

**Biomechanical performance of cranial implants with different thicknesses and material properties : A finite element study. /**

Marcján, Petr; Narra, Nathaniel; Borák, Libor; Chamrad, Jakub; Wolff, Jan.

julkaisussa: Computers in Biology and Medicine, Vuosikerta 109, 01.06.2019, s. 43-52.

Tutkimustuotos >> vertaisarvioitu

**Bioprofiling over Grid for eHealthcare. / Sun, L.; Hu, P.; Goh, C.; Hamadicharef, B.; Ifeachor, E.; Barbounakis, I.; Zervakis,**

M.; Nurminen, N.; Varri, A.; Fontanelli, R.; Di Bona, S.; Guerri, D.; La Manna, S.; Cerbioni, K.; Palanca, E.; Starita, A.

julkaisussa: STUDIES IN HEALTH TECHNOLOGY AND INFORMATICS, Vuosikerta 120, 01.01.2006, s. 205-216.

Tutkimustuotos >> vertaisarvioitu

**Chapter 3.9-a computer-assisted visual sleep scoring program. / Värri, Alpo; Koivuluoma, Mikko; Morvan, Catherine.**

julkaisussa: STUDIES IN HEALTH TECHNOLOGY AND INFORMATICS, Vuosikerta 78, 01.01.2000, s. 285-297.

Tutkimustuotos >> vertaisarvioitu

**The Definition of Informatics Competencies in Finnish Healthcare and Social Welfare Education. / Värri, Alpo; Tiainen,**

Minna; Rajalahti, Elina; Kinnunen, Ulla Mari; Saarni, Lea; Ahonen, Outi.

Digital Personalized Health and Medicine: Proceedings of MIE 2020. IOP Press, 2020. s. 1143-1147 (Studies in Health Technology and Informatics; Vuosikerta 270).

Tutkimustuotos >> vertaisarvioitu

**Prototyping directional UAV-based wireless access and backhaul systems. / Gerasimenko, Mikhail; Pokornyy, Jiri;**

Schneider, Tibor; Sirjov, Jakub; Andreev, Sergey; Hosek, Jiri.

2019 IEEE Global Communications Conference, GLOBECOM 2019 - Proceedings. IEEE, 2019. 9014228.

Tutkimustuotos >> vertaisarvioitu

**Optimized wake-up scheme with bounded delay for energy-efficient MTC. / Rostami, Soheil; Lagen, Sandra; Costa, Mario;**

Dlni, Paolo; Valkama, Mikko.

2019 IEEE Global Communications Conference, GLOBECOM 2019 - Proceedings. IEEE, 2019. 9013534.

Tutkimustuotos >> vertaisarvioitu

**Red Alert : Break-Glass Protocol to Access Encrypted Medical Records in the Cloud. / De Oliveira, Marcela Tuler;**

Michalas, Antonis; Groot, Adrien E.D.; Marquering, Henk A.; Olabbarriaga, Silvia Delgado.

2019 IEEE International Conference on E-Health Networking, Application and Services, HealthCom 2019. IEEE, 2019. 9009598.

Tutkimustuotos >> vertaisarvioitu

**Face verification and recognition for digital forensics and information security. / Amato, Giuseppe; Falchi, Fabrizio;**

Gennaro, Claudio; Massoli, Fabio Valerio; Passalis, Nikolaos; Tefas, Anastasios; Trivilini, Alessandro; Vairo, Claudio.

7th International Symposium on Digital Forensics and Security, ISDFS 2019. toim. / Asaf Varol; Murat Karabatak; Cihan Varol; Sevginur Teke. IEEE, 2019.

Tutkimustuotos >> vertaisarvioitu

**Societal impact as Cost-Benefit Analysis : Comparative analysis of two research infrastructures. / Magazinik, Anastasiya;**

Bedolla, Joel Souza; Lasheras, Nuria Catalan; Mäkinen, Saku.

2019 IEEE International Conference on Engineering, Technology and Innovation, ICE/ITMC 2019. IEEE, 2019.

Tutkimustuotos >> vertaisarvioitu

**Error analysis of NOMA-based user cooperation with SWIPT. / Li, Suyue; Bariah, Lina; Muhaidat, Sami; Sofotasios,**

Paschalis; Liang, Jie; Wang, Anhong.

Proceedings - 15th Annual International Conference on Distributed Computing in Sensor Systems, DCOSS 2019. IEEE, 2019. s. 507-513.

