

**Acquisition of O<sub>2</sub> adsorption isotherms as supplementary analysis for thorough characterization of polycrystalline titanium dioxide photocatalysts**

Moiseev, Anna; **Kritševskaja, Marina; Klauson, Deniss** 20th International Conference on Photochemical Conversion and Storage of Solar Energy : Berlin, Germany, July 27th-August 1st, 2014 2014 / p. 85

**Advanced chemical oxidation with pre-coagulation for treatment of paint manufacturing wastewater**

**Kattel, Eneliis; Viisimaa, Marika; Klauson, Deniss; Trapido, Marina; Dulova, Niina** Proceedings of the International Conference on Advances In Applied Science and Environmental Engineering - ASEE 2014 2014 / p. 38-43 : ill

**Advanced oxidation processes for sulfonamide antibiotic sulfamethizole degradation : Process applicability study at ppm level and scale-down to ppb level**

**Klauson, Deniss;** Romero Sarcos, Natalja; **Kritševskaja, Marina; Kattel, Eneliis; Dulova, Niina; Dedova, Tatjana; Trapido, Marina** Journal of environmental chemical engineering 2019 / art. 103287, 8 p. : ill <https://doi.org/10.1016/j.jece.2019.103287> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

**Air quality as an important indicator for ergonomic offices and school premises**

Traumann, Ada; **Kritševskaja, Marina; Tint, Piia; Klauson, Deniss** Agronomy research 2014 / p. 925-934 : ill

**Aqueous photocatalytic degradation of selected micropollutants by Pd-modified titanium dioxide**

**Klauson, Deniss; Šakarašvili, Marko; Pronina, Natalja; Kritševskaja, Marina; Kärber, Erki; Mikli, Valdek** European Conference on Environmental Applications of Advanced Oxidation Processes : 21-24 October 2015, Athens, Greece : conference program and book of abstracts 2015 / p. 126 : ill

**Aqueous photocatalytic degradation of selected micropollutants by Pd-modified titanium dioxide**

**Klauson, Deniss; Šakarašvili, Marko; Pronina, Natalja; Kritševskaja, Marina; Kärber, Erki; Mikli, Valdek** European Conference on Environmental Applications of Advanced Oxidation Processes : 21-24 October 2015, Athens, Greece : book of proceedings 2015 / [3] p. : ill

**Aqueous photocatalytic degradation of selected micropollutants by Pd-modified titanium dioxide in three photoreactor types**

**Klauson, Deniss; Šakarašvili, Marko; Pronina, Natalja; Kritševskaja, Marina; Kärber, Erki; Mikli, Valdek** Environmental technology 2017 / p. 860-871 : ill <https://doi.org/10.1080/09593330.2016.1214185>

**Aqueous photocatalytic oxidation of amoxicillin**

**Klauson, Deniss; Babkina, J.; Stepanova, Kristina; Kritševskaja, Marina; Preis, Sergei** Proceedings of the 2nd European Conference on Environmental Applications of Advanced Oxidation Technologies (EAAOP-2): Nicosia, Cyprus, September 9-11, 2009 2009 / [12] p

**Aqueous photocatalytic oxidation of amoxicillin**

**Klauson, Deniss; Babkina, J.; Stepanova, Kristina; Kritševskaja, Marina; Preis, Sergei** Catalysis today 2010 / 1/2, p. 39-45

**Aqueous photocatalytic oxidation of doxycycline**

**Klauson, Deniss; Poljakova, Alissa; Pronina, Natalja; Kritševskaja, Marina; Moiseev, Anna; Dedova, Tatjana; Preis, Sergei** Journal of advanced oxidation technologies 2013 / p. 234-243

**Aqueous photocatalytic oxidation of doxycycline**

**Kritševskaja, Marina; Klauson, Deniss; Pronina, Natalja; Poljakova, Alissa; Preis, Sergei** Abstracts of papers of the American Chemical Society. Vol. 245 2013 / [1] p

**Aqueous photocatalytic oxidation of non-biodegradable pollutants = Bioloogiliselt mittelagunevate saasteainete fotokatalüütiline oksüdatsioon vesifaasis**

