

Wang, M, Kong, W, Marten, R, He, XC, Chen, D, Pfeifer, J, Heitto, A, Kontkanen, J, Dada, L, Kürten, A, Yli-Juuti, T, Manninen, HE, Amanatidis, S, Amorim, A, Baalbaki, R, Baccarini, A, Bell, DM, Bertozzi, B, Bräkling, S, Brilke, S, Murillo, LC, Chiu, R, Chu, B, De Menezes, LP, Duplissy, J, Finkenzeller, H, Carracedo, LG, Granzin, M, Guida, R, Hansel, A, Hofbauer, V, Krechmer, J, Lehtipalo, K, Lamkaddam, H, Lampimäki, M, Lee, CP, Makhmutov, V, Marie, G, Mathot, S, Mauldin, RL, Mentler, B, Müller, T, Onnela, A, Partoll, E, Petäjä, T, Philippov, M, Pospisilova, V, Ranjithkumar, A, Rissanen, M, Rörup, B, Scholz, W, Shen, J, Simon, M, Sipilä, M, Steiner, G, Stolzenburg, D, Tham, YJ, Tomé, A, Wagner, AC, Wang, DS, Wang, Y, Weber, SK, Winkler, PM, Wlasits, PJ, Wu, Y, Xiao, M, Ye, Q, Zauner-Wieczorek, M, Zhou, X, Volkamer, R, Riipinen, I, Dommen, J, Curtius, J, Baltensperger, U, Kulmala, M, Worsnop, DR, Kirkby, J, Seinfeld, JH, El-Haddad, I, Flagan, RC & Donahue, NM 2020, 'Rapid growth of new atmospheric particles by nitric acid and ammonia condensation', *Nature*, vol. 581, no. 7807, pp. 184-189. <https://doi.org/10.1038/s41586-020-2270-4>

Shahsavan, H, Aghakhani, A, Zeng, H, Guo, Y, Davidson, ZS, Priimägi, A & Sitti, M 2020, 'Bioinspired underwater locomotion of light-driven liquid crystal gels', *Proceedings of the National Academy of Sciences of the United States of America*, vol. 117, no. 10, pp. 5125-5133. <https://doi.org/10.1073/pnas.1917952117>

Wilmes, S, Hafer, M, Vuorio, J, Tucker, JA, Winkelmann, H, Löchte, S, Stanly, TA, Pulgar Prieto, KD, Poojari, C, Sharma, V, Richter, CP, Kurre, R, Hubbard, SR, Christopher Garcia, K, Moraga, I, Vattulainen, I, Hitchcock, IS & Piehler, J 2020, 'Mechanism of homodimeric cytokine receptor activation and dysregulation by oncogenic mutations', *Science*, vol. 367, no. 6478, pp. 643-652. <https://doi.org/10.1126/science.aaw3242>

Valtonen, O, Ormiskangas, J, Kivekäs, I, Rantanen, V, Dean, M, Poe, D, Järnstedt, J, Lekkala, J, Saarenrinne, P & Rautiainen, M 2020, 'Three-Dimensional Printing of the Nasal Cavities for Clinical Experiments', *Scientific Reports*, vol. 10, 502. <https://doi.org/10.1038/s41598-020-57537-2>

Airaksinen, M, Räsänen, O, Ilén, E, Häyrynen, T, Kivi, A, Marchi, V, Gallen, A, Blom, S, Varhe, A, Kaartinen, N, Haataja, L & Vanhatalo, S 2020, 'Automatic Posture and Movement Tracking of Infants with Wearable Movement Sensors', *Scientific Reports*, vol. 10, no. 1, 169. <https://doi.org/10.1038/s41598-019-56862-5>

Yang, Z, Dehmer, M, Yli-Harja, O & Emmert-Streib, F 2020, 'Combining deep learning with token selection for patient phenotyping from electronic health records', *Scientific Reports*, vol. 10, no. 1, 1432. <https://doi.org/10.1038/s41598-020-58178-1>

Salmela, L, Lapre, C, Dudley, JM & Genty, G 2020, 'Machine learning analysis of rogue solitons in supercontinuum generation', *Scientific Reports*, vol. 10, 9596. <https://doi.org/10.1038/s41598-020-66308-y>

Virta, J, Hannula, M, Tamminen, I, Lindfors, K, Kaukinen, K, Popp, A, Taavela, J, Saavalainen, P, Hiltunen, P, Hyttinen, J & Kurppa, K 2020, 'X-ray microtomography is a novel method for accurate evaluation of small-bowel mucosal morphology and surface area', *Scientific Reports*, vol. 10, no. 1, 13164. <https://doi.org/10.1038/s41598-020-69487-w>

Di Vito, D, Mosallaei, M, Khorramdel, B, Kanerva, M & Mäntysalo, M 2020, 'Mechanically driven strategies to improve electromechanical behaviour of printed stretchable electronic systems', *Scientific Reports*, vol. 10, no. 1, 12037. <https://doi.org/10.1038/s41598-020-68871-w>