Tutkimustuotos >> vertaisarvioitu

**Open framework for mammography-based breast cancer risk assessment. / Pertuz, Said; Torres, German F.; Tamimi,**

Rulla; Kämäräinen, Joni.

2019 IEEE EMBS International Conference on Biomedical and Health Informatics, BHI 2019 - Proceedings. IEEE, 2019.

Tutkimustuotos >> vertaisarvioitu

**Hardware-in-the-loop platform for testing autonomous vehicle control algorithms.** / Heikkinen, Jani Erik; Gafurov, Salimzhan; Kopylov, Sergey; Minav, Tatiana; Grebennikov, Sergey; Kurbanov, Artur.  
Proceedings - 12th International Conference on the Developments in eSystems Engineering, DeSE 2019. toim. / Dhiya Al-Jumeily; Jade Hind; Jamila Mustafina; Assem Al-Hajj; Abir Hussain; Evgeni Magid; Hissam Tawfik. IEEE, 2019. s. 906-911 9073320 (International Conference on Developments in eSystems Engineering, DeSE).  
Tutkimustuotos >> vertaisarvioitu

**Identification of Parkinson's Disease Utilizing a Single Self-recorded 20-step Walking Test Acquired by Smartphone's Inertial Measurement Unit.** / Mehrang, Saeed; Jauhiainen, Milla; Pietilä, Julia; Puustinen, Juha; Ruokolainen, Jari; Nieminen, Hannu.  
40th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, EMBC 2018. Vuosikerta 2018-July Institute of Electrical and Electronics Engineers Inc., 2018. s. 2913-2916 8512921.  
Tutkimustuotos >> vertaisarvioitu

**Eigen Posture Based Fall Risk Assessment System Using Kinect.** / Tripathy, Soumya Ranjan; Chakravarty, Kingshuk; Sinha, Aniruddha.  
40th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, EMBC 2018. Vuosikerta 2018-July IEEE, 2018. s. 1-4 8513263.  
Tutkimustuotos >> vertaisarvioitu

**The Accuracy of Atrial Fibrillation Detection from Wrist Photoplethysmography. A Study on Post-Operative Patients.** / Tarniceriu, Adrian; Harju, Jarkko; Yousefi, Zeinab Rezaei; Vehkaoja, Antti; Parak, Jakob; Yli-Hankala, Arvi; Korhonen, Ilkka.  
40th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, EMBC 2018. Vuosikerta 2018-July IEEE, 2018. s. 4844-4847 8513197.  
Tutkimustuotos >> vertaisarvioitu

**Secure Firmware Updates for IoT : A Survey.** / Kolehmainen, Antti.  
Proceedings - IEEE 2018 International Congress on Cybermatics: 2018 IEEE Conferences on Internet of Things, Green Computing and Communications, Cyber, Physical and Social Computing, Smart Data, Blockchain, Computer and Information Technology, iThings/GreenCom/CPSCoM/SmartData/Blockchain/CIT 2018. IEEE, 2018. s. 112-117.  
Tutkimustuotos >> vertaisarvioitu

**Cybersecurity Attacks and Defences for Unmanned Smart Ships.** / Silverajan, Bilhanan; Ocak, Mert; Nagel, Benjamin.  
Proceedings - IEEE 2018 International Congress on Cybermatics: 2018 IEEE Conferences on Internet of Things, Green Computing and Communications, Cyber, Physical and Social Computing, Smart Data, Blockchain, Computer and Information Technology, iThings/GreenCom/CPSCoM/SmartData/Blockchain/CIT 2018. IEEE, 2018. s. 15-20.  
Tutkimustuotos >> vertaisarvioitu

**Detection of beat-to-beat intervals from wrist photoplethysmography in patients with sinus rhythm and atrial fibrillation after surgery.** / Tarniceriu, Adrian; Harju, Jarkko; Vehkaoja, Antti; Parak, Jakob; Delgado-Gonzalo, Ricard; Renevey, Philippe; Yli-Hankala, Arvi; Korhonen, Ilkka.  
2018 IEEE EMBS International Conference on Biomedical and Health Informatics, BHI 2018. IEEE, 2018. s. 133-136.  
Tutkimustuotos >> vertaisarvioitu

**A novel technique for analysis of postural information with wearable devices.** / Jeyhani, Vala; Mahdiani, Shadi; Viik, Jari; Oksala, Niku; Vehkaoja, Antti.  
2018 IEEE 15th International Conference on Wearable and Implantable Body Sensor Networks, BSN 2018. IEEE, 2018. s. 30-33.  
Tutkimustuotos >> vertaisarvioitu

