

### **Deep learning for detection of pavement distress using nonideal photographic images**

**Tepljakov, Aleksei; Riid, Andri; Pihlak, Rene; Vassiljeva, Kristina; Petlenkov, Eduard** 2019 42nd International Conference on Telecommunications and Signal Processing (TSP) 2019 / p. 195-200 : ill <https://doi.org/10.1109/TSP.2019.8769086>

### **Development of the model for the optical multiwavelength monitoring of creatinine in the spent dialysate**

**Tomson, Ruth; Fridolin, Ivo; Uhlin, Nils Fredrik Arne; Jerotskaja, Jana; Lauri, Kai; Luman, Merike** 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. 261-264 : ill

### **Dialysis dose and nutrition assessment by an optical method = Dialüüsravi doosi ja patsientide toitumuse hindamine optilise meetodiga**

**Luman, Merike** 2010 [https://www.ester.ee/record=b2599301\\*est](https://www.ester.ee/record=b2599301*est)

### **Elimination of uremic toxins during dialysis assessed with the optical and analytical methods = Ureemiliste toksiinide elimineerimise hindamine dialüüsravi optiliste ja analüütiliste meetoditega**

**Lauri, Kai** 2020 <https://digikogu.taltech.ee/et/Item/85965453-b6b4-4a1c-bdb6-8ebb28420fe9> Doktoritöö aitab hinnata jooksvalt neerudialüüsi tõhusust (novaator.err.ee, 15.09.2020)

### **Estimation of removed uremic toxin indoxyl sulphate during hemodialysis by using optical data of the spent dialysate**

**Holmar, Jana; Uhlin, Nils Fredrik Arne; Ferenets, Rain; Lauri, Kai; Tanner, Risto; Arund, Jürgen; Luman, Merike; Fridolin, Ivo** The 2013 35th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC) proceedings 2013 / p. 6707-6710 : ill <https://doi.org/10.1109/EMBC.2013.6611095> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

### **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](#)

### **Informatsiooni töötlemise optilised meetodid**

**Schults, Eduard** Side. Raadio. Televisioon : infoseeria 10 1973 / lk. 22-25 : ill [https://www.ester.ee/record=b1232303\\*est](https://www.ester.ee/record=b1232303*est)

### **Method of optical self-mixing for pulse wave transit time measurement in comparison with other methods and correlation with blood pressure**

**Meigas, Kalju; Lass, Jaanus; Kattai, Rain; Karai, Deniss; Kaik, Jüri** Coherence Domain Optical Methods and Optical Coherence Tomography in Biomedicine VIII : 26-28 January 2004, San Jose, California, USA 2004 / p. 444-453 : ill [https://www.spiedigitallibrary.org/conference-proceedings-of-spie/5316/1/Method-of-optical-self-mixing-for-pulse-wave-transit-time/10.1117/12.524273.full#\\_=\\_](https://www.spiedigitallibrary.org/conference-proceedings-of-spie/5316/1/Method-of-optical-self-mixing-for-pulse-wave-transit-time/10.1117/12.524273.full#_=_)

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**Märtson, Triin** 2010 [https://www.ester.ee/record=b2560827\\*est](https://www.ester.ee/record=b2560827*est)

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**Fridolin, Ivo** Estonian Science Foundation 2007 2008 / p. 23 : ill

### **Novel spent dialysate based optical methods: towards more universal dose quantification of haemodialysis = Uudsed dialüsaadipõhised optilised meetodid universaalsema hemodialüüsravi doosi määramiseks**

**Paats, Joosep** 2025 [https://www.ester.ee/record=b5753842\\*est](https://www.ester.ee/record=b5753842*est) <https://digikogu.taltech.ee/et/Item/f2808205-001d-45c0-93b9-725b09a49f95> <https://doi.org/10.23658/taltech.49/2025>

### **Optical and electrical methods for pulse wave transit time measurement and its correlation with arterial blood pressure**

**Lass, Jaanus; Meigas, Kalju; Kattai, Rain; Karai, Deniss; Kaik, Jüri; Rossmann, Mart** Proceedings of the Estonian Academy of Sciences. Engineering 2004 / 2, p. 123-136 : ill

### **Optical method for cardiovascular risk marker uric acid removal assessment during dialysis**

**Holmar, Jana; Fridolin, Ivo; Uhlin, Nils Fredrik Arne; Lauri, Kai; Luman, Merike** The scientific world journal 2012 / p. 1-8 : ill <https://pubmed.ncbi.nlm.nih.gov/22701094/>

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**Optical monitoring of uremic metabolites-fluorophores during dialysis : the cases of [beta]-2-microglobulin, pentosidine, and 4-pyridoxic acid = Ureemiliste metaboliitide-fluorofooride optiline jälgimine dialüüsi jooksul: [beta]-2-mikroglobuliini, pentosidiini ja 4-püridokshappe näited**

Kalle, Sigrid 2018 <https://digi.lib.ttu.ee/i/?11057> [https://www.ester.ee/record=b5159591\\*est](https://www.ester.ee/record=b5159591*est)

**Pulse parameters registration using self-mixing in a diode laser as optical coherent method**

Meigas, Kalju; Kattai, Rain; Lass, Jaanus Medical & biological engineering & computing 1999 / Suppl. 1, Proceedings of the 11th Nordic-Baltic Conference on Biomedical Engineering, June 6-10, 1999, Tallinn, Estonia, p. 93-96: ill

**Quantification of corona discharge intensity applied to sphere-plane configurations**

Gupta, Pradeep Kumar; Ruiz, Jordi-Roger Riba; Tuttelberg, Kaur; Kilter, Jako IEEE Transactions on Dielectrics and Electrical Insulation 2025 <https://doi.org/10.1109/TDEI.2025.3562196>

**A two-stream context-aware ConvNet for pavement distress detection**

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