

Le Xuan, L., Zhou, C., Slablab, A., Chauvat, D., Tard, C., Perruchas, S., ... Roch, J-F. (2008). Photostable second-harmonic generation from a single KTiOPO₄ nanocrystal for nonlinear microscopy. *Small*, 4(9), 1332-1336. <https://doi.org/10.1002/smll.200701093>

Kanninen, L., Jokinen, N., Lahtonen, K., Jussila, P., Ali-Löytty, H., Hirsimäki, M., ... Valden, M. (2010). Surface science analysis and surface modification methods for biomaterials research. *European Cells and Materials*, 20(SUPPL. 3), 133.

Aydogan, D. B., Hannula, M., Rajala, A., Pälli, A., Haimi, S., Kellomäki, M., & Hyttinen, J. (2011). Analysis of biomaterial scaffold fiber thickness for assessing cell attachment. In *24th European Conference on Biomaterials - Annual Conference of the European Society for Biomaterials, ESB 2011*

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

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

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

Käpylä, E., Aydogan, D. B., Turunen, S., Hyttinen, J., & Kellomäki, M. (2011). Picosecond laser-induced polymerization of highly porous microscaffolds. In *24th European Conference on Biomaterials - Annual Conference of the European Society for Biomaterials, ESB 2011*

Daculsi, G., Goyenvalle, E., Cagnet, R., Aguado, E., & Suokas, E. O. (2011). Osteoconductive properties of poly(96L/4D-lactide)/beta-tricalcium phosphate in long term animal model. *Biomaterials*, 32(12), 3166-3177. <https://doi.org/10.1016/j.biomaterials.2011.01.033>

Marqa, M. F., Colin, P., Nevoux, P., Mordon, S. R., & Betrouni, N. (2011). Focal Laser Ablation of Prostate Cancer: Numerical Simulation of Temperature and Damage Distribution. *BioMedical Engineering Online*, 10, [45]. <https://doi.org/10.1186/1475-925X-10-45>

Zorzi, G. K., Párraga, J. E., Seijo, B., & Sánchez, A. (2011). Hybrid nanoparticle design based on cationized gelatin and the polyanions dextran sulfate and chondroitin sulfate for ocular gene therapy. *MACROMOLECULAR BIOSCIENCE*, 11 (7), 905-913. <https://doi.org/10.1002/mabi.201100005>

Waselau, M., Patrikoski, M., Juntunen, M., Kujala, K., Kääriäinen, M., Kuokkanen, H., ... Miettinen, S. (2012). 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. *Journal of Tissue Engineering*, 3(1), 1-14. <https://doi.org/10.1177/2041731412467789>

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

Sarkanen, J. R., Kaila, V., Mannerström, B., Rätty, S., Kuokkanen, H., Miettinen, S., & Ylikomi, T. (2012). Human adipose tissue extract induces angiogenesis and adipogenesis in vitro. *Tissue Engineering Part A*, 18(1-2), 17-25. <https://doi.org/10.1089/ten.tea.2010.0712>

Cuyon, L., Lesage, J. C., Betrouni, N., & Mordon, S. (2012). Development of a new illumination procedure for photodynamic therapy of the abdominal cavity. *JOURNAL OF BIOMEDICAL OPTICS*, 17(3), [038001]. <https://doi.org/10.1117/1.JBO.17.3.038001>

Praveenkumar, R., Johncy, K., MubarakAli, D., Vijayan, D., Thajuddin, N., & Gunasekaran, M. (2012). Demonstration of increased lipid accumulation potential of *stigeoclonium* sp., Kütz. BUM11007 under nitrogen starved regime: A new source of lipids for biodiesel production. *Journal of Biobased Materials and Bioenergy*, 6(2), 209-213. <https://doi.org/10.1166/jbmb.2012.1200>

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

Paci, M., Sartiani, L., Del Lungo, M., Jaconi, M., Mugelli, A., Cerbai, E., & Severi, S. (2012). Mathematical modelling of the action potential of human embryonic stem cell derived cardiomyocytes. *BioMedical Engineering Online*, 11, [61]. <https://doi.org/10.1186/1475-925X-11-61>

