo, Pierangelo ; Milani, Roberto ; Shishido, Atsushi ; Pilati, Tullio ; Resnati, Giuseppe ; Terraneo, Giancarlo. / **Halogen bonding versus hydrogen bonding in driving self-assembly and performance of light-responsive supramolecular polymers**. In: *Advanced Functional Materials*. 2012 ; Vol. 22, No. 12. pp. 2572-2579.

Praveenkumar, Ramasamy ; Johncy, Kamarasu ; MubarakAli, Davoodbhasha ; Vijayan, Durairaj ; Thajuddin, Nooruddin ; Gunasekaran, Muthukumaran. / **Demonstration of increased lipid accumulation potential of *Stigeoclonium sp.*, Kütz. BUM11007 under nitrogen starved regime : A new source of lipids for biodiesel production**. In: *Journal of Biobased Materials and Bioenergy*. 2012 ; Vol. 6, No. 2. pp. 209-213.

Cuyon, Laurie ; Lesage, Jean Claude ; Betrouni, Nacim ; Mordon, Serge. / **Development of a new illumination procedure for photodynamic therapy of the abdominal cavity**. In: *JOURNAL OF BIOMEDICAL OPTICS*. 2012 ; Vol. 17, No. 3.

Sarkanen, Jertta Riina ; Kaila, Ville ; Mannerström, Bettina ; Rätty, Sari ; Kuokkanen, Hannu ; Miettinen, Susanna ; Ylikomi, Timo. / **Human adipose tissue extract induces angiogenesis and adipogenesis in vitro**. In: *Tissue Engineering Part A*. 2012 ; Vol. 18, No. 1-2. pp. 17-25.

Waselau, Martin ; Patrikoski, Mimmi ; Juntunen, Miia ; Kujala, Kasper ; Kääriäinen, Minna ; Kuokkanen, Hannu ; Sándor, George K. ; Vapaavuori, Outi ; Suuronen, Riitta ; Mannerström, Bettina ; von Rechenberg, Brigitte ; Miettinen, Susanna. / **Effects of bioactive glass S53P4 or beta-tricalcium phosphate and bone morphogenetic protein-2 and bone morphogenetic protein-7 on osteogenic differentiation of human adipose stem cells**. In: *Journal of Tissue Engineering*. 2012 ; Vol. 3, No. 1. pp. 1-14.

Tirkkonen, L. ; Haimi, Suvi ; Huttunen, S. ; Wolff, J. ; Pirhonen, E. ; Sándor, G. K. ; Miettinen, S. / **Osteogenic medium is superior to growth factors in differentiation of human adipose stem cells towards boneforming cells in 3D culture**. In: *European Cells and Materials*. 2012 ; Vol. 25. pp. 144-158.

Zorzi, Giovanni Konat ; Párraga, Jenny Evelin ; Seijo, Begoña ; Sánchez, Alejandro. / **Hybrid nanoparticle design based on cationized gelatin and the polyanions dextran sulfate and chondroitin sulfate for ocular gene therapy**. In: *MACROMOLECULAR BIOSCIENCE*. 2011 ; Vol. 11, No. 7. pp. 905-913.

Marqa, Mohamad Feras ; Colin, Pierre ; Nevoux, Pierre ; Mordon, Serge R. ; Betrouni, Nacim. / **Focal Laser Ablation of Prostate Cancer : Numerical Simulation of Temperature and Damage Distribution**. In: *BioMedical Engineering Online*. 2011 ; Vol. 10.

Daculsi, Guy ; Goyenvalle, Eric ; Cognet, Ronan ; Aguado, Eric ; Suokas, Esa O. / **Osteoconductive properties of poly(96L/4D-lactide)/beta-tricalcium phosphate in long term animal model**. In: *Biomaterials*. 2011 ; Vol. 32, No. 12. pp. 3166-3177.

Aydogan, Dogu Baran ; Hannula, Markus ; Rajala, Anne ; Pälli, Aliisa ; Haimi, Suvi ; Kellomäki, Minna ; Hyttinen, Jari. / **Analysis of biomaterial scaffold fiber thickness for assessing cell attachment**. 24th European Conference on Biomaterials - Annual Conference of the European Society for Biomaterials, ESB 2011. 2011.

Ahola, Niina ; Veiranto, Minna ; Männistö, Noora ; Kellomäki, Minna. / **Composites of poly(L-lactide-co-caprolactone) and tricalcium phosphate containing antibiotics; Degradation and drug release**. 24th European Conference on Biomaterials - Annual Conference of the European Society for Biomaterials, ESB 2011. 2011.

Paakinaho, K. ; Heino, H. ; Väisänen, J. ; Törmälä, P. ; Kellomäki, M. / **Effect of lactide monomer on the hydrolytic degradation and performance of melt processed poly(lactide-co-glycolide) 85L/15G**. 24th European Conference on Biomaterials - Annual Conference of the European Society for Biomaterials, ESB 2011. 2011.

Cetina-Diaz, S. M. ; Vargas-Coronado, R. F. ; Cervantes-Uc, J. M. ; Cauich-Rodríguez, J. V. ; Ahola, N. ; Paakinaho, K. ; Kellomäki, M. / **HA composites of segmented polyurethanes prepared with glutamine or ascorbic acid as chain extenders for bone tissue regeneration**. 24th European Conference on Biomaterials - Annual Conference of the European Society for Biomaterials, ESB 2011. 2011.

Käpylä, Elli ; Aydogan, Dogu Baran ; Turunen, Sanna ; Hyttinen, Jari ; Kellomäki, Minna. / **Picosecond laser-induced polymerization of highly porous microcaffolds**. 24th European Conference on Biomaterials - Annual Conference of the European Society for Biomaterials, ESB 2011. 2011.

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. / **Surface science analysis and surface modification methods for biomaterials research**. In: European Cells and Materials. 2010 ; Vol. 20, No. SUPPL. 3. pp. 133.

Le Xuan, Loc ; Zhou, Chunyuan ; Slablab, Abdallah ; Chauvat, Dominique ; Tard, Cédric ; Perruchas, Sandrine ; Gacoin, Thierry ; Villeval, Philippe ; Roch, Jean-François. / **Photostable second-harmonic generation from a single KTiOPO4 nanocrystal for nonlinear microscopy**. In: Small. 2008 ; Vol. 4, No. 9. pp. 1332-1336.