

**Aasta tehnikauiliõpilane on mees nagu orkester : [intervjuu Kristjan Pildiga]**

**Pilt, Kristjan**; Feldmann, Mati Inseneria 2009 / lk. 36-37 : ill [https://artiklid.elnet.ee/record=b1140678\\*est](https://artiklid.elnet.ee/record=b1140678*est)

**Activity classification for real-time wearable systems : effect of window length, sampling frequency and number of features on classifier performance**

**Allik, Ardo; Pilt, Kristjan; Karai, Deniss; Fridolin, Ivo; Leier, Mairo; Jervan, Gert** 2016 IEEE EMBS Conference on Biomedical Engineering and Sciences (IECBES) : Kuala Lumpur, 4-8 December 2016 / p. 460-464 : ill  
<https://doi.org/10.1109/IECBES.2016.7843493>

**Adaptive sum comb filter for PPG signals by using ECG signal as reference**

**Pilt, Kristjan; Meigas, Kalju; Lass, Jaanus; Rosmann, M.; Kaik, Jüri** BEC 2008 : 2008 International Biennial Baltic Electronics Conference : proceedings of the 11th Biennial Baltic Electronics Conference : Tallinn University of Technology : October 6-8, 2008, Tallinn, Estonia 2008 / p. 317-320 : ill

**Advancing novel physical fatigue assessment and human activity monitoring methods towards personalized feedback with wearable sensors = Kantavatel seadmetel põhinevate füüsilise väsimuse hindamise ning inimese aktiivsuse monitoorimise meetodite arendamine personaalseks tagasisideks**

**Allik, Ardo** 2022 <https://doi.org/10.23658/taltech.62/2022> <https://digikogu.taltech.ee/et/Item/230f302e-0cf1-4b86-a9d3-0927a51b36e2>  
[https://www.ester.ee/record=b5525012\\*est](https://www.ester.ee/record=b5525012*est)

**The analysis of finger photoplethysmographic waveform in healthy volunteers and diabetes patients [Electronic resource]**

**Pilt, Kristjan; Meigas, Kalju; Temitski, Kristina; Viigimaa, Margus** IFMBE proceedings ; Vol. 38 2013 / p. 55-58 : ill [CD-ROM]  
[https://doi.org/10.1007/978-3-642-34197-7\\_14](https://doi.org/10.1007/978-3-642-34197-7_14) [Conference Proceedings at Scopus](#) [Article at Scopus](#)

**Annual report 2003 / BEST-Estonia**

Välling, Esko; Tamm, Kristjan; Männiste, Mari; Mitt, Kristjan; Paju, Evelin; Arnover, Mari; Pool, Allan-Hermann; Pilt, Kristjan; Tähiste, Jane; Endrekson, Eire; **Krispin, Madli** 2003

**Aortic augmentation index is dependent on bodyside in healthy young subjects**

**Einstein, Sandra; Pilt, Kristjan; Palmar, Merlin; Meigas, Kalju; Viigimaa, Margus** High Blood Pressure & Cardiovascular Prevention 2019 / p. 375-382 : ill <https://doi.org/10.1007/s40292-019-00335-3> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Application of novel QT interval correction and QT/RR assessment models to ECG 24-hour recordings in cardiac patients**

**Veski, Kristi; Karai, Deniss; Pilt, Kristjan; Meigas, Kalju; Kaik, Jüri** Estonian journal of engineering 2010 / 1, p. 107-120 : ill

**Arterial pulse waveform dependence on applied pressure**

**Pilt, Kristjan; Meigas, Kalju; Viigimaa, Margus; Kaik, Jüri; Kattai, Rain; Karai, Deniss** BEC 2010 : 2010 12th Biennial Baltic Electronics Conference : proceedings of the 12th Biennial Baltic Electronics Conference : Tallinn University of Technology, October 4-6, 2010, Tallinn, Estonia 2010 / p. 277-280 : ill

**Arterial stiffness assessment for early diagnosis of atherosclerosis**

**Pikta, Marika; Viigimaa, Margus; Pilt, Kristjan; Kõõts, Kristina; Meigas, Kalju** Cardiology 2015 / p. 32  
<https://www.karger.com/Article/Abstract/431110>