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

Diban, N., Haimi, S., Bolhuis-Versteeg, L., Teixeira, S., Miettinen, S., Poot, A., ... Stamatialis, D. (2013). Hollow fibers of poly(lactide-co-glycolide) and poly(ϵ -caprolactone) blends for vascular tissue engineering applications. *Acta Biomaterialia*, 9(5), 6450-6458. <https://doi.org/10.1016/j.actbio.2013.01.005>

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

Stepien, M., Chinga-Carrasco, G., Saarinen, J. J., Teisala, H., Tuominen, M., Aromaa, M., ... Toivakka, M. (2013). Wear resistance of nanoparticle coatings on paperboard. In *TAPPI International Conference on Nanotechnology 2013* (pp. 821-829). TAPPI Press.

Borah, D., Rasappa, S., Sentharamakannan, R., Shaw, M. T., Holmes, J. D., & Morris, M. A. (2013). The sensitivity of random polymer brush-lamellar polystyrene-b-polymethylmethacrylate block copolymer systems to process conditions. *Journal of Colloid and Interface Science*, 393(1), 192-202. <https://doi.org/10.1016/j.jcis.2012.10.070>

Turunen, S., Käpylä, E., Lähteenmäki, M., Ylä-Outinen, L., Narkilahti, S., & Kellomäki, M. (2014). Direct laser writing of microstructures for the growth guidance of human pluripotent stem cell derived neuronal cells. *Optics and Lasers in Engineering*, 55, 197-204. <https://doi.org/10.1016/j.optlaseng.2013.11.003>

Ylä-Outinen, L., Joki, T., Varjola, M., Skottman, H., & Narkilahti, S. (2014). Three-dimensional growth matrix for human embryonic stem cell-derived neuronal cells. *Journal of Tissue Engineering and Regenerative Medicine*, 8(3), 186-194. <https://doi.org/10.1002/term.1512>

Zhang, D., Pekkanen-Mattila, M., Shahsavani, M., Falk, A., Teixeira, A. I., & Herland, A. (2014). A 3D Alzheimer's disease culture model and the induction of P21-activated kinase mediated sensing in iPSC derived neurons. *Biomaterials*, 35(5), 1420-1428. <https://doi.org/10.1016/j.biomaterials.2013.11.028>

Sorkio, A., Hongisto, H., Kaarniranta, K., Uusitalo, H., Juuti-Uusitalo, K., & Skottman, H. (2014). Structure and barrier properties of human embryonic stem cell-derived retinal pigment epithelial cells are affected by extracellular matrix protein coating. *Tissue Engineering Part A*, 20(3-4), 622-634. <https://doi.org/10.1089/ten.tea.2013.0049>

Kulkova, J., Moritz, N., Suokas, E. O., Strandberg, N., Leino, K. A., Laitio, T. T., & Aro, H. T. (2014). Osteointegration of PLGA implants with nanostructured or micro-sized β -TCP particles in a minipig model. *Journal of the Mechanical Behavior of Biomedical Materials*, 40, 190-200. <https://doi.org/10.1016/j.jmbbm.2014.08.028>

Leroy, H. A., Vermandel, M., Tétard, M. C., Lejeune, J. P., Mordon, S., & Reyns, N. (2015). Interstitial photodynamic therapy and glioblastoma: Light fractionation study on a preclinical model: Preliminary results. In *Optical Techniques in Neurosurgery, Neurophotonics, and Optogenetics II* (Vol. 9305). [93050D] SPIE. <https://doi.org/10.1117/12.2079347>

Stumpel, J. E., Gil, E. R., Spoelstra, A. B., Bastiaansen, C. W. M., Broer, D. J., & Schenning, A. P. H. J. (2015). Stimuli-Responsive Materials Based on Interpenetrating Polymer Liquid Crystal Hydrogels. *Advanced Functional Materials*, 25(22), 3314–3320. <https://doi.org/10.1002/adfm.201500745>