Juutinen, M, Wang, C, Zhu, J, Haladjian, J, Ruokolainen, J, Puustinen, J & Vehkaoja, A 2020, 'Parkinson's disease detection from 20-step walking tests using inertial sensors of a smartphone: Machine learning approach based on an observational case-control study', *PLoS ONE*, vol. 15, no. 7, e0236258. <https://doi.org/10.1371/journal.pone.0236258>

Molkkari, M, Angelotti, G, Emig, T & Räsänen, E 2020, 'Dynamical heart beat correlations during running', *Scientific Reports*, vol. 10, no. 1, 13627. <https://doi.org/10.1038/s41598-020-70358-7>

Railanmaa, A, Soltani, A, Lehtimäki, S, Pournoori, N, Keskinen, J, Hokka, M & Lupo, D 2020, 'Skin-conformable printed supercapacitors and their performance in wear', *Scientific Reports*, vol. 10, no. 1, 15194. <https://doi.org/10.1038/s41598-020-72244-8>

Fedele, C, Mäntylä, E, Belardi, B, Hamkins-Indik, T, Cavalli, S, Netti, PA, Fletcher, DA, Nymark, S, Priimagi, A & Ihalainen, TO 2020, 'Azobenzene-based sinusoidal surface topography drives focal adhesion confinement and guides collective migration of epithelial cells', *Scientific Reports*, vol. 10, no. 1, 15329. <https://doi.org/10.1038/s41598-020-71567-w>

Kangas, P, Tikkakoski, A, Kettunen, J, Eräranta, A, Huhtala, H, Kähönen, M, Sipilä, K, Mustonen, J & Pörsti, I 2019, 'Changes in hemodynamics associated with metabolic syndrome are more pronounced in women than in men', *Scientific Reports*, vol. 9, no. 1, 18377. <https://doi.org/10.1038/s41598-019-54926-0>

Islam, MS, Ivanov, S, Robson, E, Dooley-Cullinane, T, Coffey, L, Doolin, K & Balasubramaniam, S 2019, 'Genetic similarity of biological samples to counter bio-hacking of DNA-sequencing functionality', *Scientific Reports*, vol. 9, no. 1, 8684. <https://doi.org/10.1038/s41598-019-44995-6>

Caetano dos Santos, FL, Michalek, IM, Laurila, K, Kaukinen, K, Hyttinen, J & Lindfors, K 2019, 'Automatic classification of IgA endomysial antibody test for celiac disease: a new method deploying machine learning', *Scientific Reports*, vol. 9, no. 1, 9217. <https://doi.org/10.1038/s41598-019-45679-x>

Tiulpin, A, Klein, S, Bierma-Zeinstra, SMA, Thevenot, J, Rahtu, E, Meurs, JV, Oei, EHG & Saarakkala, S 2019, 'Multimodal Machine Learning-based Knee Osteoarthritis Progression Prediction from Plain Radiographs and Clinical Data', *Scientific Reports*, vol. 9, no. 1, 20038. <https://doi.org/10.1038/s41598-019-56527-3>

Bainschab, M, Martikainen, S, Keskinen, J, Bergmann, A & Karjalainen, P 2019, 'Aerosol gas exchange system (AGES) for nanoparticle sampling at elevated temperatures: Modeling and experimental characterization', *Scientific Reports*, vol. 9, no. 1, 17149. <https://doi.org/10.1038/s41598-019-53113-5>

Frankberg, EJ, Kalikka, J, Ferré, FG, Joly-Pottuz, L, Salminen, T, Hintikka, J, Hokka, M, Koneti, S, Douillard, T, Le Saint, B, Kreiml, P, Cordill, MJ, Epicier, T, Stauffer, D, Vanazzi, M, Roiban, L, Akola, J, Fonzo, FD, Levänen, E & Masenelli-Varlot, K 2019, 'Highly ductile amorphous oxide at room temperature and high strain rate', *Science*, vol. 366, no. 6467, pp. 864-869. <https://doi.org/10.1126/science.aav1254>

Allahham, MHDS, Al-Sa'd, MF, Al-Ali, A, Mohamed, A, Khattab, T & Erbad, A 2019, 'DroneRF dataset: A dataset of drones for RF-based detection, classification and identification', *Data in Brief*, vol. 26, 104313. <https://doi.org/10.1016/j.dib.2019.104313>

Kanerva, M, Besharat, Z, Pärnänen, T, Jokinen, J, Honkanen, M, Sarlin, E, Göthelid, M & Schlenzka, D 2019, 'Automatization and stress analysis data of CoCr laser weld fatigue tests', *Data in Brief*, vol. 26, 104374. <https://doi.org/10.1016/j.dib.2019.104374>

Railanmaa, A, Lehtimäki, S, Keskinen, J & Lupo, D 2019, 'Non-toxic printed supercapacitors operating in sub-zero conditions', *Scientific Reports*, vol. 9, no. 1, 14059. <https://doi.org/10.1038/s41598-019-50570-w>