**Arterite jäikus ja kardiovaskulaarne risk**

**Pilt, Kristjan; Viigimaa, Margus** Lege Artis : ajakiri Eesti arstidele 2020 / lk. 47-50 : ill [https://www.ester.ee/record=b1575283\\*est](https://www.ester.ee/record=b1575283*est)  
<https://www.med24.ee/ajakirjad/legeartis/aprill-2020/arterite-j%C3%A4ikus-ja-kardiovaskulaarne-risk>

**Assessing hemodynamics from the photoplethysmogram to gain insights into vascular age : a review from VascAgeNet**

Charlton, Peter H.; Paliakaite, Birute; **Pilt, Kristjan**; Bachler, Martin; Zanelli, Serena; Kulin, Daniel; Allen, John; Hallab, Magid; Bianchini, Elisabetta; Mayer, Christopher C. American journal of physiology-heart and circulatory physiology 2022 / p. H493-H522  
<https://doi.org/10.1152/ajpheart.00392.2021> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Assessment of algorithms for detecting an arterial pulse pressure wave equiphase point**

**Temitski, Kristina; Lauri, J.; Pilt, Kristjan; Meigas, Kalju; Viigimaa, Margus** BEC 2012 : 2012 13th Biennial Baltic Electronics Conference : proceedings of the 13th Biennial Baltic Electronics Conference : October 3-5, 2012, Tallinn, Estonia 2012 / p. 191-194 : ill

**Assessment of associations between arterial mechanical properties and biochemical blood markers for early detection of atherosclerosis**

Kõõts, Kristina; **Pilt, Kristjan**; Sepa, Madis; Pikta, Marika; **Fridolin, Ivo; Meigas, Kalju; Viigimaa, Margus** 8th European Medical and Biological Engineering Conference : proceedings of the EMBEC 2020, November 29 – December 3, 2020 Portorož, Slovenia 2021 / p. 121-129 [https://doi.org/10.1007/978-3-030-64610-3\\_15](https://doi.org/10.1007/978-3-030-64610-3_15) [Conference Proceedings at Scopus](#) [Article at Scopus](#)

## **Association between optical signal derived aortic augmentation index and cardiovascular risk factors in healthy volunteers**

**Pikta, Marika; Viigimaa, Margus; Pilt, Kristjan; Kõõts, Kristina; Meigas, Kalju** Reports on global health research 2020 / art. 119, 8 p. : ill <https://doi.org/10.29011/rghr-119.100019> <https://www.gavinpublishers.com/article/view/association-between-optical-signal-derived-aortic-augmentation-index-and-cardiovascular-risk-factors-in-healthy-volunteers>

## **Association between ventricular repolarization and main cardiovascular risk factors**

**Pšenitšnikov, Igor; Šipilova, Tatjana; Karai, Deniss; Riipulk, Jevgeni; Veski, Kristi; Pilt, Kristjan; Kaik, Jüri** Scandinavian cardiovascular journal : SCJ 2011 / p. 33-40 : ill

## **Biomeditsiinitehnika - tehnoloogia tervise heaks**

**Hinrikus, Hiie; Bachmann, Maie; Pilt, Kristjan; Meigas, Kalju; Fridolin, Ivo** Teadusmõte Eestis (X). Tehnikateadused. 3 : [artiklikogumik] 2019 / lk. 48-58 : ill [https://www.ester.ee/record=b5208765\\*est](https://www.ester.ee/record=b5208765*est)

## **Classification algorithm improvement for physical activity recognition in maritime environments**

**Allik, Ardo; Pilt, Kristjan; Karai, Deniss; Fridolin, Ivo; Leier, Mairo; Jervan, Gert** World Congress on Medical Physics and Biomedical Engineering 2018 : June 3–8, 2018, Prague, Czech Republic (Vol. 3) 2019 / p. 13-17 [https://doi.org/10.1007/978-981-10-9023-3\\_3](https://doi.org/10.1007/978-981-10-9023-3_3) [Conference proceeding](#) [Article at Scopus](#) [Article at WOS](#)