**Klauson, Deniss** 2010 <https://digi.lib.ttu.ee/i/?479> [https://www.esther.ee/record=b2595245\\*est](https://www.esther.ee/record=b2595245*est)

**Aqueous photocatalytic oxidation of oxygenated fuel additives using sulphur-doped titania**

**Klauson, Deniss; Preis, Sergei** The 8th European Meeting on Environmental Chemistry (EMEC8) : Inverness, England, 05-08 December 2007 : book of abstracts and final programme 2007 / p. 46

**Aqueous photocatalytic oxidation of prednisolone**

**Klauson, Deniss; Pilnik-Sudareva, Jana; Pronina, Natalja; Budarnaja, Olga; Kritševskaja, Marina; Käkinen, Aleksandr; Juganson, Katre; Preis, Sergei** Central European journal of chemistry 2013 / p. 1620-1633 : ill

**Aqueous photocatalytic oxidation of prednisolone**

**Klauson, Deniss; Pilnik-Sudareva, Jana; Budarnaja, Olga; Kritševskaja, Marina; Kuljasova, Julia; Käkinen, Aleksandr; Juganson, Katre; Preis, Sergei** Abstracts of papers of the American Chemical Society. Vol. 245 2013 / [1] p

## Aqueous photocatalytic oxidation of sulfamethizole

**Klauson, Deniss; Kritševskaja, Marina; Borissova, Maria; Preis, Sergei** The 5th European Meeting on Solar Chemistry and Photocatalysis : Environmental Applications (SPEA5) : 04-08 October 2008, Palermo, Italy : book of abstracts 2008 / p. PP2.18

## Aqueous photocatalytic oxidation of sulfamethizole

**Klauson, Deniss; Kritševskaja, Marina; Borissova, Maria; Preis, Sergei** Environmental technology 2010 / 14, p. 1547-1555 : ill

## Bio-recalcitrant pollutants removal from wastewater with combination of the Fenton treatment and biological oxidation

**Trapido, Marina; Tenno, Taavo; Goi, Anna; Dulova, Niina; Kattel, Eneliis; Klauson, Deniss; Klein, Kati; Tenno, Toomas; Viisimaa, Marika** Journal of water process engineering 2017 / p. 277-282 : ill <https://doi.org/10.1016/j.jwpe.2017.02.007>

## Bio-recalcitrant pollutants removal from wastewater with combination of the Fenton treatment and biooxidation

**Trapido, Marina; Tenno, Taavo; Goi, Anna; Dulova, Niina; Klauson, Deniss; Kattel, Eneliis; Viisimaa, Marika; Kivi, Arthur; Klein, Kati** 20th International Scientific Conference EcoBalt 2016 : Tartu, Estonia, October 9-12 : book of abstracts 2016 / p. 24 : ill [http://akki.ut.ee/wp-content/uploads/2015/01/Abstracts\\_Book\\_EcoBalt\\_2016.pdf](http://akki.ut.ee/wp-content/uploads/2015/01/Abstracts_Book_EcoBalt_2016.pdf)

## Bio-recalcitrant pollutants removal from wastewater with combination of the Fenton treatment and biooxidation

**Trapido, Marina; Tenno, Taavo; Goi, Anna; Dulova, Niina; Kattel, Eneliis; Kivi, Arthur; Klauson, Deniss; Klein, Kati; Viisimaa, Marika** European Conference on Environmental Applications of Advanced Oxidation Processes : 21-24 October 2015, Athens, Greece : conference program and book of abstracts 2015 / p. 111 : ill

## Bio-recalcitrant pollutants removal from wastewater with combination of the Fenton treatment and biooxidation

**Trapido, Marina; Tenno, Taavo; Goi, Anna; Dulova, Niina; Kattel, Eneliis; Kivi, Arthur; Klauson, Deniss; Klein, Kati; Viisimaa, Marika** European Conference on Environmental Applications of Advanced Oxidation Processes : 21-24 October 2015, Athens, Greece : book of proceedings 2015 / [3] p. : ill

