

Assessing tissue hydration dynamics based on water/fat separated MRI

Karlsson, Markus; Indurain, Ainhoa; Romu, Thobias; Tunon, Patrik; Segelmark, Marten; **Uhlen, Nils Fredrik Arne**; Fernström, Anders; Dahlqvist Leinhard, Olof Journal of magnetic resonance imaging 2023 / p. 652-660 <https://doi.org/10.1002/jmri.28581> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Can removal of middle molecular uremic retention solutes be estimated by UV-absorbance measurements in spent dialysate?

Lauri, Kai; Luman, Merike; Holmar, Jana; Tomson, Ruth; Kalle, Sigrid; Arund, Jürgen; Uhlin, Nils Fredrik Arne; Fridolin, Ivo World Congress on Medical Physics and Biomedical Engineering, June 7–12, 2015, Toronto, Canada 2015 / p. 1297 - 1300 https://doi.org/10.1007/978-3-319-19387-8_315 [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Cognitive disorders in patients with chronic kidney disease : approaches to prevention and treatment

Pepin, Marion; Klimkowicz-Mrowiec, Aleksandra; Godefroy, Oliver; Delgado, Pilar; Carriazo, Sol; Ferreira, Ana Carina; Golenia, Aleksandra; Malyszko, Jolanta; Grodzicki, Tomasz; Giannakou, Konstantino; Andrade, Alexandre; **Bachmann, Maie; Fridolin, Ivo** European Journal of Neurology 2023 / p. 2899-2911 : ill <https://doi.org/10.1111/ene.15928>

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

Adoberg, Annika; Leis, Liisi; **Uhlen, 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>

Comparison of protein-bound uremic toxins indoxyl sulfate and indole acetic acid reduction ratios in blood and spent dialysate during haemodialysis with different modalities

Leis, Liisi; Adoberg, Annika; Paats, Joosep; Tanner, Risto; Fridolin, Ivo XVII Baltic Nephrology Conference, Tartu, Estonia, October 3rd-5th, 2024 : Abstracts 2024 / 1 p <https://balticnephrology2024.eu/abstracts>

Context Factors Facilitating and Hindering Patient Participation in Dialysis Care: A Focus Group Study With Patients and Staff

Årestedt, Liselott; Martinsson, Caroline; Hjelm, Carina; **Uhlen, Nils Fredrik Arne**; Eldh, Ann Catrine Worldviews on evidence-based nursing 2020 / p. 457-464 <https://doi.org/10.1111/wn.12452>

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 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 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>

Estimating total urea removal and protein catabolic rate by monitoring UV absorbance in spent dialysate

Uhlen, Nils Fredrik Arne; Fridolin, Ivo; Lindberg, Lars-Göran; Magnusson, Martin Nephrology dialysis transplantation 2005 / 11, p. 2458-2464 <https://pubmed.ncbi.nlm.nih.gov/16077147/>

Estonian professor introduces an artificial kidney therapy monitoring platform [Online resource]

Petrone, Justin estonianworld.com 2021 ["Estonian professor introduces an artificial kidney therapy monitoring platform"](#)

Fluorescence of Beta-2-microglobulin in the spent dialysate

Kalle, Sigrid; Kressa, H.; Tanner, Risto; Holmar, Jana; Fridolin, Ivo 16th Nordic-Baltic Conference on Biomedical Engineering : 16. NBC & 10. MTD 2014 Joint Conferences, October 14-16, 2014, Gothenburg, Sweden 2015 / p. 59-62 : ill https://doi.org/10.1007/978-3-319-12967-9_16 [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

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 <https://doi.org/10.1371/journal.pone.0162346> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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](#)

HPLC study of uremic toxins in the spent dialysate

Lauri, Kai; Tanner, Risto; Arund, Jürgen; Fridolin, Ivo NoSSS2009 : 5th Conference on Separation and Related Techniques by Nordic Separation Science Society : 26-29 August, 2009, Tallinn University of Technology, Estonia : abstract book and program 2009 / p. 109

In the backwater of convective dialysis: Decreased 25-hydroxyvitamin D levels following the switch to online hemodiafiltration

Uhlen, Nils Fredrik Arne; Magnusson, Per; Larsson, Tobias E.; Fernström, Anders Clinical nephrology 2015 / p. 315-321 : ill <https://doi.org/10.5414/CN108468> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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 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>

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

Arund, Jürgen; Luman, Merike; **Uhlen, Nils Fredrik Arne; Tanner, Risto; Fridolin, Ivo** PLoS ONE 2016 / art. e0156541, p. 1-12 : ill <https://doi.org/10.1371/journal.pone.0156541> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

K2- step-by-step protocol for performing in vitro and ex vivo experiments of vascular calcification

Holmar, Jana; Noels, Heidi; Jankowski, Joachim; Orth-Alampour, Setareh The International Journal of Artificial Organs 2021 <https://doi.org/10.1177%2F03913988211038230>

LDL-aferees väljendunud hüperkolesteroleemia ravis

Viigimaa, Margus; Väikmann, Reet Eesti Arst 2006 / 8, lk. 523-528 : ill https://artiklid.elnet.ee/record=b1055628*est

Long-term follow-up of biomarkers of vascular calcification after switch from traditional hemodialysis to online hemodiafiltration