## **Comparison of predictive equations for basal metabolic rate**

**Allik, Ardo; Mägi, Siiri; Pilt, Kristjan; Karai, Deniss; Fridolin, Ivo; Leier, Mairo; Jervan, Gert** Wireless Mobile Communication and Healthcare : 7th International Conference, MobiHealth 2017, Vienna, Austria, November 14–15, 2017 : proceedings 2018 / p. 261-264 : ill <https://doi.org/10.1007/978-3-319-98551-0> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

## **Construction of gender-specific regression models for aortic length estimation based on computed tomography images**

**Zemtsovskaja, Galina; Pilt, Kristjan; Samarin, Andrei; Albina, Jelena; Meigas, Kalju; Viigimaa, Margus** Health and technology 2020 / p. 679–687 : ill <https://doi.org/10.1007/s12553-019-00391-8> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## **Development of a measurement system for estimation of local peripheral arterial stiffness parameters**

**Pilt, Kristjan; Karai, Deniss; Fridolin, Ivo** 2024 19th Biennial Baltic Electronics Conference (BEC) 2024 / p. 1-5 <https://doi.org/10.1109/BEC61458.2024.10737944> [Article at Scopus](#) [Conference proceeding at Scopus](#) [Article at WOS](#)

## **Dialysis patients survival in HD centres from Belgium, Estonia, Spain, and Sweden—association with BMI and hypocalcemia**

**Holmar, Jana; Luman, Merike; Adoberg, Annika; Leis, Liisi; Paats, Joosep; Uhlin, Fredrik; Ortiz, Alberto; Gloerieux, Griet; Dhondt, Annemieke; Pilt, Kristjan; Tanner, Risto; Fridolin, Ivo** Nephrology Dialysis Transplantation 2024 / p. i1456–i1457 <https://doi.org/10.1093/ndt/gfae069.885>

## **The effect of local cold and warm exposure on index finger photoplethysmographic signal waveform**

**Pilt, Kristjan; Meigas, Kalju; Temitski, Kristina; Viigimaa, Margus** 2013 35th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC) 2013 / p. 2300-2303 <https://doi.org/10.1109/EMBC.2013.6609997> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

## **Effect of transmural pressure on the estimation of arterial stiffness index from the photoplethysmographic waveform**

**Pilt, Kristjan; Reiu, Andy** Medical and Biological Engineering and Computing 2024 / p. 1049-1059 <https://doi.org/10.1007/s11517-023-02992-y> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## **Electroencephalography as an objective indicator of stress**

**Gavriljuk, Marietta; Uudeberg, Tuuli; Pilt, Kristjan; Karai, Deniss; Fridolin, Ivo; Bachmann, Maie** 19th Nordic-Baltic Conference on Biomedical Engineering and Medical Physics : Proceedings of NBC 2023, June 12–14, 2023, Liepaja, Latvia 2023 / p. 221–226 [https://doi.org/10.1007/978-3-031-37132-5\\_28](https://doi.org/10.1007/978-3-031-37132-5_28) [Conference proceedings at Scopus](#) [Article at Scopus](#)

## **Establishing best practices in photoplethysmography signal acquisition and processing**

Charlton, Peter H.; **Pilt, Kristjan**; Kyriacou, Panayiotis A. Physiological measurement 2022 / art. 050301, 6 p <https://doi.org/10.1088/1361-6579/ac6cc4> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## **Fall detection and activity recognition system for usage in smart work-wear [Online resource]**

**Leier, Mairo; Jervan, Gert; Allik, Ardo; Pilt, Kristjan; Karai, Deniss; Fridolin, Ivo** BEC 2018 : 2018 16th Biennial Baltic Electronics Conference (BEC) : proceedings of the 16th Biennial Baltic Electronics Conference, October 8-10, 2018 2018 / 4 p.: ill <https://doi.org/10.1109/BEC.2018.8600959>

## **Hemodialysis optical monitoring toward greener technology : a potential for water saving dialysis treatment**

**Leis, Liisi; Adoberg, Annika; Paats, Joosep; Holmar, Jana; Arund, Jürgen; Karai, Deniss; Luman, Merike; Pilt, Kristjan; Taklaja, Paul; Tanner, Risto; Fridolin, Ivo** 19th Nordic-Baltic Conference on Biomedical Engineering and Medical Physics : Proceedings of NBC 2023, June 12–14, 2023, Liepaja, Latvia 2023 / p. 162 - 171 [https://doi.org/10.1007/978-3-031-37132-5\\_21](https://doi.org/10.1007/978-3-031-37132-5_21) [Conference Proceedings at Scopus](#) [Article at Scopus](#)