## Chemical oxidation for the treatment of oil shale industry effluent : treatment strategies optimization

**Bolobajev, Juri; Viisimaa, Marika; Klauson, Deniss; Goi, Anna; Trapido, Marina** Ozone and related oxidants in : safe water along its cycle : April 23–24, 2013, Berlin, Germany 2013 / 2.8-1-2.8-8

## Combined methods for the treatment of a typical hardwood soaking basin wastewater from plywood industry

**Klauson, Deniss; Klein, Kati; Kivi, Arthur; Kattel, Eneliis; Viisimaa, Marika; Dulova, Niina; Velling, Siiri; Trapido, Marina; Tenno, Taavo** International journal of environmental science and technology 2015 / p. 3575-3586 : ill <http://dx.doi.org/10.1007/s13762-015-0777-2>

## Combined processes for the treatment of a typical hardwood soaking basin wastewater from plywood industry

**Klauson, Deniss; Viisimaa, Marika; Kattel, Eneliis; Trapido, Marina; Kivi, Arthur; Klein, Kati; Velling, S.; Tenno, Taavo** Abstracts book : International Congress on Water, Waste and Energy Management : 16th-18th July 2014, Porto, Portugal 2014 / p. 33

## Combined processes for wastewater purification : treatment of a typical landfill leachate with a combination of chemical and biological oxidation processes

**Klauson, Deniss; Kivi, Arthur; Kattel, Eneliis; Klein, Kati; Viisimaa, Marika; Bolobajev, Juri; Velling, Siiri; Goi, Anna; Tenno, Taavo; Trapido, Marina** Journal of chemical technology and biotechnology 2015 / p. 1527-1536 : ill <http://dx.doi.org/10.1002/jctb.4484>

## Comparison of different advanced oxidation processes for sulphonamethizole degradation : process applicability study at mg L-1 level and scale-down to µg L-1 level

**Klauson, Deniss; Grimm, F.; Pronina, Natalja; Viisimaa, Marika; Dulova, Niina** 5th European Conference on Environmental Applications of Advanced Oxidation Processes (EAAOP5) : book of abstracts 2017 / p. 401 [https://photocatalysis.org/events/901/photo/book\\_of\\_proceedings\\_eaaop5\\_prague.pdf](https://photocatalysis.org/events/901/photo/book_of_proceedings_eaaop5_prague.pdf)

## Degradation of environmentally toxic refractory compounds in suspended-bed reactor by photocatalytic oxidation and combination of biological treatment with photocatalysis [Online resource]

**Pronina, Natalja; Klauson, Deniss; Kamenev, Sven; Kamenev, Inna; Rudenko, Tatjana; Künnis-Beres, Kai; Moiseev, Anna; Kritševskaja, Marina** Tartu Ülikooli ASTRA projekt PER ASPERA : Funktsionaalsed materjalid ja tehnoloogiad : [7-8 märts 2017, Tartu : teesid] 2017 / [1] p. : ill <http://fmtdk.ut.ee/teesid/>

## Elimination of persistent emerging micropollutants in a suspended-bed photocatalytic reactor : influence of operating conditions and combination with aerobic biological treatment

**Pronina, Natalja; Klauson, Deniss; Rudenko, Tatjana; Künnis-Beres, Kai; Kamenev, Inna; Kamenev, Sven; Moiseev, Anna; Deubener, Joachim; Kritševskaja, Marina** Photochemical & photobiological sciences 2016 / p. 1492-1502 : ill <http://doi.org/10.1039/C6PP00319B>

## Fluidized-bed photocatalytic reactor : influence of operating conditions on the elimination of persistent emerging micropollutants

**Pronina, Natalja; Klauson, Deniss; Kamenev, Sven; Rudenko, Tatjana; Künnis-Beres, Kai; Moiseev, Anna; Deubener, Joachim; Kritševskaja, Marina** European Conference on Environmental Applications of Advanced Oxidation Processes : 21-24 October 2015, Athens, Greece : conference program and book of abstracts 2015 / p. 124 : ill

**Fluidized-bed photocatalytic reactor : influence of operating conditions on the elimination of persistent emerging micropollutants**