**Improving hospital services based on patient experience data : Current feedback practices and future opportunities.** / Kaipio, Johanna; Stenhammar, Hanna; Immonen, Susanna; Litovuo, Lauri; Axelsson, Minja; Lantto, Minna; Lahdenne, Pekka.  
Building Continents of Knowledge in Oceans of Data: The Future of Co-Created eHealth - Proceedings of MIE 2018. IOS Press, 2018. s. 266-270 (Studies in Health Technology and Informatics; Vuosikerta 247).  
Tutkimustuotos >> vertaisarvioitu

**Mobile Microservice Architecture for Patients Self-Care.** / Ruokolainen, Jari.

The Practice of Patient Centered Care: Empowering and Engaging Patients in the Digital Era. IOS Press, 2017. s. 106 (Studies in Health Technology and Informatics; Vuosikerta 244).

Tutkimustuotos >> vertaisarvioitu

**Random Value Impulse Noise Removal Based on Most Similar Neighbors.** / Habib, Muhammad; Rasheed, Saqib; Hussain, Ayyaz; Ali, Mubashir.

2015 13th International Conference on Frontiers of Information Technology (FIT) . IEEE, 2016. s. 329-333.

Tutkimustuotos >> vertaisarvioitu

**Network signatures based on gene pair expression ratios improve classification and the analysis of muscle-invasive urothelial cancer.** / De Matos Simoes, Ricardo; Mitsiades, Constantine; Williamson, Kate E.; Emmert-Streib, Frank.

2015 IEEE International Conference on Bioinformatics and Biomedicine (BIBM). IEEE, 2015. s. 1216-1223.

Tutkimustuotos >> vertaisarvioitu

**Security aspects of e-Health systems migration to the cloud.** / Michalas, Antonis; Paladi, Nicolae; Gehrmann, Christian.

2014 IEEE 16th International Conference on e-Health Networking, Applications and Services, Healthcom 2014. Institute of Electrical and Electronics Engineers Inc., 2015. s. 212-218 7001843.

Tutkimustuotos >> vertaisarvioitu

**On computation of calcium cycling anomalies in cardiomyocytes data.** / Juhola, Martti; Joutsijoki, Henry; Varpa, Kirsi; Saarikoski, Jyri; Rasku, Jyrki; Iltanen, Kati; Laurikkala, Jorma; Hyyro, Heikki; Avalos-Salguero, Jorge; Siirtola, Harri; Penttinen, Kirsi; Aalto-Setälä, Katriina.

2014 36th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, EMBC 2014.

Institute of Electrical and Electronics Engineers Inc., 2014. s. 1444-1447 6943872.

Tutkimustuotos >> vertaisarvioitu

**An image guided treatment platform for prostate cancer photodynamic therapy.** / Betrouni, N.; Colin, P.; Puech, P.; Villers, A.; Mordon, S.

2013 35th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, EMBC 2013. 2013. s. 370-373 6609514.

Tutkimustuotos >> vertaisarvioitu

**Computer aided diagnosis of acoustic neuroma : A neural network perspective.** / Anwar, Shahzad; Izhar-UI-Haq, Izhar; Qadir, Muhammad Usman; Ali, Ihtisham; Razzaq, Shadman; Ahmad, Bilal; Shah, Kamran; Shah, Shaukat Ali; Khan, Muhammad Tahir.

julkaisussa: JOURNAL OF MEDICAL IMAGING AND HEALTH INFORMATICS, Vuosikerta 7, Nro 2, 01.04.2017, s. 371-377.

Tutkimustuotos: Katsausartikkeli >> vertaisarvioitu

**TinderMIX : Time-dose integrated modelling of toxicogenomics data.** / Serra, Angela; Fratello, Michele; Del Giudice, Giusy; Saarimäki, Laura Aliisa; Paci, Michelangelo; Federico, Antonio; Greco, Dario.

julkaisussa: GigaScience, Vuosikerta 9, Nro 5, 01.05.2020.

Tutkimustuotos >> vertaisarvioitu

**Fusion enhancement for tracking of respiratory rate through intrinsic mode functions in photoplethysmography.** / Pirhonen, Mikko; Vehkaoja, Antti.

julkaisussa: Biomedical Signal Processing and Control, Vuosikerta 59, 101887, 2020.