**Increased pulse wave velocity strongly related to age in apparently healthy people of high cardiovascular risk population**  
**Zemtsovskaja, Galina; Pilt, Kristjan; Albina, Jelena; Meigas, Kalju; Viigimaa, Margus** European Heart Journal 2020 / ehaa946.3783 <https://doi.org/10.1093/ehjci/ehaa946.3783>

**Influence of acute mental stress on the forehead photoplethysmographic signal waveform**  
**Pilt, Kristjan; Karai, Deniss; Bachmann, Maie; Gavriljuk, Marietta; Fridolin, Ivo** 19th Nordic-Baltic conference on biomedical engineering and medical physics : proceedings of NBC 2023, June 12-14, 2023, Liepaja, Latvia 2023 / p. 181 - 188  
[https://doi.org/10.1007/978-3-031-37132-5\\_23](https://doi.org/10.1007/978-3-031-37132-5_23) [Conference Proceedings at Scopus](#) [Article at Scopus](#)

**Influence of gender on the QT interval variability and duration in different wake-sleep stages in non-sleep apneic individuals : analysis of polysomnographic recordings**  
**Viigimäe, Moonika; Karai, Deniss; Pilt, Kristjan; Polo, Olli; Huhtala, Heini; Meigas, Kalju; Kaik, Jüri** Journal of electrocardiology 2017 / p. 444-449 : ill <https://doi.org/10.1016/j.jelectrocard.2017.03.012> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Influence of mental stress on the arterial stiffness parameters detected from photoplethysmographic signal waveform**  
**Pilt, Kristjan; Karai, Deniss; Bachmann, Maie; Gavriljuk, Marietta; Allik, Ardo; Uudeberg, Tuuli** 2022 18th Biennial Baltic Electronics Conference (BEC) 2022 / 4 p <https://doi.org/10.1109/BEC56180.2022.9935609>

**Interrelationship between protein bound uremic toxin indoxyl sulfate oncentration in blood and spent dialysate during hemodialysis treatment : [abstract]**  
**Paats, Joosep; Adoberg, Annika; Arund, Jürgen; Fridolin, Ivo; Lauri, Kai; Leis, Liisi; Pilt, Kristjan; Tanner, Risto; Luman, Merike** Nephrology dialysis transplantation 2021 / p. 382 : ill <https://doi.org/10.1093/ndt/gfab099.005>

**Intima-media thickness of the common carotid artery of patients with chronic kidney disease**  
**Silluta, Sandra; Pilt, Kristjan; Kõõts, Kristina; Viigimaa, Margus; Meigas, Kalju** Cardiology 2015 / p. 37  
<https://www.karger.com/Article/Abstract/431110>

**Intradialytic on-line multicomponent reduction ratio monitoring in spent dialysate by a novel miniaturized optical sensor**  
**Pilt, Kristjan; Arund, Jürgen; Adoberg, Annika; Leis, Liisi; Fridolin, Ivo; Luman, Merike** Nephrology Dialysis Transplantation 2019 / p. 643-644 <https://doi.org/10.1093/ndt/gfz102.SuO012>

**Intradialytic on-line multicomponent total removed solute monitoring in spent dialysate by a novel miniaturized optical sensor**  
**Adoberg, Annika; Paats, Joosep; Arund, Jürgen; Leis, Liisi; Pilt, Kristjan; Fridolin, Ivo; Luman, Merike** Nephrology Dialysis Transplantation 2021 <https://doi.org/10.1093/ndt/gfaa141.TO015>

**Intradialytic on-line multicomponent total removed solute monitoring in spent dialysate by a novel miniaturized optical sensor**  
**Adoberg, Annika; Paats, Joosep; Arund, Jürgen; Leis, Liisi; Pilt, Kristjan; Fridolin, Ivo; Luman, Merike** Nephrology Dialysis Transplantation 2020 / gfaa141.TO015 <https://doi.org/10.1093/ndt/gfaa141.TO015>