Uhlen, Nils Fredrik Arne; Fernström, Anders; Knapen, Marjo H.J.; Vermeer, Cees; Magnusson, Per Scandinavian journal of clinical & laboratory investigation 2019 / p. 174-181 <https://doi.org/10.1080/00365513.2019.1576218> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Major chromophores and fluorophores in the spent dialysate as cornerstones for optical monitoring of kidney replacement therapy = Peamised kromofoorid ja fluorofoorid heitdialüsaadis neeruasendusravi optilise monitooringu nurgakividena

Arund, Jürgen 2016 http://www.ester.ee/record=b4574893*est

Meditsiinitehnika - terviseinseneering

Hinrikus, Hiie; Lass, Jaanus; Meigas, Kalju; Fridolin, Ivo Teadusmõtte Eestis. 4, Tehnikateadused. 2 2007 / lk. 17-25 : ill

New optical method for estimation of protein bound uremic toxins elimination

Holmar, Jana; Arund, Jürgen; Uhlin, Fredrik; Tanner, Risto; Fridolin, Ivo World Congress on Medical Physics and Biomedical Engineering May 26-31, 2012, Beijing, China 2013 / p. 71-74 https://doi.org/10.1007/978-3-642-29305-4_20 [Conference Proceedings at Scopus](#) [Article at Scopus](#)

Novel method for dialysis monitoring : "Estimation of dialysis quality and adequacy with a new optical technique", ETF research project 2004-2006

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

On-line monitoring of dialysis adequacy using diasens optical sensor: accurate Kt/V estimation by smoothing algorithms

Talisainen, Aleksei; Kostin, Sergei; Karai, Deniss; Fridolin, Ivo; Ubar, Raimund-Johannes 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. 273-276 : ill

On-line monitoring of the spent dialysate during haemodialysis using UV-absorbance

Uhlin, Nils Fredrik Arne; **Fridolin, Ivo** Proceedings of the 34th International Conference of EDTNA/ERCA : Wien, Austria, 2005. 1 2005 / p. 46

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>

An optical method for serum calcium and phosphorus level assessment during Hemodialysis

Holmar, Jana; Uhlin, Fredrik; Fernström, Anders; Luman, Merike; Jankowski, Joachim; **Fridolin, Ivo** Toxins 2015 / p. 719-727 <https://doi.org/10.3390/toxins7030719> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Optical monitoring of dialysis dose

Uhlin, Nils Fredrik Arne; **Fridolin, Ivo** Modeling and control of dialysis systems. Vol. 2, Biofeedback systems and soft computing techniques of dialysis 2013 / p. 867-928 : ill https://doi.org/10.1007/978-3-642-27558-6_3 [Article collection metrics at Scopus](#) [Article at Scopus](#)

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/ii/211057> https://www.estel.ee/record=b5159591*est

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>

Patient participation in dialysis care - A qualitative study of patients' and health professionals' perspectives

Årestedt, Liselott; Martinsson, Caroline; Hjelm, Carina; Uhlin, Nils Fredrik Arne; Eldh, Ann Catrine Health expectations 2019 / p. 1285-1293 <https://doi.org/10.1111/hex.12966> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Protein catabolic rate estimated by on-line monitoring of the UV-absorbance in the spent dialysate

Uhlin, Nils Fredrik Arne; **Fridolin, Ivo** American Society of Nephrology 37th Annual Meeting and Scientific exposition : St.Louis, Missouri, USA, 2004 2004 / [1] p <https://liu.diva-portal.org/smash/record.jsf?pid=diva2%3A249543&dsid=-4914>

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](#)

Sleep quality, fatigue, and health-related quality of life in patients on initial peritoneal dialysis and multiple modalities after two years : a prospective study

Yngman-Uhlin, Pia; Kjellsdotter, Anna; Uhlin, Nils Fredrik Arne; Edell-Gustafsson, Ulla Nephrology nursing journal 2019 / p. 615-649 <https://library.annanurse.org/anna/articles/2494/view>

The IgG-degrading enzyme of Streptococcus pyogenes causes rapid clearance of anti-glomerular basement membrane antibodies in patients with refractory anti-glomerular basement membrane disease

Soveri, Inga; Molne, Johan; Uhlin, Nils Fredrik Arne; Nilsson, Thomas; Kjellman, Christian; Sonesson, Elisabeth; Segelmark, Marten Kidney International 2019 / p. 1234-1238 <https://doi.org/10.1016/j.kint.2019.06.019> [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> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

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>

Total removed uric acid during dialysis estimated by on-line ultra violet absorbance in the spent dialysate [Electronic resource]

Uhlén, Nils Fredrik Arne; Lindberg, Lars-Göran; **Fridolin, Ivo** IFMBE proceedings 2005 / [6] p. [CD-ROM]

https://www.academia.edu/86162834/Total_removed_uric_acid_during_dialysis_estimated_by_on_line_ultra_violet_absorbance_in_the_spent_dialysate

Uudne meetod neeruasendusravi paremaks jälgimiseks : Eesti Teadusfondi projekt "Uudne optiline tehnika dialüüsi kvaliteedi jälgimiseks ja hindamiseks", 2004-2006

Fridolin, Ivo Eesti Teadusfondi aastaraamat 2007 2008 / lk. 23 : ill