Tutkimustuotos >> vertaisarvioitu

**Functional electrical stimulation for facial pacing : Effects of waveforms on movement intensity and ratings of discomfort.** / Ilves, Mirja; Rantanen, Ville; Venesvirta, Hanna; Lylykangas, Jani; Vehkaoja, Antti; Mäkelä, Eeva; Verho, Jarmo; Leikkala, Jukka; Rautiainen, Markus; Surakka, Veikko.

julkaisussa: Biomedical Signal Processing and Control, Vuosikerta 60, 101992, 2020.

Tutkimustuotos >> vertaisarvioitu

**Separation of HCM and LQT Cardiac Diseases with Machine Learning of  $Ca^{2+}$  Transient Profiles.** / Joutsijoki, Henry; Penttinen, Kirsi; Juhola, Martti; Aalto-Setälä, Katriina.  
julkaisussa: Methods of Information in Medicine, Vuosikerta 58, Nro 4-5, 01.11.2019, s. 167-178.  
Tutkimustuotos >> vertaisarvioitu

**Exploring associations between the self-reported values, well-being, and health behaviors of Finnish citizens : Cross-sectional analysis of more than 100,000 web-survey responses.** / Honka, Anita Marianne; Helander, Elina; Pavel, Misha; Jimison, Holly; Mustonen, Pekka; Korhonen, Ilkka; Ermes, Miikka.  
julkaisussa: Journal of Medical Internet Research, Vuosikerta 21, Nro 4, e12170, 01.04.2019.  
Tutkimustuotos >> vertaisarvioitu

**Identification of motor symptoms related to Parkinson disease using motion-tracking sensors at home (KÄVELI) : Protocol for an observational case-control study.** / Jauhiainen, Milla; Puustinen, Juha; Mehrang, Saeed; Ruokolainen, Jari; Holm, Anu; Vehkaoja, Antti; Nieminen, Hannu.  
julkaisussa: Journal of Medical Internet Research, Vuosikerta 21, Nro 3, e12808, 01.03.2019.  
Tutkimustuotos >> vertaisarvioitu

**Robocasting of Bioactive  $SiO_2-P_2O_5-CaO-MgO-Na_2O-K_2O$  Glass Scaffolds.** / Baino, Francesco; Barberi, Jacopo; Fiume, Elisa; Orlygsson, Gissur; Massera, Jonathan; Verne, Enrica.  
julkaisussa: Journal of Healthcare Engineering, Vuosikerta 2019, 5153136, 2019.  
Tutkimustuotos >> vertaisarvioitu

**The effect of percutaneous transluminal angioplasty of superficial femoral artery on pulse wave features.** / Peltokangas, Mikko; Suominen, Velipekka; Vakhitov, Damir; Verho, Jarmo; Korhonen, Janne; Lekkala, Jukka; Vehkaoja, Antti; Oksala, Niku.  
julkaisussa: Computers in Biology and Medicine, Vuosikerta 96, 01.05.2018, s. 274-282.  
Tutkimustuotos >> vertaisarvioitu

**Comparison of non-invasive blood pressure monitoring using modified arterial applanation tonometry with intra-arterial measurement.** / Harju, Jarkko; Vehkaoja, Antti; Kumpulainen, Pekka; Campadello, Stefano; Lindroos, Ville; Yli-Hankala, Arvi; Oksala, Niku.  
julkaisussa: Journal of Clinical Monitoring and Computing, Vuosikerta 32, Nro 1, 2018, s. 13-22.  
Tutkimustuotos >> vertaisarvioitu

**The Digi-NewB project for preterm infant sepsis risk and maturity analysis.** / Värrö, Alpo; Kallonen, Antti; Helander, Elina; Ledesma Figueroa, Andres; Pladys, Patrick.  
julkaisussa: Finnish Journal of eHealth and eWelfare, Vuosikerta 10, Nro 2-3, 2018, s. 330-333.  
Tutkimustuotos >> vertaisarvioitu

**Detection of spine structures with Bioimpedance Probe (BIP) Needle in clinical lumbar punctures.** / Halonen, Sanna; Annala, Kari; Kari, Juho; Jokinen, Samuli; Lumme, Aki; Kronström, Kai; Yli-Hankala, Arvi.  
julkaisussa: Journal of Clinical Monitoring and Computing, Vuosikerta 31, Nro 5, 10.2017, s. 1065-1072.  
Tutkimustuotos >> vertaisarvioitu