**Intradialytic on-line multicomponent total removed solutes monitoring in spent dialysate by a novel miniaturized optical sensor**  
**Pilt, Kristjan; Arund, Jürgen; Adoberg, Annika; Leis, Liisi; Luman, Merike; Fridolin, Ivo** International journal of artificial organs 2019 / p. 415-416 <https://journals.sagepub.com/doi/10.1177/0391398819860985>

**Intradialytic optical assessment of C-mannosyl tryptophan removal using spent dialysate**  
**Paats, Joosep; Adoberg, Annika; Leis, Liisi; Arund, Jürgen; Lauri, Kai; Luman, Merike; Tanner, Risto; Holmar, Jana; Pilt, Kristjan; Fridolin, Ivo** Scientific reports 2025 / art. 20052, 12 p. : ill <https://doi.org/10.1038/s41598-025-01844-z>

**Investigation of photoplethysmographic signal augmentation index estimation differences between fingers**  
**Pilt, Kristjan; Silluta, Sandra; Kõõts, Kristina; Karai, Deniss; Meigas, Kalju; Viigimaa, Margus** EMBEC & NBC 2017 : joint conference of the European Medical and Biological Engineering Conference (EMBEC) and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics (NBC), Tampere, Finland, June 2017 2018 / p. 819-822 : ill [https://doi.org/10.1007/978-981-10-5122-7\\_205](https://doi.org/10.1007/978-981-10-5122-7_205) [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

**In-vitro investigation of flow profiles in arteries using the photoplethysmograph**  
**Pilt, Kristjan; May, James M.; Kyriacou, Panayiotis A.** Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC) 2021 / p. 7211-7214 <https://doi.org/10.1109/EMBC46164.2021.9629713> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

**Linnaplaneerimise heaolu skoor mõõdab, mida linnaelanikud tegelikult tunnevad**  
**Fridolin, Ivo; Pilt, Kristjan; Bachmann, Maie; Grišakov, Kristi; Tärnov, Külle; Sternfeldt, Silver** Mente et Manu 2022 / lk. 24-26 : fot [https://www.ester.ee/record=b1242496\\*est](https://www.ester.ee/record=b1242496*est)

## **Methods, devices and results of arterial stiffness estimation**

**Pilt, Kristjan** Cardiology 2015 / p. 15 <https://www.karger.com/Article/Abstract/431110>

## **Microwave effect on diffusion: A possible mechanism for non-thermal effect**

**Hinrikus, Hiie; Lass, Jaanus; Karai, Denis; Pilt, Kristjan; Bachmann, Maie** Electromagnetic Biology and Medicine 2015 / p. 327 - 333 <https://doi.org/10.3109/15368378.2014.921195> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## **Mikrolaine- ja optiline tehnika : loengumaterjalid biomeditsiinitehnika ja meditsiinifüüsika magistriõppe üliõpilastele**

2012 [http://www.ester.ee/record=b2860846\\*est](http://www.ester.ee/record=b2860846*est)

## **New photoplethysmographic signal analysis algorithm for arterial stiffness estimation**

**Pilt, Kristjan; Ferenets, Rain; Meigas, Kalju; Lindberg, Lars-Göran; Temitski, Kristina; Viigimaa, Margus** The Scientific World Journal 2013 / art. 169035 <https://doi.org/10.1155/2013/169035> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## **Non-invasive determination of uric acid in blood during hemodialysis with an optical spent dialysate sensor**

**Paats, Joosep; Arund, Jürgen; Adoberg, Annika; Holmar, Jana; Leis, Liisi; Luman, Merike; Pilt, Kristjan; Tanner, Risto; Fridolin, Ivo** 61st ERA Congress, 23-26 May 2024: Congress Abstracts 2024 / p. i1236 <https://doi.org/10.1093/ndt/gfae069.754>

## **Non-invasive optical estimation of intradialytic concentrations of uremic toxins in blood of hemodialysis patients**