Ahtiainen, K., Sippola, L., Nurminen, M., Mannerström, B., Haimi, S., Suuronen, R., ... Miettinen, S. (2015). Effects of chitosan and bioactive glass modifications of knitted and rolled polylactide-based 96/4L/D scaffolds on chondrogenic differentiation of adipose stem cells. *Journal of Tissue Engineering and Regenerative Medicine*, 9(1), 55-65. <https://doi.org/10.1002/term.1614>

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

Parssinen, J., Hammarén, H., Rahikainen, R., Sencadas, V., Ribeiro, C., Vanhatupa, S., ... Hytönen, V. P. (2015). Enhancement of adhesion and promotion of osteogenic differentiation of human adipose stem cells by poled electroactive poly(vinylidene fluoride). *Journal of Biomedical Materials Research. Part A*, 103(3), 919-928. <https://doi.org/10.1002/jbm.a.35234>

Potapov, I., Zhurov, B., & Volkov, E. (2015). Multi-stable dynamics of the non-adiabatic repressilator. *Journal of the Royal Society. Interface*, 12(104), [20141315]. <https://doi.org/10.1098/rsif.2014.1315>

Sorkio, A. E., Vuorimaa-Laukkanen, E. P., Hakola, H. M., Liang, H., Ujula, T. A., Valle-Delgado, J. J., ... Skottman, H. (2015). Biomimetic collagen I and IV double layer Langmuir-Schaefer films as microenvironment for human pluripotent stem cell derived retinal pigment epithelial cells. *Biomaterials*, 51, 257-269. <https://doi.org/10.1016/j.biomaterials.2015.02.005>

Vignion-Dewalle, A. S., Betrouni, N., Tylcz, J. B., Vermandel, M., Mortier, L., & Mordon, S. (2015). Comparison of three light doses in the photodynamic treatment of actinic keratosis using mathematical modeling. *JOURNAL OF BIOMEDICAL OPTICS*, 20(5), [058001]. <https://doi.org/10.1117/1.JBO.20.5.058001>

Ribeiro, C., Parssinen, J., Sencadas, V., Correia, V., Miettinen, S., Hytönen, V. P., & Lanceros-Méndez, S. (2015). Dynamic piezoelectric stimulation enhances osteogenic differentiation of human adipose stem cells. *Journal of Biomedical Materials Research. Part A*, 103(6), 2172-2175. <https://doi.org/10.1002/jbm.a.35368>

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

Massera, J., Kokkari, A., Närhi, T., & Hupa, L. (2015). The influence of SrO and CaO in silicate and phosphate bioactive glasses on human gingival fibroblasts. *Journal of Materials Science: Materials in Medicine*, 26(6), [196]. <https://doi.org/10.1007/s10856-015-5528-x>

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

Ojansivu, M., Vanhatupa, S., Björkvik, L., Häkkänen, H., Kellomäki, M., Autio, R., ... Miettinen, S. (2015). Bioactive glass ions as strong enhancers of osteogenic differentiation in human adipose stem cells. *Acta Biomaterialia*, 21, 190-203. <https://doi.org/10.1016/j.actbio.2015.04.017>