Lapre, C, Billet, C, Meng, F, Ryczkowski, P, Sylvestre, T, Finot, C, Genty, G & Dudley, JM 2019, 'Real-time characterization of spectral instabilities in a mode-locked fibre laser exhibiting soliton-similariton dynamics', *Scientific Reports*, vol. 9, no. 1. <https://doi.org/10.1038/s41598-019-50022-5>

Koskela, O, Montonen, T, Belay, B, Figueiras, E, Pursiainen, S & Hyttinen, J 2019, 'Gaussian Light Model in Brightfield Optical Projection Tomography', *Scientific Reports*, vol. 9, no. 1. <https://doi.org/10.1038/s41598-019-50469-6>

Kim, J, Shah, D, Potapov, I, Latukka, J, Aalto-Setälä, K & Räsänen, E 2019, 'Scaling and correlation properties of RR and QT intervals at the cellular level', *Scientific Reports*, vol. 9, no. 1, 3651. <https://doi.org/10.1038/s41598-019-40247-9>

Lehtipalo, K, Yan, C, Dada, L, Bianchi, F, Xiao, M, Wagner, R, Stolzenburg, D, Ahonen, LR, Amorim, A, Baccarini, A, Bauer, PS, Baumgartner, B, Bergen, A, Bernhammer, AK, Breitenlechner, M, Brilke, S, Buchholz, A, Mazon, SB, Chen, D, Chen, X, Dias, A, Dommen, J, Draper, DC, Duplissy, J, Ehn, M, Finkenzeller, H, Fischer, L, Frege, C, Fuchs, C, Garmash, O, Gordon, H, Hakala, J, He, X, Heikkinen, L, Heinritzi, M, Helm, JC, Hofbauer, V, Hoyle, CR, Jokinen, T, Kangasluoma, J, Kerminen, VM, Kim, C, Kirkby, J, Kontkanen, J, Kürten, A, Lawler, MJ, Mai, H, Mathot, S, Nieminen, T & Virtanen, A 2018, 'Multicomponent new particle formation from sulfuric acid, ammonia, and biogenic vapors', *Science Advances*, vol.

4, no. 12, eaau5363. <https://doi.org/10.1126/sciadv.aau5363>

Tiulpin, A, Thevenot, J, Rahtu, E, Lehenkari, P & Saarakkala, S 2018, 'Automatic knee osteoarthritis diagnosis from plain radiographs: A deep learning-based approach', *Scientific Reports*, vol. 8, no. 1, 1727. <https://doi.org/10.1038/s41598-018-20132-7>

Erasmus, EP, Sule, R, Johnson, OT, Massera, J & Sigalas, I 2018, 'In vitro Evaluation of Porous borosilicate, borophosphate and phosphate Bioactive Glasses Scaffolds fabricated using Foaming Agent for Bone Regeneration', *Scientific Reports*, vol. 8, no. 1, 3699. <https://doi.org/10.1038/s41598-018-22032-2>

Soltani, A, Lahti, J, Järvelä, K, Curtze, S, Laurikka, J, Hokka, M & Kuukkala, VT 2018, 'An Optical Method for the In-Vivo Characterization of the Biomechanical Response of the Right Ventricle', *Scientific Reports*, vol. 8, no. 1, 6831. <https://doi.org/10.1038/s41598-018-25223-z>

Baltakys, K, Kannianen, J & Emmert-Streib, F 2018, 'Multilayer Aggregation with Statistical Validation: Application to Investor Networks', *Scientific Reports*, vol. 8, no. 1, 8198. <https://doi.org/10.1038/s41598-018-26575-2>

Rashed, AR, Gudulluoglu, B, Yun, HW, Habib, M, Boyaci, IH, Hong, SH, Ozbay, E & Caglayan, H 2018, 'Highly-Sensitive Refractive Index Sensing by Near-infrared Metatronic Nanocircuits', *Scientific Reports*, vol. 8, no. 1, 11457. <https://doi.org/10.1038/s41598-018-29623-z>

Mobarak, E, Håversen, L, Manna, M, Rutberg, M, Levin, M, Perkins, R, Rog, T, Vattulainen, I & Borén, J 2018, 'Glucosylceramide modifies the LPS-induced inflammatory response in macrophages and the orientation of the LPS/TLR4 complex in silico', *Scientific Reports*, vol. 8, no. 1, 13600. <https://doi.org/10.1038/s41598-018-31926-0>

Potapov, I, Latukka, J, Kim, J, Luukko, P, Aalto-Setälä, K & Räsänen, E 2018, 'Information transfer in QT-RR dynamics: Application to QT-correction', *Scientific Reports*, vol. 8, no. 1, 14992. <https://doi.org/10.1038/s41598-018-33359-1>

Prajapat, MK & Ribeiro, AS 2018, 'Added value of autoregulation and multi-step kinetics of transcription initiation', *Royal Society Open Science*, vol. 5, no. 11, 181170. <https://doi.org/10.1098/rsos.181170>