**Paats, Joosep; Adoberg, Annika; Arund, Jürgen; Fridolin, Ivo; Holmar, Jana; Lauri, Kai; Leis, Liisi; Pilt, Kristjan; Tanner, Risto; Luman, Merike** Nephrology Dialysis Transplantation 2023 / art. #3367, p. i149-i150 : ill [https://doi.org/10.1093/ndt/gfad063b\\_3367](https://doi.org/10.1093/ndt/gfad063b_3367)

## **A novel physical fatigue assessment method utilizing heart rate variability and pulse arrival time towards personalized feedback with wearable sensors**

**Allik, Ardo; Pilt, Kristjan; Viigimäe, Moonika; Fridolin, Ivo; Jervan, Gert** Sensors 2022 / art. 1680 <https://doi.org/10.3390/s22041680> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## **Online urea concentration estimation from spent dialysate using optical sensor**

**Pilt, Kristjan; Arund, Jürgen; Adoberg, Annika; Leis, Liisi; Luman, Merike; Fridolin, Ivo** XV Mediterranean Conference on Medical and Biological Engineering and Computing - MEDICON 2019 : proceedings of MEDICON 2019, September 26–28, 2019, Coimbra, Portugal 2020 / p. 1459-1464 [https://doi.org/10.1007/978-3-030-31635-8\\_180](https://doi.org/10.1007/978-3-030-31635-8_180) [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

## **Online uric acid concentration estimation in blood from spent dialysate measurements using an optical sensor**

**Paats, Joosep; Arund, Jürgen; Pilt, Kristjan; Adoberg, Annika; Leis, Liisi; Luman, Merike; Holmar, Jana; Tanner, Risto; Fridolin, Ivo** 9th European Medical and Biological Engineering Conference : Proceedings of EMBEC 2024 ; Volume 2 2024 / p. 178 - 187 [https://doi.org/10.1007/978-3-031-61628-0\\_20](https://doi.org/10.1007/978-3-031-61628-0_20) [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

## **Optical pulse wave signal analysis for determination of early arterial ageing in diabetic patients = Optilise pulsilaine signaali analüüs arterite varase vananemise määramiseks diabeedihaigetel**

**Pilt, Kristjan** 2014 [https://www.ester.ee/record=b3049979\\*est](https://www.ester.ee/record=b3049979*est)

## **Optical real-time cardiorenal toxin uric acid measurement during hemodialysis using a miniaturized optical sensor**

**Holmar, Jana; Arund, Jürgen; Adoberg, Annika; Leis, Liisi; Luman, Merike; Paats, Joosep; Pilt, Kristjan; Tanner, Risto; Fridolin, Ivo** Proceedings of the Annual International Conference of the IEEE Engineering in Medicine and Biology Society, EMBS2023 2023 / 4 p. : ill <https://doi.org/10.1109/EMBC40787.2023.10340379> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

## **Optimization of physical activity recognition for real-time wearable systems : effect of window length, sampling frequency and number of features**

**Allik, Ardo; Pilt, Kristjan; Karai, Deniss; Fridolin, Ivo; Leier, Mairo; Jervan, Gert** Applied sciences 2019 / art. 4833, 14 p. : ill <https://doi.org/10.3390/app9224833> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## **Photoplethysmographic signal processing using adaptive sum comb filter for pulse delay measurement**

**Pilt, Kristjan; Meigas, Kalju; Ferenets, Rain; Kaik, Jüri** Estonian journal of engineering 2010 / 1, p. 78-94 : ill [https://artiklid.elnet.ee/record=b1964973\\*est](https://artiklid.elnet.ee/record=b1964973*est)

## **Photoplethysmographic signal rising front analysis for the discrimination of subjects with increased arterial ageing**

**Pilt, Kristjan; Meigas, Kalju; Kööts, Kristina; Viigimaa, Margus** Proceedings of the Estonian Academy of Sciences 2014 / p. 221-226 : ill

## **Photoplethysmographic signal waveform index for detection of increased arterial stiffness**

Pilt, Kristjan; **Ferenets, Rain**; Meigas, Kalju; **Temitski, Kristina**; **Viigimaa, Margus** Physiological measurement 2014 / p. 2027-2036 : ill <https://doi.org/10.1088/0967-3334/35/10/2027> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Pilot study for estimating physical fatigue based on heart rate variability and reaction time**