- Foroutan, F., Walters, N. J., Owens, G. J., Mordan, N. J., Kim, H. W., de Leeuw, N. H., & Knowles, J. C. (2015). Sol-gel synthesis of quaternary $(P_2O_5)_{55}-(CaO)_{25}-(Na_2O)_{(20-x)}-(TiO_2)_x$ bioresorbable glasses for bone tissue engineering applications ($x = 0, 5, 10, \text{ or } 15$). *Biomedical materials (Bristol, England)*, *10*(4), 45025. <https://doi.org/10.1088/1748-6041/10/4/045025>
- Sorkio, A., Porter, P. J., Juuti-Uusitalo, K., Meenan, B. J., Skottman, H., & Burke, G. A. (2015). Surface Modified Biodegradable Electrospun Membranes as a Carrier for Human Embryonic Stem Cell-Derived Retinal Pigment Epithelial Cells. *Tissue Engineering Part A*, *21*(17-18), 2301-2314. <https://doi.org/10.1089/ten.tea.2014.0640>
- Al Qaysi, M., Walters, N. J., Foroutan, F., Owens, G. J., Kim, H. W., Shah, R., & Knowles, J. C. (2015). Strontium- and calcium-containing, titanium-stabilised phosphate-based glasses with prolonged degradation for orthopaedic tissue engineering. *Journal of Biomaterials Applications*, *30*(3), 300-310. <https://doi.org/10.1177/0885328215588898>
- Zhao, M. D., Björninen, M., Cao, L., Wang, H. R., Pelto, J., Li, X. Q., ... Dong, J. (2015). Polypyrrole coating on poly-(lactide/glycolide)- β -tricalcium phosphate screws enhances new bone formation in rabbits. *Biomedical Materials*, *10*(6), [065016]. <https://doi.org/10.1088/1748-6041/10/6/065016>
- Kuuliala, L., Pippuri, T., Hultman, J., Auvinen, S-M., Kolppo, K., Nieminen, T., ... Jääskeläinen, E. (2015). Preparation and antimicrobial characterization of silver-containing packaging materials for meat. *Food Packaging and Shelf Life*, *6*, 53-60. [67]. <https://doi.org/10.1016/j.fpsl.2015.09.004>
- Bansod, N. D., Kapgade, B. P., Das, C., Das, A., Basu, D., & Debnath, S. C. (2016). Compatibilization of natural rubber/nitrile rubber blends by sol-gel nano-silica generated by in situ method. *JOURNAL OF SOL-GEL SCIENCE AND TECHNOLOGY*, *80*(2), 548-559. <https://doi.org/10.1007/s10971-016-4114-0>
- Lahti, J., Lavonen, J., Lahtinen, K., Johansson, P., Seppänen, T., & Cameron, D. C. (2016). Improved properties for packaging materials by nanoscale surface modification and ALD barrier coating. In *TAPPI International Conference on Nanotechnology for Renewable Materials 2016* (Vol. 2, pp. 684-706). TAPPI Press.
- Hiltunen, M., Pelto, J., Ellä, V., & Kellomäki, M. (2016). Uniform and electrically conductive biopolymer-doped polypyrrole coating for fibrous PLA. *Journal of Biomedical Materials Research. Part B: Applied Biomaterials*, *104*(8), 1721-1729. <https://doi.org/10.1002/jbm.b.33514>
- Vuornos, K., Björninen, M., Talvitie, E., Paakinaho, K., Kellomäki, M., Huhtala, H., ... Haimi, S. (2016). Human Adipose Stem Cells Differentiated on Braided Polylactide Scaffolds is a Potential Approach for Tendon Tissue Engineering. *Tissue Engineering Part A*, *22*(5-6), 513-523. <https://doi.org/10.1089/ten.tea.2015.0276>
- Heydari, G., Sedighi Moghaddam, M., Tuominen, M., Fielden, M., Haapanen, J., Mäkelä, J. M., & Claesson, P. M. (2016). Wetting hysteresis induced by temperature changes: Supercooled water on hydrophobic surfaces. *Journal of Colloid and Interface Science*, *468*, 21-33. <https://doi.org/10.1016/j.jcis.2016.01.040>
- Sharma, R., Bhalerao, S., & Gupta, D. (2016). Effect of incorporation of CdS NPs on performance of PTB7: PCBM organic solar cells. *Organic Electronics: physics, materials, applications*, *33*, 274-280. <https://doi.org/10.1016/j.orgel.2016.03.030>
- Calejo, M. T., Ilmarinen, T., Jongprasitkul, H., Skottman, H., & Kellomäki, M. (2016). Honeycomb porous films as permeable scaffold materials for human embryonic stem cell-derived retinal pigment epithelium. *Journal of Biomedical Materials Research. Part A*, *104*(7), 1646-1656. <https://doi.org/10.1002/jbm.a.35690>
- Lindgren, M., Wallin, M., Kakkonen, M., Saarela, O., & Vuorinen, J. (2016). The influence of high-temperature sulfuric acid solution ageing on the properties of laminated vinyl-ester joints. *International Journal of Adhesion and Adhesives*, *68*, 298-304. <https://doi.org/10.1016/j.ijadhadh.2016.04.011>