Warnau, J, Sharma, V, Gamiz-Hernandez, AP, Luca, AD, Haapanen, O, Vattulainen, I, Wikström, M, Hummer, G & Kaila, VRI 2018, 'Redox-coupled quinone dynamics in the respiratory complex I', *Proceedings of the National Academy of Sciences of the United States of America*, vol. 115, no. 36, pp. E8413-E8420. <https://doi.org/10.1073/pnas.1805468115>

Keinänen, P, Siljander, S, Koivula, M, Sethi, J, Sarlin, E, Vuorinen, J & Kanerva, M 2018, 'Optimized dispersion quality of aqueous carbon nanotube colloids as a function of sonochemical yield and surfactant/CNT ratio', *Heliyon*, vol. 4, no. 9, e00787. <https://doi.org/10.1016/j.heliyon.2018.e00787>

Sartoneva, R, Kuismanen, K, Juntunen, M, Karjalainen, S, Hannula, M, Kyllönen, L, Hyttinen, J, Huhtala, H, Paakinaho, K & Miettinen, S 2018, 'Porous poly-L-lactide-co-1-caprolactone scaffold: A novel biomaterial for vaginal tissue engineering', *Royal Society Open Science*, vol. 5, no. 8, 180811. <https://doi.org/10.1098/rsos.180811>

Virkki, K, Tervola, E, Ince, M, Torres, T & Tkachenko, NV 2018, 'Comparison of electron injection and recombination on TiO₂ nanoparticles and ZnO nanorods photosensitized by phthalocyanine', *Royal Society Open Science*, vol. 5, no. 7, 180323. <https://doi.org/10.1098/rsos.180323>

Tomberg, T, Vainio, M, Hieta, T & Halonen, L 2018, 'Sub-parts-per-trillion level sensitivity in trace gas detection by cantilever-enhanced photo-acoustic spectroscopy', *Scientific Reports*, vol. 8, no. 1, 1848. <https://doi.org/10.1038/s41598-018-20087-9>

Narra, N, Abe, S, Dimitrov, V, Nikander, R, Kouhia, R, Sievänen, H & Hyttinen, J 2018, 'Ricci-flow based conformal mapping of the proximal femur to identify exercise loading effects', *Scientific Reports*, vol. 8, no. 1, 4823. <https://doi.org/10.1038/s41598-018-23248-y>

Erasmus, EP, Johnson, OT, Sigalas, I & Massera, J 2017, 'Effects of Sintering Temperature on Crystallization and Fabrication of Porous Bioactive Glass Scaffolds for Bone Regeneration', *Scientific Reports*, vol. 7, no. 1, 6046. <https://doi.org/10.1038/s41598-017-06337-2>

Aho, V, Myllys, M, Ruokolainen, V, Hakanen, S, Mäntylä, E, Virtanen, J, Hukkanen, V, Kühn, T, Timonen, J, Mattila, K, Larabell, CA & Vihinen-Ranta, M 2017, 'Chromatin organization regulates viral egress dynamics', *Scientific Reports*, vol. 7, no. 1, 3692. <https://doi.org/10.1038/s41598-017-03630-y>

Ruskamo, S, Nieminen, T, Kristiansen, CK, Vatne, GH, Baumann, A, Hallin, EI, Raasakka, A, Joensuu, P, Bergmann, U, Vattulainen, I & Kursula, P 2017, 'Molecular mechanisms of Charcot-Marie-Tooth neuropathy linked to mutations in human myelin protein P2', *Scientific Reports*, vol. 7, no. 1, 6510. <https://doi.org/10.1038/s41598-017-06781-0>

Fang, Y, Akbari, M, Sydänheimo, L, Ukkonen, L & Tentzeris, MM 2017, 'Sensitivity enhancement of flexible gas sensors via conversion of inkjet-printed silver electrodes into porous gold counterparts', *Scientific Reports*, vol. 7, no. 1, 8988. <https://doi.org/10.1038/s41598-017-09174-5>

Kiranyaz, S, Ince, T & Gabbouj, M 2017, 'Personalized Monitoring and Advance Warning System for Cardiac Arrhythmias', *Scientific Reports*, vol. 7, no. 1, 9270. <https://doi.org/10.1038/s41598-017-09544-z>

Mäkelä, J, Kandavalli, V & Ribeiro, AS 2017, 'Rate-limiting steps in transcription dictate sensitivity to variability in cellular components', *Scientific Reports*, vol. 7, no. 1, 10588. <https://doi.org/10.1038/s41598-017-11257-2>

Laudyn, UA, Kwaśny, M, Sala, FA, Karpierz, MA, Smyth, NF & Assanto, G 2017, 'Curved optical solitons subject to transverse acceleration in reorientational soft matter', *Scientific Reports*, vol. 7, no. 1, 12385. <https://doi.org/10.1038/s41598-017-12242-5>