**Allik, Ardo**; Pilt, Kristjan; **Viigimäe, Moonika**; **Fridolin, Ivo** XV Mediterranean Conference on Medical and Biological Engineering and Computing -MEDICON 2019 : proceedings of MEDICON 2019, September 26–28, 2019, Coimbra, Portugal 2020 / p. 193-200 [https://doi.org/10.1007/978-3-030-31635-8\\_23](https://doi.org/10.1007/978-3-030-31635-8_23) [Conference proceeding at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

**POS-648 medicines intake influences accuracy of the uremic retention molecules' optical monitoring in spent dialysate : the case of uremic toxin uric acid and paracetamol**

**Paats, Joosep**; Adoberg, Annika; **Arund, Jürgen**; **Fridolin, Ivo**; **Holmar, Jana**; Leis, Liisi; **Pilt, Kristjan**; **Tanner, Risto**; **Uhlin, Nils Fredrik Arne**; **Luman, Merike** Kidney International Reports 2022 / p. S277-S278 : ill <https://doi.org/10.1016/j.ekir.2022.01.681>

**Possibility to use Finapres signal for the estimation of aortic pulse wave velocity [Electronic resource]**

**Pilt, Kristjan**; **Meigas, Kalju**; **Viigimaa, Margus**; **Temitski, Kristina** IFMBE proceedings ; Vol. 37 2011 / p. 524-527 : ill [CD-ROM] [https://link.springer.com/chapter/10.1007/978-3-642-23508-5\\_136](https://link.springer.com/chapter/10.1007/978-3-642-23508-5_136)

**Pulse wave registration from radial artery using photoplethysmographic method**

**Pilt, Kristjan**; **Leier, Mairo**; **Silluta, Sandra**; **Kööts, Kristina**; **Meigas, Kalju**; **Viigimaa, Margus** Conference proceedings : 37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society : Milan, Italy, August 25-29 2015 2015 / p. 6425-6428 : ill <https://doi.org/10.1109/EMBC.2015.7319863> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

**QT interval variability index and QT interval duration during different sleep stages in patients with obstructive sleep apnea**

**Viigimäe, Moonika**; **Karai, Deniss**; **Pilt, Kristjan**; Pirm, Peeter; Huhtala, Heini; Polo, Olli; **Meigas, Kalju**; **Kaik, Jüri** Sleep medicine 2017 / p. 160-167 : ill <https://doi.org/10.1016/j.sleep.2017.06.026> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**QT interval variability index and QT interval duration in different sleep stages : analysis of polysomnographic recordings in nonapneic male patients**

**Viigimäe, Moonika**; **Karai, Deniss**; Pirm, Peeter; **Pilt, Kristjan**; **Meigas, Kalju**; **Kaik, Jüri** BioMed Research International 2015 / art. 963028 <https://doi.org/10.1155/2015/963028> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Second derivative analysis of forehead photoplethysmographic signal in healthy volunteers and diabetes patients [Electronic resource]**

**Pilt, Kristjan**; **Meigas, Kalju**; **Temitski, Kristina**; **Viigimaa, Margus** World Congress on Medical Physics and Biomedical Engineering May 26-31, 2012, Beijing, China 2012 / p. 410-413 : ill [CD-ROM] [https://link.springer.com/chapter/10.1007/978-3-642-29305-4\\_109](https://link.springer.com/chapter/10.1007/978-3-642-29305-4_109) [https://doi.org/10.1007/978-3-642-29305-4\\_109](https://doi.org/10.1007/978-3-642-29305-4_109) [Conference Proceedings at Scopus](#) [Article at Scopus](#)

**Second derivative photoplethysmographic signal analysis of differences between fingers in healthy subjects [Online resource]**

**Pilt, Kristjan**; **Silluta, Sandra**; **Palmar, Merlin**; **Karai, Deniss**; **Meigas, Kalju**; **Viigimaa, Margus** BEC 2018 : 2018 16th Biennial Baltic Electronics Conference (BEC) : proceedings of the 16th Biennial Baltic Electronics Conference, October 8-10, 2018 2019 / 4 p.: ill <https://doi.org/10.1109/BEC.2018.8600985>

