

Behaviour of uremic toxins and UV absorbance in respect to low and high flux dialyzers

Lauri, Kai; Arund, Jürgen; Tanner, Risto; Jerotskaja, Jana; Luman, Merike; Fridolin, Ivo Estonian journal of engineering 2010 / 1, p. 95-106 : ill

Benefit from lipoprotein apheresis in severe case of coronary heart disease patient with high level of lipoprotein (a)

Zemtsovski, Mihhail; Zemtsovskaja, Galina; Pikta, Marika; Luman, Merike; Viigimaa, Margus Cardiology 2015 / p. 35-36
<https://www.karger.com/Article/Abstract/431110>

Brain-to-brain loop concept in application to porphyrias : 10-year experience at North Estonia Medical Centre

Zemtsovskaja, Galina; Pikta, Marika; Borissova, Julia; Pille, Viive; Luman, Merike; Viigimaa, Margus Eesti Arst 2016 / p. 61
<http://ojs.utlib.ee/index.php/EA/article/viewFile/12917/8000> http://www.ester.ee/record=b4600434*est

Combined displacer-enhanced removal of protein-bound uremic toxins estimated in spent dialysate

Adoberg, Annika; Leis, Liisi; Uhlin, Nils Fredrik Arne; Arund, Jürgen; Segelmark, Marten; Fernström, Anders; Luman, Merike; Fridolin, Ivo Kidney International Reports 2019 / art.: MON-105 ; p. S347 <https://doi.org/10.1016/j.ekir.2019.05.895>

Could urea in spent dialysate be a marker for monitoring removal of 4-pyridoxic acid?

Kalle, Sigrid; Tanner, Risto; Arund, Jürgen; Tomson, Ruth; Luman, Merike; Fridolin, Ivo XIII Baltic Nephrology Conference : October 13-15, 2016, Jurmala, Latvia : final programme 2016 / p. 6 <http://nefrologs.lv/wp-content/uploads/2016/10/XIII-BNC.pdf>

Development of a method for optical monitoring of creatinine in the spent dialysate

Tomson, Ruth; Uhlin, Nils Fredrik Arne; Holmar, Jana; Lauri, Kai; Luman, Merike; Fridolin, Ivo Estonian journal of engineering 2011 / 2, p. 140-150 : ill

Development of an optical monitoring technology for urea rebound assessment

Tomson, Ruth; Fridolin, Ivo; Luman, Merike The 10th International Conference on Bioelectromagnetism : proceedings 2015 / [4] p. : ill

Development of an optical monitoring technology for urea rebound assessment

Tomson, Ruth; Fridolin, Ivo; Luman, Merike International journal of bioelectromagnetism 2015 / p. 52-56 : ill

Development of the model for the optical monitoring of urea in spent dialysate

Tomson, Ruth; Fridolin, Ivo; Uhlin, Nils Fredrik Arne; Holmar, Jana; Lauri, Kai; Luman, Merike BEC 2012 : 2012 13th Biennial Baltic Electronics Conference : proceedings of the 13th Biennial Baltic Electronics Conference : October 3-5, 2012, Tallinn, Estonia 2012 / p. 179-182 : ill

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

The effect of Kt/V on post dialysis urea rebound in hemodialysis and hemodiafiltration

Tomson, Ruth; Fridolin, Ivo; Luman, Merike; Holmar, Jana Nephrology dialysis transplantation 2016 / p. i490
<https://doi.org/10.1093/ndt/gfw194.3>

Estimation of dialysis patients' survival through combined approach of small molecule uremic markers

Holmar, Jana; Fridolin, Ivo; Uhlin, Nils Fredrik Arne; Fernström, Anders; Luman, Merike Proceedings of the Estonian Academy of Sciences 2014 / p. 227-233 : ill https://artiklid.elnet.ee/record=b2680559*est

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

Estimation of the influence of K/V on post dialysis urea rebound in HD and HDF with traditional and optical methods

Tomson, Ruth; Fridolin, Ivo; Luman, Merike XIII Baltic Nephrology Conference : October 13-15, 2016, Jurmala, Latvia : final programme 2016 / p. 2 <http://nefrologs.lv/wp-content/uploads/2016/10/XIII-BNC.pdf>

4-pyridoxic acid in the spent dialysate : contribution to fluorescence and optical monitoring

Kalle, Sigrid; Tanner, Risto; Arund, Jürgen; Tomson, Ruth; Luman, Merike; Fridolin, Ivo PLoS ONE 2016 / art. e0162346, p. 1-11 : ill <http://dx.doi.org/10.1371/journal.pone.0162346>

Free fraction of protein-bound uremic solutes in case of different dialysis modalities

Arund, Jürgen; Tanner, Risto; Luman, Merike; Fridolin, Ivo XIII Baltic Nephrology Conference : October 13-15, 2016, Jurmala, Latvia : final programme 2016 / p. 17 <http://nefrologs.lv/wp-content/uploads/2016/10/XIII-BNC.pdf>

Free pentosidine assessment based on fluorescence measurements in spent dialysate

Kalle, Sigrid; Tanner, Risto; Luman, Merike; Fridolin, Ivo Blood Purification 2019 / p. 85–93 <https://doi.org/10.1159/000493522>
[Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Interrelationship between protein bound uremic toxin indoxyl sulfate concentration 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>

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>

Investigation of porphyrias : 10-year experience at the North Estonia Medical Centre

Zemtsovskaja, Galina; Pikta, Marika; Borissova, Julia; Pille, Viive; Luman, Merike; Viigimaa, Margus Eesti Arst 2016 / p. 61
<http://ojs.utlib.ee/index.php/EA/article/viewFile/12917/8000> http://www.estar.ee/record=b4600434*est

Is fluorescence valid to monitor removal of protein bound uremic solutes in dialysis?