Senju, Y, Kalimeri, M, Koskela, EV, Somerharju, P, Zhao, H, Vattulainen, I & Lappalainen, P 2017, 'Mechanistic principles underlying regulation of the actin cytoskeleton by phosphoinositides', *Proceedings of the National Academy of Sciences of the United States of America*, vol. 114, no. 43, pp. E8977-E8986. <https://doi.org/10.1073/pnas.1705032114>

Rönkkö, T, Kuuluvainen, H, Karjalainen, P, Keskinen, J, Hillamo, R, Niemi, JV, Pirjola, L, Timonen, HJ, Saarikoski, S, Saukko, E, Järvinen, A, Silvennoinen, H, Rostedt, A, Olin, M, Yli-Ojanperä, J, Nousiainen, P, Kousa, A & Dal Maso, M 2017, 'Traffic is a major source of atmospheric nanocluster aerosol', *Proceedings of the National Academy of Sciences of the United States of America*, vol. 114, no. 29, pp. 7549-7554. <https://doi.org/10.1073/pnas.1700830114>

Valkonen, M, Ruusuvoori, P, Kartasalo, K, Nykter, M, Visakorpi, T & Latonen, L 2017, 'Analysis of spatial heterogeneity in normal epithelium and preneoplastic alterations in mouse prostate tumor models', *Scientific Reports*, vol. 7, 44831. <https://doi.org/10.1038/srep44831>

Rissanen, J, Korobko, DA, Zolotovskiy, IO, Melkumov, M, Khopin, VF & Gumenyuk, R 2017, 'Infiltrated bunch of solitons in Bi-doped frequency-shifted feedback fibre laser operated at 1450 nm', *Scientific Reports*, vol. 7, 44194. <https://doi.org/10.1038/srep44194>

Du, J, Harra, J, Virkki, M, Mäkelä, JM, Leng, Y, Kauranen, M & Kobayashi, T 2016, 'Surface-Enhanced Impulsive Coherent Vibrational Spectroscopy', *Scientific Reports*, vol. 6, 36471. <https://doi.org/10.1038/srep36471>

Ropo, M, Blum, V & Baldauf, C 2016, 'Trends for isolated amino acids and dipeptides: Conformation, divalent ion binding, and remarkable similarity of binding to calcium and lead', *Scientific Reports*, vol. 6, 35772. <https://doi.org/10.1038/srep35772>

Postila, PA, Kaszuba, K, Kuleta, P, Vattulainen, I, Sarewicz, M, Osyczka, A & Róg, T 2016, 'Atomistic determinants of co-enzyme Q reduction at the Q₁-site of the cytochrome bc₁ complex', *Scientific Reports*, vol. 6, 33607. <https://doi.org/10.1038/srep33607>

Jääskeläinen, IP, Pajula, J, Tohka, J, Lee, HJ, Kuo, WJ & Lin, FH 2016, 'Brain hemodynamic activity during viewing and re-viewing of comedy movies explained by experienced humor', *Scientific Reports*, vol. 6, 27741. <https://doi.org/10.1038/srep27741>

Faggiani, R, Baron, A, Zang, X, Lalouat, L, Schulz, SA, O'Regan, B, Vynck, K, Cluzel, B, De Fornel, F, Krauss, TF & Lalanne, P 2016, 'Lower bound for the spatial extent of localized modes in photonic-crystal waveguides with small random imperfections', *Scientific Reports*, vol. 6, 27037. <https://doi.org/10.1038/srep27037>

Noronen, T, Firstov, S, Dianov, E & Okhotnikov, OG 2016, '1700 nm dispersion managed mode-locked bismuth fiber laser', *Scientific Reports*, vol. 6, 24876. <https://doi.org/10.1038/srep24876>

Wiklund, P, Zhang, X, Pekkala, S, Autio, R, Kong, L, Yang, Y, Keinänen-Kiukaanniemi, S, Alen, M & Cheng, S 2016, 'Insulin resistance is associated with altered amino acid metabolism and adipose tissue dysfunction in normoglycemic women', *Scientific Reports*, vol. 6, 24540. <https://doi.org/10.1038/srep24540>

Curtze, SC, Kratz, M, Steinert, M & Vogt, S 2016, 'Step down Vascular Calcification Analysis using State-of-the-Art Nanoanalysis Techniques', *Scientific Reports*, vol. 6, 23285. <https://doi.org/10.1038/srep23285>

Laudyn, UA, Jung, PS, Karpierz, MA & Assanto, G 2016, 'Quasi two-dimensional astigmatic solitons in soft chiral metastructures', *Scientific Reports*, vol. 6, 22923. <https://doi.org/10.1038/srep22923>

Tuukkanen, S, Välimäki, M, Lehtimäki, S, Vuorinen, T & Lupo, D 2016, 'Behaviour of one-step spray-coated carbon nanotube supercapacitor in ambient light harvester circuit with printed organic solar cell and electrochromic display', *Scientific Reports*, vol. 6, 22967. <https://doi.org/10.1038/srep22967>