- Lenk, K., Priwitzer, B., Ylä-Outinen, L., Tietz, L. H. B., Narkilahti, S., & Hyttinen, J. A. K. (2016). Simulation of developing human neuronal cell networks. *BioMedical Engineering Online*, *15*(1), [105]. <https://doi.org/10.1186/s12938-016-0226-6>
- Will, O. M., Purcz, N., Chalaris, A., Heneweer, C., Boretius, S., Purcz, L., ... Tiwari, S. (2016). Increased survival rate by local release of diclofenac in a murine model of recurrent oral carcinoma. *International Journal of Nanomedicine*, *11*, 5311-5321. <https://doi.org/10.2147/IJN.S109199>
- Pammo, A., Schouten, M., Virtanen, J., & Tuukkanen, S. (2016). *Biomaterials for Electronics*. 1-1.
- Hyysalo, A., Ristola, M., Joki, T., Honkanen, M., Vippola, M., & Narkilahti, S. (2017). Aligned Poly(ϵ -caprolactone) Nanofibers Guide the Orientation and Migration of Human Pluripotent Stem Cell-Derived Neurons, Astrocytes, and Oligodendrocyte Precursor Cells In Vitro. *MACROMOLECULAR BIOSCIENCE*, *17*(7), [1600517]. <https://doi.org/10.1002/mabi.201600517>
- Borges, L. R., Bakic, P. R., Foi, A., Maidment, A. D. A., & Vieira, M. A. C. (2017). Pipeline for effective denoising of digital mammography and digital breast tomosynthesis. In *Medical Imaging 2017: Physics of Medical Imaging* [1013206] (Progress in biomedical optics and imaging). SPIE. <https://doi.org/10.1117/12.2255058>
- Koivisto, J. T., Joki, T., Parraga, J. E., Paakkönen, R., Ylä-Outinen, L., Salonen, L., ... Kellomäki, M. (2017). Bioamine-crosslinked gellan gum hydrogel for neural tissue engineering. *Biomedical Materials*, *12*(2), [025014]. <https://doi.org/10.1088/1748-605X/aa62b0>
- Böttrich, M., Tanskanen, J. M. A., & Hyttinen, J. A. K. (2017). Lead field theory provides a powerful tool for designing microelectrode array impedance measurements for biological cell detection and observation. *BioMedical Engineering Online*, *16*(1), [85]. <https://doi.org/10.1186/s12938-017-0372-5>
- Moilanen, C., Björkqvist, T., Ovaska, M., Koivisto, J., Miksic, A., Engberg, B. A., ... Alava, M. (2017). Influence of strain rate, temperature and fatigue on the radial compression behaviour of Norway spruce. *Holzforschung*, *71*(6), 505-514. <https://doi.org/10.1515/hf-2016-0144>
- Karvinen, J., Koivisto, J. T., Jönkkäri, I., & Kellomäki, M. (2017). The production of injectable hydrazone crosslinked gellan gum-hyaluronan-hydrogels with tunable mechanical and physical properties. *Journal of the Mechanical Behavior of Biomedical Materials*, *71*, 383-391. <https://doi.org/10.1016/j.jmbbm.2017.04.006>
- Virjula, S., Zhao, F., Leivo, J., Vanhatupa, S., Kreutzer, J., Vaughan, T. J., ... Miettinen, S. (2017). The effect of equiaxial stretching on the osteogenic differentiation and mechanical properties of human adipose stem cells. *Journal of the Mechanical Behavior of Biomedical Materials*, *72*, 38-48. <https://doi.org/10.1016/j.jmbbm.2017.04.016>
- Virtanen, J., & Tuukkanen, S. (2017). *Multi-material bio-printing facilities*. Paper presented at BMT and MED Research Day 2017, Tampere, Finland.
- Fedele, C., De Gregorio, M., Netti, P. A., Cavalli, S., & Attanasio, C. (2017). Azopolymer photopatterning for directional control of angiogenesis. *Acta Biomaterialia*, *63*, 317-325. <https://doi.org/10.1016/j.actbio.2017.09.022>
- Ojansivu, M., Wang, X., Hyväri, L., Kellomäki, M., Hupa, L., Vanhatupa, S., & Miettinen, S. (2018). Bioactive glass induced osteogenic differentiation of human adipose stem cells is dependent on cell attachment mechanism and mitogen-activated protein kinases. *European Cells and Materials*, *35*, 53-71. <https://doi.org/10.22203/eCM.v035a05>
- Wirdatmadja, S., Johari, P., Balasubramaniam, S., Bae, Y., Stachowiak, M. K., & Jorner, J. M. (2018). Light propagation analysis in nervous tissue for wireless optogenetic nanonetworks. In *Optogenetics and Optical Manipulation 2018* [104820R] SPIE. <https://doi.org/10.1117/12.2288786>
- Åkerblom, M., Raunonen, P., Casella, E., Disney, M. I., Danson, F. M., Gaulton, R., ... Kaasalainen, M. (2018). Non-intersecting leaf insertion algorithm for tree structure models. *Interface Focus*, *8*(2), [20170045]. <https://doi.org/10.1098/rsfs.2017.0045>