Arund, Jürgen; Luman, Merike; Uhlin, Nils Fredrik Arne; Tanner, Risto; Fridolin, Ivo PLoS ONE 2016 / art. e0156541, p. 1-12 : ill <https://doi.org/10.1371/journal.pone.0156541>

Kroonilise neeruhaiguse ennetus ja käsitus

Luman, Merike Eesti Arst 2017 / lk. 195-198 http://www.estar.ee/record=b1072028*est

Lean body mass assessment based on UV-absorbance in spent dialysate

Tomson, Ruth; Fridolin, Ivo; Luman, Merike BEC 2014 : 2014 14th Biennial Baltic Electronics Conference : proceedings of the 14th Biennial Baltic Electronics Conference : Tallinn University of Technology, October 6-8, 2014, Tallinn, Estonia 2014 / p. 185-188 : ill

Nutrition estimation of dialysis patients by on-line monitoring and kinetic modelling

Fridolin, Ivo; Lauri, Kai; Jerotskaja, Jana; Luman, Merike Estonian journal of engineering 2008 / p. 177-188 : ill
https://artiklid.elnet.ee/record=b1022244*est

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 [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Optical assessment of calcification markers phosphorus and calcium during hemodialysis

Holmar, Jana; Uhlin, Nils Fredrik Arne; Fernström, Anders; Luman, Merike; Jankowski, Joachim; Fridolin, Ivo Nephrology Dialysis Transplantation 2015 / iii556 <https://doi.org/10.1093/ndt/gfv197.03>

Optical dialysis adequacy monitoring: small uremic toxins and contribution to UV-absorbance studied by HPLC

Lauri, Kai; Arund, Jürgen; Holmar, Jana; Tanner, Risto; Luman, Merike; Fridolin, Ivo Progress in hemodialysis - from emergent biotechnology to clinical practice 2011 / p. 143-160 : ill <https://www.intechopen.com/chapters/21275>

Optical measurement of creatinine in spent dialysate

Tomson, Ruth; Fridolin, Ivo; Uhlin, Nils Fredrik Arne; Holmar, Jana; Lauri, Kai; Luman, Merike Clinical nephrology 2013 / p. 107-117 : ill

Optical method and biochemical source for the assessment of the middle-molecule uremic toxin β 2-microglobulin in spent dialysate

Paats, Joosep; Adoberg, Annika; Arund, Jürgen; Fridolin, Ivo; Lauri, Kai; Leis, Liisi; Luman, Merike; Tanner, Risto Toxins 2021 / art. 255, 15 p. : ill <https://doi.org/10.3390/toxins13040255> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

Optical on-line monitoring of a displacer-chromophore administration during a dialysis treatment

Arund, Jürgen; Adoberg, Annika; Leis, Liisi; Luman, Merike; Uhlin, Nils Fredrik Arne; Segelmark, Marten; Fernström, Anders; Fridolin, Ivo Kidney International Reports 2019 / p. S340-S341 <https://doi.org/10.1016/j.ekir.2019.05.879>

Paracetamol interferes uric acid levels in uraemic patients revealed by monitoring spent dialysate

Tanner, Risto; Arund, Jürgen; Fridolin, Ivo; Luman, Merike ISRN nephrology 2013 / p. 1-4 : ill

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>

Reduction of urea and indoxyl sulphate concentration during different dialysis treatment modalities

Holmar, Jana; Luman, Merike; Arund, Jürgen; Lauri, Kai; Tomson, Ruth; Tanner, Risto; Kalle, Sigrid; Fridolin, Ivo International journal of artificial organs 2016 / p. 379 <http://dx.doi.org/10.5301/ijao.5000508>

Removal estimation of uremic CVD marker phosphate in dialysis using spectrophoto- and fluorimetric signals

Holmar, Jana; Arund, Jürgen; Kalle, Sigrid; Lauri, Kai; Luman, Merike; Tanner, Risto; Tomson, Ruth; Fridolin, Ivo 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. 358-361 : ill https://doi.org/10.1007/978-981-10-5122-7_90

Removal of phosphate as the trigger of vascular calcification by different dialysis treatment modalities

Holmar, Jana; Jankowski, Joachim; Fridolin, Ivo; Alampour-Rajabi, Setareh; Luman, Merike Nephrology dialysis transplantation 2018 / p. i224 : ill <https://doi.org/10.1093/ndt/gfy104.FP548>

Removal of Urea, beta 2-Microglobulin, and Indoxyl Sulfate Assessed by Absorbance and Fluorescence in the Spent Dialysate During Hemodialysis

Lauri, Kai; Arund, Jürgen; Holmar, Jana; Tanner, Risto; Kalle, Sigrid; Luman, Merike; Fridolin, Ivo Asaio journal 2020 / p. 695-705 <https://doi.org/10.1097/MAT.0000000000001058> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Removal of vascular calcification inducer phosphate in different dialysis treatment modalities

Holmar, Jana; Fridolin, Ivo; Luman, Merike World Congress on Medical Physics and Biomedical Engineering 2018 : June 3-8, 2018, Prague, Czech Republic (Vol. 3) 2019 / p. 143-147 https://doi.org/10.1007/978-981-10-9023-3_26 [Conference proceeding at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

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](#)

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>

Total removed beta 2-microglobulin and urea during different dialysis treatment modalities

Holmar, Jana; Luman, Merike; Lauri, Kai; Fridolin, Ivo XIII Baltic Nephrology Conference : October 13-15, 2016, Jurmala, Latvia : final programme 2016 / p. 21-22 : ill <http://nefrologs.lv/wp-content/uploads/2016/10/XIII-BNC.pdf>

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**; **Uhlen, 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](#)