Astola, H & Tabus, I 2016, 'On the linear programming bound for linear Lee codes', *SpringerPlus*, vol. 5, no. 1, 246, pp. 1-13. <https://doi.org/10.1186/s40064-016-1863-8>

Sand, J, Ihantola, S, Peräjärvi, K, Toivonen, H & Toivonen, J 2016, 'Optical detection of radon decay in air', *Scientific Reports*, vol. 6, 21532. <https://doi.org/10.1038/srep21532>

Godec, A & Metzler, R 2016, 'First passage time distribution in heterogeneity controlled kinetics: Going beyond the mean first passage time', *Scientific Reports*, vol. 6, 20349. <https://doi.org/10.1038/srep20349>

Guixà-González, R, Javanainen, M, Gómez-Soler, M, Cordobilla, B, Domingo, JC, Sanz, F, Pastor, M, Ciruela, F, Martínez-Seara, H & Selent, J 2016, 'Membrane omega-3 fatty acids modulate the oligomerisation kinetics of adenosine A_{2A} and dopamine D₂ receptors', *Scientific Reports*, vol. 6, 19839. <https://doi.org/10.1038/srep19839>

Postila, PA, Vattulainen, I & Róg, T 2016, 'Selective effect of cell membrane on synaptic neurotransmission', *Scientific Reports*, vol. 6, 19345. <https://doi.org/10.1038/srep19345>

Larjo, A & Lähdesmäki, H 2015, 'Using multi-step proposal distribution for improved MCMC convergence in Bayesian network structure learning', *Eurasip Journal on Bioinformatics and Systems Biology*, vol. 2015, no. 1, 6. <https://doi.org/10.1186/s13637-015-0024-7>

Pulkkinen, O & Metzler, R 2015, 'Variance-corrected Michaelis-Menten equation predicts transient rates of single-enzyme reactions and response times in bacterial gene-regulation', *Scientific Reports*, vol. 5, 17820. <https://doi.org/10.1038/srep17820>

Pessi, T, Viiri, LE, Raitoharju, E, Astola, N, Seppälä, I, Waldenberger, M, Lounatmaa, K, Davies, AH, Lehtimäki, T, Karhunen, PJ & Monaco, C 2015, 'Interleukin-6 and microRNA profiles induced by oral bacteria in human atheroma derived and healthy smooth muscle cells', *SpringerPlus*, vol. 4, no. 1. <https://doi.org/10.1186/s40064-015-0993-8>