Kaasalainen, S., Åkerblom, M., Nevalainen, O., Hakala, T., & Kaasalainen, M. (2018). Uncertainty in multispectral lidar signals caused by incidence angle effects. *Interface Focus*, 8(2), [20170033]. <https://doi.org/10.1098/rsfs.2017.0033>

Disney, M. I., Boni Vicari, M., Burt, A., Calders, K., Lewis, S. L., Raunonen, P., & Wilkes, P. (2018). Weighing trees with lasers: Advances, challenges and opportunities. *Interface Focus*, 8(2), [20170048]. <https://doi.org/10.1098/rsfs.2017.0048>

Kulju, S., Riegger, L., Koltay, P., Mattila, K., & Hyväluoma, J. (2018). Fluid flow simulations meet high-speed video: Computer vision comparison of droplet dynamics. *Journal of Colloid and Interface Science*, 522, 48-56. <https://doi.org/10.1016/j.jcis.2018.03.053>

Abu Khamidakh, A. E., Rodriguez-Martinez, A., Kaarniranta, K., Kallioniemi, A., Skottman, H., Hyttinen, J., & Juuti-Uusitalo, K. (2018). Wound healing of human embryonic stem cell-derived retinal pigment epithelial cells is affected by maturation stage. *BioMedical Engineering Online*, 17(1), [102]. <https://doi.org/10.1186/s12938-018-0535-z>

Kroon, M., Talvitie, E., Miettinen, S., & Kellomäki, M. (2018). *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.

Pihlman, H., Keränen, P., Paakinaho, K., Linden, J., Hannula, M., Manninen, I. K., ... Laitinen-Vapaavuori, O. (2018). Novel osteoconductive β -tricalcium phosphate/poly(L-lactide-co-e-caprolactone) scaffold for bone regeneration: a study in a rabbit calvarial defect. *Journal of Materials Science: Materials in Medicine*, 29(10), [156]. <https://doi.org/10.1007/s10856-018-6159-9>

Kroon, M., Talvitie, E., Miettinen, S., & Kellomäki, M. (2018). *Cell response to round and star-shaped polylactide fibers*. Paper presented at BioMediTech Research Day 2018, Tampere, Finland.