**Serum levels and removal by haemodialysis and haemodiafiltration of tryptophan-derived uremic toxins in ESKD patients**

**Paats, Joosep**; Adoberg, Annika; **Arund, Jürgen**; **Fridolin, Ivo**; Leis, Liisi; **Luman, Merike**; **Pilt, Kristjan**; **Uhlin, Nils Fredrik Arne** International journal of molecular sciences 2020 / art. 1522, 19 p. : ill <https://doi.org/10.3390/ijms21041522> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Smart photoplethysmographic sensor for pulse wave registration at different vascular depths**

**Leier, Mairo**; **Jervan, Gert**; **Pilt, Kristjan** Proceedings of the 8th Annual Conference of the Estonian National Doctoral School in Information and Communication Technologies : December 5-6, 2014, Rakvere 2014 / p. 67-70 : ill

**Smart photoplethysmographic sensor for pulse wave registration at different vascular depths**

**Leier, Mairo**; **Pilt, Kristjan**; **Karai, Deniss**; **Jervan, Gert** Conference proceedings : 37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society : Milan, Italy, August 25-29 2015 2015 / p. 1849-1852 : ill <https://doi.org/10.1109/EMBC.2015.7318741> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

**Stroke volume assessment by impedance cardiography : comparative analysis with transthoracic echocardiography**

**Silluta, Sandra**; **Pilt, Kristjan**; **Bischler, Elja**; **Kööts, Kristina**; **Meigas, Kalju**; **Viigimaa, Margus** EMBEC & NBC 2017 : joint conference of the European Medical and Biological Engineering Conference (EMBEC) and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics (NBC), Tampere, Finland, June 2017 2018 / p. 398-401 [https://doi.org/10.1007/978-981-10-5122-7\\_100](https://doi.org/10.1007/978-981-10-5122-7_100)

**The aortic pulse wave velocity estimation for arterial stiffness assessment**

**Pilt, Kristjan**; **Kööts, Kristina**; **Meigas, Kalju**; **Šamarin, Andrei**; **Zemtsovskaja, Galina**; **Viigimaa, Margus** 6th European

Conference of the International Federation for Medical and Biological Engineering, MBEC 2014, 7–11 September 2014, Dubrovnik, Croatia 2015 / p. 294-297 [https://doi.org/10.1007/978-3-319-11128-5\\_73](https://doi.org/10.1007/978-3-319-11128-5_73) [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

**The Association of pulse wave velocity with blood pressure and biochemical cardiovascular risk markers in young Tallinn adults**

Zemtsovskaja, Galina; **Pilt, Kristjan**; Albina, Jelena; Meigas, Kalju; Viigimaa, Margus Atherosclerosis 2019 / p. e167-e168 <https://doi.org/10.1016/j.atherosclerosis.2019.06.506>

**Time-averaged concentration estimation of uraemic toxins with different removal kinetics : a novel approach based on intradialytic spent dialysate measurements**

**Paats, Joosep**; Adoberg, Annika; **Arund, Jürgen**; Dhondt, Annemieke; Fernström, Anders; Glorieux, Griet; **Fridolin, Ivo**; **Holmar, Jana**; **Luman, Merike**; **Pilt, Kristjan** Clinical Kidney Journal 2023 / p. 735-744 : ill <https://doi.org/10.1093/ckj/sfac273> <https://academic.oup.com/ckj/article/16/4/735/6948331> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Treatment with paracetamol can interfere with the intradialytic optical estimation in spent dialysate of uric acid but not of indoxyl sulfate**

Adoberg, Annika; **Paats, Joosep**; **Arund, Jürgen**; Dhondt, Annemieke; **Fridolin, Ivo**; Glorieux, Griet; **Holmar, Jana**; Lauri, Kai; Leis, Liisi; **Luman, Merike**; **Pilt, Kristjan**; **Uhlén, Nils Fredrik Arne**; **Tanner, Risto** Toxins 2022 / art. 610 <https://doi.org/10.3390/toxins14090610> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Veresoonte optiline uurimine : [TTÜ Biomeditsiinitehnika instituudis]**

Pilt, Kristjan Studioosus 2011 / lk. 21