- Honkela, A, Peltonen, J, Topa, H, Charapitsa, I, Matarese, F, Grote, K, Stunnenberg, HG, Reid, G, Lawrence, ND & Rattray, M 2015, 'Genome-wide modeling of transcription kinetics reveals patterns of RNA production delays', *Proceedings of the National Academy of Sciences of the United States of America*, vol. 112, no. 42, pp. 13115-13120. <https://doi.org/10.1073/pnas.1420404112>
- Mikhailova, A, Jylhä, A, Rieck, J, Nättinen, J, Ilmarinen, T, Veréb, Z, Aapola, U, Beuerman, R, Petrovski, G, Uusitalo, H & Skottman, H 2015, 'Comparative proteomics reveals human pluripotent stem cell-derived limbal epithelial stem cells are similar to native ocular surface epithelial cells', *Scientific Reports*, vol. 5, 14684. <https://doi.org/10.1038/srep14684>
- Sharma, V, Belevich, G, Gamiz-Hernandez, AP, Róg, T, Vattulainen, I, Verkhovskaya, ML, Wikström, M, Hummer, G & Kaila, VRI 2015, 'Redox-induced activation of the proton pump in the respiratory complex I', *Proceedings of the National Academy of Sciences of the United States of America*, vol. 112, no. 37, pp. 11571-11576. <https://doi.org/10.1073/pnas.1503761112>
- Sariola, V, Pena-Francesch, A, Jung, H, Çetinkaya, M, Pacheco, C, Sitti, M & Demirel, MC 2015, 'Segmented molecular design of self-healing proteinaceous materials', *Scientific Reports*, vol. 5, 13482. <https://doi.org/10.1038/srep13482>
- Rasappa, S, Ghoshal, T, Borah, D, SenthamaraiKannan, R, Holmes, JD & Morris, MA 2015, 'A Highly Efficient Sensor Platform Using Simply Manufactured Nanodot Patterned Substrates', *Scientific Reports*, vol. 5, 13270. <https://doi.org/10.1038/srep13270>
- Lukovic, D, Castro, AA, Delgado, ABG, Bernal, MDL, Pelaez, NL, Lloret, AD, Espejo, RP, Kamenarova, K, Sánchez, LF, Cuenca, N, Cortón, M, Fernandez, AA, Sorkio, A, Skottman, H, Ayuso, C, Erceg, S & Bhattacharya, SS 2015, 'Human iPSC derived disease model of MERTK-associated retinitis pigmentosa', *Scientific Reports*, vol. 5, 12910. <https://doi.org/10.1038/srep12910>
- Mathis, A, Froehly, L, Toenger, S, Dias, F, Genty, G & Dudley, JM 2015, 'Caustics and rogue waves in an optical sea', *Scientific Reports*, vol. 5, 12822. <https://doi.org/10.1038/srep12822>
- Bauer, M, Rasmussen, ES, Lomholt, MA & Metzler, R 2015, 'Real sequence effects on the search dynamics of transcription factors on DNA', *Scientific Reports*, vol. 5, 10072. <https://doi.org/10.1038/srep10072>
- Reverey, JF, Jeon, J-H, Bao, H, Leippe, M, Metzler, R & Selhuber-Unkel, C 2015, 'Superdiffusion dominates intracellular particle motion in the supercrowded cytoplasm of pathogenic *Acanthamoeba castellanii*', *Scientific Reports*, vol. 5, 11690. <https://doi.org/10.1038/srep11690>
- Toenger, S, Godin, T, Billet, C, Dias, F, Erkintalo, M, Genty, G & Dudley, JM 2015, 'Emergent rogue wave structures and statistics in spontaneous modulation instability', *Scientific Reports*, vol. 5, 10380. <https://doi.org/10.1038/srep10380>
- Gundem, G, Van Loo, P, Kremeyer, B, Alexandrov, LB, Tubio, JMC, Papaemmanuil, E, Brewer, DS, Kallio, HML, Högnäs, G, Annala, M, Kivinummi, K, Goody, V, Latimer, C, O'Meara, S, Dawson, KJ, Isaacs, W, Emmert-Buck, MR, Nykter, M, Foster, C, Kote-Jarai, Z, Easton, D, Whitaker, HC, Neal, DE, Cooper, CS, Eeles, RA, Visakorpi, T, Campbell, PJ, McDermott, U, Wedge, DC & Bova, GS 2015, 'The evolutionary history of lethal metastatic prostate cancer', *Nature*, vol. 520, no. 7547, pp. 353-357. <https://doi.org/10.1038/nature14347>
- Kaszuba, K, Grzybek, M, Orłowski, A, Danne, R, Róg, T, Simons, K, Coskun, Ü & Vattulainen, I 2015, 'N-Glycosylation as determinant of epidermal growth factor receptor conformation in membranes', *Proceedings of the National Academy of Sciences of the United States of America*, vol. 112, no. 14, pp. 4334-4339. <https://doi.org/10.1073/pnas.1503262112>
- Turner, KM, Sun, Y, Ji, P, Granberg, KJ, Bernard, B, Hu, L, Cogdell, DE, Zhou, X, Yli-Harja, O, Nykter, M, Shmulevich, I, Yung, WKA, Fuller, GN & Zhang, W 2015, 'Genomically amplified Akt3 activates DNA repair pathway and promotes glioma progression', *Proceedings of the National Academy of Sciences of the United States of America*, vol. 112, no. 11, pp. 3421-3426. <https://doi.org/10.1073/pnas.1414573112>

Sharma, V, Enkavi, G, Vattulainen, I, Róg, T & Wikström, M 2015, 'Proton-coupled electron transfer and the role of water molecules in proton pumping by cytochrome c oxidase', *Proceedings of the National Academy of Sciences of the United States of America*, vol. 112, no. 7, pp. 2040-2045. <https://doi.org/10.1073/pnas.1409543112>

Akamatsu, N, Tashiro, W, Saito, K, Mamiya, JI, Kinoshita, M, Ikeda, T, Takeya, J, Fujikawa, S, Priimagi, A & Shishido, A 2014, 'Facile strain analysis of largely bending films by a surface-labelled grating method', *Scientific Reports*, vol. 4, 5377. <https://doi.org/10.1038/srep05377>

Fan, YM, Hernesniemi, J, Oksala, N, Levula, M, Raitoharju, E, Collings, A, Hutri-Kähönen, N, Juonala, M, Marniemi, J, Lyytikäinen, LP, Seppälä, I, Mennander, A, Tarkka, M, Kangas, AJ, Soininen, P, Salenius, JP, Klopp, N, Illig, T, Laitinen, T, Ala-Korpela, M, Laaksonen, R, Viikari, J, Kähönen, M, Raitakari, OT & Lehtimäki, T 2014, 'Upstream Transcription Factor 1 (USF1) allelic variants regulate lipoprotein metabolism in women and USF1 expression in atherosclerotic plaque', *Scientific Reports*, vol. 4, 4650. <https://doi.org/10.1038/srep04650>

Margvelashvili, A, Zollikofer, CPE, Lordkipanidze, D, Peltomäki, T & De León, MSP 2013, 'Tooth wear and dentoalveolar remodeling are key factors of morphological variation in the Dmanisi mandibles', *Proceedings of the National Academy of Sciences of the United States of America*, vol. 110, no. 43, pp. 17278-17283. <https://doi.org/10.1073/pnas.1316052110>