Salonius, E., Muhonen, V., Lehto, K., Järvinen, E., Pyhältö, T., Hannula, M., ... Kiviranta, I. (2019). Gas-foamed poly(lactide-co-glycolide) and poly(lactide-co-glycolide) with bioactive glass fibres demonstrate insufficient bone repair in lapine osteochondral defects. *Journal of Tissue Engineering and Regenerative Medicine*, 13(3), 406-415. <https://doi.org/10.1002/term.2801>

Tomaskovic-Crook, E., Zhang, P., Ahtiainen, A., Kaisvu, H., Lee, C. Y., Beirne, S., ... Crook, J. M. (2019). Human Neural Tissues from Neural Stem Cells Using Conductive Biogel and Printed Polymer Microelectrode Arrays for 3D Electrical Stimulation. *ADVANCED HEALTHCARE MATERIALS*, [1900425]. <https://doi.org/10.1002/adhm.201900425>

Mishra, A., Ojansivu, M., Autio, R., Vanhatupa, S., Miettinen, S., & Massera, J. (Accepted/In press). In-vitro dissolution characteristics and human adipose stem cell response to novel borophosphate glasses. *Journal of Biomedical Materials Research - Part A*. <https://doi.org/10.1002/jbm.a.36722>

Veber, A., Lu, Z., Vermillac, M., Pigeonneau, F., Blanc, W., & Petit, L. (2019). Nano-structured optical fibers made of glass-ceramics, and phase separated and metallic particle-containing glasses. *Fibers*, 7(12). <https://doi.org/10.3390/fib7120105>

Haapanen, J., Aromaa, M., Teisala, H., Juuti, P., Tuominen, M., Sillanpää, M., ... Mäkelä, J. M. (2019). On the limit of superhydrophobicity: Defining the minimum amount of TiO₂ nanoparticle coating. *Materials Research Express*, 6(3), [035004]. <https://doi.org/10.1088/2053-1591/aaf2ee>

Fliervoet, L. A. L., Lisitsyna, E. S., Durandin, N. A., Kotsis, I., Maas-Bakker, R. F. M., Yliperttula, M., ... Vermonden, T. (2019). Structure and Dynamics of Thermosensitive pDNA Polyplexes Studied by Time-Resolved Fluorescence Spectroscopy. *Biomacromolecules*. <https://doi.org/10.1021/acs.biomac.9b00896>

Reyes, G., Borghei, M., King, A. W. T., Lahti, J., & Rojas, O. J. (2019). Solvent Welding and Imprinting Cellulose Nanofiber Films Using Ionic Liquids. *Biomacromolecules*, 20(1), 502-514. <https://doi.org/10.1021/acs.biomac.8b01554>

Vimieiro, R. B., Borges, L. R., Caron, R. F., Barufaldi, B., Bakic, P. R., Maidment, A. D. A., & Vieira, M. A. C. (2019). Noise measurements from reconstructed digital breast tomosynthesis. In T. G. Schmidt, G-H. Chen, & H. Bosmans (Eds.), *Medical Imaging 2019: Physics of Medical Imaging* [109480C] (Progress in Biomedical Optics and Imaging - Proceedings of SPIE; Vol. 10948). SPIE, IEEE. <https://doi.org/10.1117/12.2512977>

Lolicato, F., Joly, L., Martinez-Seara, H., Fragneto, G., Scoppola, E., Baldelli Bombelli, F., ... Maccarini, M. (2019). The Role of Temperature and Lipid Charge on Intake/Uptake of Cationic Gold Nanoparticles into Lipid Bilayers. *Small*, *15*(23), [1805046]. <https://doi.org/10.1002/smll.201805046>

Jackson, T., Shenkin, A., Moore, J., Bunce, A., van Emmerik, T., Kane, B., ... Malhi, Y. (2019). An architectural understanding of natural sway frequencies in trees. *Journal of the Royal Society. Interface*, *16*(155). <https://doi.org/10.1098/rsif.2019.0116>

Wang, X., Molino, B. Z., Pitkänen, S., Ojansivu, M., Xu, C., Hannula, M., ... Wallace, G. (2019). 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. *ACS Biomaterials Science and Engineering*, *5*(9), 4496-4510. <https://doi.org/10.1021/acsbiomaterials.9b00105>