**A Proxy-Based Solution for Asynchronous Telemedical Systems.** / Rauti, Sampsa; Lahtiranta, Janne; Parisod, Heidi; Hyrynsalmi, Sami; Salanterä, Sanna; Aromaa, Minna Elisabeth; Smed, Jouni; Leppänen, Ville.  
julkaisussa: International Journal of E-health and Medical Communication, Vuosikerta 8, Nro 3, 5, 01.07.2017, s. 70-83.  
Tutkimustuotos >> vertaisarvioitu

**Bayes Forest : A data-intensive generator of morphological tree clones.** / Potapov, Ilya; Järvenpää, Marko; Åkerblom, Markku; Raunonen, Pasi; Kaasalainen, Mikko.  
julkaisussa: GigaScience, Vuosikerta 6, Nro 10, gix079, 2017.  
Tutkimustuotos >> vertaisarvioitu

**A software tool for studying the size and shape of human cardiomyocytes.** / Rasku, Jyrki; Ojala, Marisa; Pölonen, Risto Pekka; Joutsijoki, Henry; Gizatdinova, Yulia; Laurikkala, Jorma; Kartasalo, Kimmo; Aalto-Setälä, Katriina; Juhola, Martti.  
julkaisussa: Biomedical Signal Processing and Control, Vuosikerta 30, 01.09.2016, s. 134-139.  
Tutkimustuotos >> vertaisarvioitu

**Which wavelength is the best for arterial pulse waveform extraction using laser speckle imaging?** / Vaz, Pedro; Pereira, Tânia; Figueiras, Edite; Correia, Carlos; Humeau-Heurtier, Anne; Cardoso, João.  
julkaisussa: Biomedical Signal Processing and Control, Vuosikerta 25, 03.2016, s. 188-195.  
Tutkimustuotos >> vertaisarvioitu

**User acceptance of electronic health records : A post-implementation study.** / Sintonen, Sanna; Mäkelä, Kari; Miettinen, Raimo.  
julkaisussa: International Journal of Healthcare Technology and Management, Vuosikerta 15, Nro 2, 2015, s. 162-175.  
Tutkimustuotos >> vertaisarvioitu

**[COMMODE] a large-scale database of molecular descriptors using compounds from PubChem.** / Dander, Andreas; Mueller, Laurin A J; Gallasch, Ralf; Pabinger, Stephan; Emmert-Streib, Frank; Graber, Armin; Dehmer, Matthias.  
julkaisussa: Source Code for Biology and Medicine, Vuosikerta 8, 22, 13.11.2013.  
Tutkimustuotos >> vertaisarvioitu

**Mobile mental wellness training for stress management : Feasibility and design implications based on a one-month field study.** / Ahtinen, Aino; Mattila, Elina; Välikynen, Pasi; Kaipainen, Kirsikka; Vanhala, Toni; Ermes, Miikka; Sairanen, Essi; Myllymäki, Tero; Lappalainen, Raimo.  
julkaisussa: Journal of Medical Internet Research, Vuosikerta 15, Nro 7, e11, 07.2013.  
Tutkimustuotos >> vertaisarvioitu

**Indirect measurement of the vascular endothelial glycocalyx layer thickness in human submucosal capillaries with a plugin for ImageJ.** / Liuhanen, Sasu; Sallisalmi, Marko; Pettilä, Ville; Oksala, Niku; Tenhunen, Jyrki.  
julkaisussa: Computer Methods and Programs in Biomedicine, Vuosikerta 110, Nro 1, 04.2013, s. 38-47.  
Tutkimustuotos >> vertaisarvioitu

**Three-dimensional skeletonization and symbolic description in vascular imaging : Preliminary results.** / Verscheure, L.; Peyrodie, L.; Dewalle, A. S.; Reyns, N.; Betrouni, N.; Mordon, S.; Vermandel, M.  
julkaisussa: INTERNATIONAL JOURNAL OF COMPUTER ASSISTED RADIOLOGY AND SURGERY, Vuosikerta 8, Nro 2, 03.2013, s. 233-246.  
Tutkimustuotos >> vertaisarvioitu

**Elastic image registration for guiding focal laser ablation of prostate cancer : Preliminary results.** / Makni, Nasr; Puech, Philippe; Colin, Pierre; Azzouzi, Abdelrahmene; Mordon, Serge; Betrouni, Nacim.  
julkaisussa: Computer Methods and Programs in Biomedicine, Vuosikerta 108, Nro 1, 10.2012, s. 213-223.  
Tutkimustuotos >> vertaisarvioitu