Paci, M, Nanni, L & Severi, S 2013, 'An ensemble of classifiers based on different texture descriptors for texture classification', *Journal of King Saud University - Science*, vol. 25, no. 3, pp. 235-244. <https://doi.org/10.1016/j.jksus.2012.12.001>

Zhang, TG, Wang, YF, Zang, XR, Zhuang, W & Chen, JB 2013, 'Active optical clock based on four-level quantum system', *Chinese Science Bulletin*, vol. 58, no. 17, pp. 2033-2038. <https://doi.org/10.1007/s11434-013-5877-0>

Li, J, Shaikh, SA, Enkavi, G, Wen, PC, Huang, Z & Tajkhorshid, E 2013, 'Transient formation of water-conducting states in membrane transporters', *Proceedings of the National Academy of Sciences of the United States of America*, vol. 110, no. 19, pp. 7696-7701. <https://doi.org/10.1073/pnas.1218986110>

Haider, S, Islam, B, D'Atri, V, Sgobba, M, Poojari, C, Sun, L, Yuen, T, Zaidi, M & New, MI 2013, 'Structure-phenotype correlations of human CYP21A2 mutations in congenital adrenal hyperplasia', *Proceedings of the National Academy of Sciences of the United States of America*, vol. 110, no. 7, pp. 2605-2610. <https://doi.org/10.1073/pnas.1221133110>

Eriksson, UK, Fischer, G, Friemann, R, Enkavi, G, Tajkhorshid, E & Neutze, R 2013, 'Subangstrom resolution x-ray structure details aquaporin-water interactions', *Science*, vol. 340, no. 6138, pp. 1346-1349. <https://doi.org/10.1126/science.1234306>

Kalimeri, M, Constantoudis, V, Papadimitriou, C, Karamanos, K, Diakonou, FK & Papageorgiou, H 2012, 'Entropy analysis of word-length series of natural language texts: Effects of text language and genre', *INTERNATIONAL JOURNAL OF BIFURCATION AND CHAOS*, vol. 22, no. 9, 1250223. <https://doi.org/10.1142/S0218127412502239>

Levin, EJ, Cao, Y, Enkavi, G, Quick, M, Pan, Y, Tajkhorshid, E & Zhou, M 2012, 'Structure and permeation mechanism of a mammalian urea transporter', *Proceedings of the National Academy of Sciences of the United States of America*, vol. 109, no. 28, pp. 11194-11199. <https://doi.org/10.1073/pnas.1207362109>

Emmert-Streib, F, De Matos Simoes, R, Tripathi, S, Glazko, GV & Dehmer, M 2012, 'A Bayesian analysis of the chromosome architecture of human disorders by integrating reductionist data', *Scientific Reports*, vol. 2, 513. <https://doi.org/10.1038/srep00513>

Akola, J & Jones, RO 2017, 'Speeding up crystallization', *Science*, vol. 358, no. 6369, pp. 1386. <https://doi.org/10.1126/science.aag0476>

Tubio, JMC, Li, Y, Ju, YS, Martincorena, I, Cooke, SL, Tojo, M, Gundem, G, Pipinikas, CP, Zamora, J, Raine, K, Menzies, A, Roman-Garcia, P, Fullam, A, Gerstung, M, Shlien, A, Tarpey, PS, Papaemmanuil, E, Knappskog, S, Van Loo, P, Ramakrishna, M, Davies, HR, Marshall, J, Wedge, DC, Teague, JW, Butler, AP, Nik-Zainal, S, Alexandrov, L, Behjati, S, Yates, LR, Bolli, N, Mudie, L, Hardy, C, Martin, S, McLaren, S, O'Meara, S, Anderson, E, Maddison, M, Gamble, S, Foster, C, Warren, AY, Whitaker, H, Brewer, D, Eeles, R, Cooper, C, Neal, D, Lynch, AG, Visakorpi, T, Isaacs, WB, Van't Veer, L, Caldas, C, Desmedt, C, Sotiriou, C, Aparicio, S, Foekens, JA, Eyfjörd, JE, Lakhani, SR, Thomas, G, Myklebost, O, Span, PN, Børresen-Dale, AL, Richardson, AL, Van De Vijver, M, Vincent-Salomon, A, Van Den Eynden, GG, Flanagan, AM, Futreal, PA, Janes, SM, Bova, GS, Stratton, MR, McDermott, U & Campbell, PJ 2014, 'Extensive transduction of nonrepetitive DNA mediated by L1 retrotransposition in cancer genomes', *Science*, vol. 345, no. 6196, 1251343. <https://doi.org/10.1126/science.1251343>

Katko, TS 2017, 'Väitöstilaisuus yliopiston imagoluojana', *Tiedepolitiikka*, vol. 42, no. 1, pp. 63-64.

Jungwirth, P 2011, 'Physical chemistry: Water's wafer-thin surface', *Nature*, vol. 474, no. 7350, pp. 168-169. <https://doi.org/10.1038/474168a>