Pitkänen, S., Paakinaho, K., Pihlman, H., Ahola, N., Hannula, M., Asikainen, S., ... Miettinen, S. (2019). Characterisation and in vitro and in vivo evaluation of supercritical-CO₂-foamed β -TCP/PLCL composites for bone applications. *European cells & materials*, *38*, 35-50. <https://doi.org/10.22203/eCM.v038a04>

Vuornos, K., Huhtala, H., Kääriäinen, M., Kuismanen, K., Hupa, L., Kellomäki, M., & Miettinen, S. (2019). Bioactive glass ions for in vitro osteogenesis and microvascularization in gellan gum-collagen hydrogels. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*. <https://doi.org/10.1002/jbm.b.34482>

Faqhiri, H., Hannula, M., Kellomäki, M., Calejo, M. T., & Massera, J. (2019). Effect of melt-derived bioactive glass particles on the properties of chitosan scaffolds. *JOURNAL OF FUNCTIONAL BIOMATERIALS*, *10*(3), [38]. <https://doi.org/10.3390/jfb10030038>

Kanerva, M., Besharat, Z., Pärnänen, T., Jokinen, J., Honkanen, M., Sarlin, E., ... Schlenzka, D. (2019). Miniature CoCr laser welds under cyclic shear: Fatigue evolution and crack growth. *Journal of the Mechanical Behavior of Biomedical Materials*, *99*, 93-103. <https://doi.org/10.1016/j.jmbbm.2019.07.004>

Häkkinen, A., Oliveira, S. M. D., Neeli-Venkata, R., & Ribeiro, A. S. (2019). Transcription closed and open complex formation coordinate expression of genes with a shared promoter region. *Journal of the Royal Society Interface*, *16*(161), [20190507]. <https://doi.org/10.1098/rsif.2019.0507>

Ukkonen, L., Sydänheimo, L., Ma, S., & Björninen, T. (2020). Backscattering-based wireless communication and power transfer to small biomedical implants. In B. L. Gray, & H. Becker (Eds.), *Microfluidics, BioMEMS, and Medical Microsystems XVIII* [112350A] (Progress in Biomedical Optics and Imaging - Proceedings of SPIE; Vol. 11235). SPIE. <https://doi.org/10.1117/12.2552183>

Rebelo Calejo, T., Vuorenperä, H., Vuorimaa-Laukkanen, E., Kallio, P., Aalto-Setälä, K., Miettinen, S., ... Juuti-Uusitalo, K. (2020). Co-culture of human induced pluripotent stem cell-derived retinal pigment epithelial cells and endothelial cells on double collagen-coated honeycomb films. *Acta Biomaterialia*, *101*, 327-343. <https://doi.org/10.1016/j.actbio.2019.11.002>

Nymark, P., Bakker, M., Dekkers, S., Franken, R., Fransman, W., García-Bilbao, A., ... Grafström, R. (2020). Toward Rigorous Materials Production: New Approach Methodologies Have Extensive Potential to Improve Current Safety Assessment Practices. *Small*, *16*(6), [1904749]. <https://doi.org/10.1002/smll.201904749>

Halonen, H. T., Ihalainen, T. O., Hyväri, L., Miettinen, S., & Hyttinen, J. A. K. (2020). Cell adhesion and culture medium dependent changes in the high frequency mechanical vibration induced proliferation, osteogenesis, and intracellular organization of human adipose stem cells. *Journal of the Mechanical Behavior of Biomedical Materials*, *101*, [103419]. <https://doi.org/10.1016/j.jmbbm.2019.103419>

Palmroth, A., Pitkänen, S., Hannula, M., Paakinaho, K., Hyttinen, J., Miettinen, S., & Kellomäki, M. (2020). Evaluation of scaffold microstructure and comparison of cell seeding methods using micro-computed tomography-based tools. *Journal of the Royal Society. Interface*, 17(165), [20200102]. <https://doi.org/10.1098/rsif.2020.0102>