Pronina, Natalja; Klauson, Deniss; Kamenev, Sven; Rudenko, Tatjana; Künnis-Beres, Kai; Moiseev, Anna; Deubener, Joachim; Kritševskaja, Marina European Conference on Environmental Applications of Advanced Oxidation Processes : 21-24 October 2015, Athens, Greece : book of proceedings 2015 / [1] p. : ill

**Gas-phase photocatalytic activity of nanostructured titanium dioxide from diffusion flame synthesis**

Jöks, Svetlana; Klauson, Deniss; Kritševskaja, Marina; Preis, Sergei; Moiseev, Anna; Qi, F.; Deubener, Joachim; Weber, Alfred Photocatalytic and Advanced Oxidation Technologies for Treatment of Water, Air, Soil and Surfaces (PAOT) : Gdansk, Poland, 4-8 July, 2011 : abstracts 2011 / p. 62

**Gas-phase photocatalytic activity of nanostructured titanium dioxide from flame aerosol synthesis**

Jöks, Svetlana; Klauson, Deniss; Kritševskaja, Marina; Preis, Sergei; Qi, Fei; Weber, Alfred; Moiseev, Anna; Deubener, Joachim Applied catalysis B : environmental 2012 / p. 1-9 : ill <https://www.sciencedirect.com/science/article/pii/S0926337311004255>

**Hierarchical nanostructures of ZnO obtained by spray pyrolysis**

Dedova, Tatjana; Krunks, Malle; Oja Acik, Ilona; Klauson, Deniss; Volobujeva, Olga; Mere, Arvo Materials chemistry and physics 2013 / p. 69-75 : ill

**Implementation of TiO<sub>2</sub> oxygen adsorption capacities for the evaluation of photocatalysts' activity in pollutants' oxidation**

Kritševskaja, Marina; Moiseev, Anna; Klauson, Deniss; Pronina, Natalja European Conference on Environmental Applications of Advanced Oxidation Processes : 21-24 October 2015, Athens, Greece : book of proceedings 2015 / [1] p. : ill

**Implementation of TiO<sub>2</sub> oxygen adsorption capacities for the evaluation of photocatalysts' activity in pollutants' oxidation**

Kritševskaja, Marina; Moiseev, Anna; Klauson, Deniss; Pronina, Natalja European Conference on Environmental Applications of Advanced Oxidation Processes : 21-24 October 2015, Athens, Greece : conference program and book of abstracts 2015 / p. 148 : ill

**Improvement of workplace ergonomics in atrium-type buildings**

Tint, Piia; Hrenov, Georgi; Siirak, Virve; Traumann, Ada; Kritševskaja, Marina; Klauson, Deniss Proceedings of the Latvian Academy of Sciences. Section B, Natural, exact, and applied sciences 2016 / p. 336-340 : ill <https://doi.org/10.1515/prolas-2016-0051>

**Photocatalytic activity of quenched flame-synthesized titania nanoparticles**

Klauson, Deniss; Hauser, G. I.; Kritševskaja, Marina; Moiseev, Anna; Weber, Alfred; Deubener, Joachim 5th European Conference on Environmental Applications of Advanced Oxidation Processes (EAAOP5) : book of abstracts 2017 / p. 199 [https://photo-catalysis.org/events/901/photo/book\\_of\\_proceedings\\_eaaop5\\_prague.pdf](https://photo-catalysis.org/events/901/photo/book_of_proceedings_eaaop5_prague.pdf)

**Photocatalytic decomposition of humic acids in anoxic aqueous solutions producing hydrogen, oxygen and light hydrocarbons**

Klauson, Deniss; Budarnaja, Olga; Castellanos Beltran, Ignacio; Kritševskaja, Marina; Preis, Sergei Environmental technology 2014 / p. 2237-2243 : ill

**Physical and chemical properties of ozone [Electronic resource]**

Klauson, Deniss Encyclopedia of life support systems (EOLSS). Chapter 6.192 2008

**Potential of electric discharge plasma methods in abatement of volatile organic compounds originating from food industry**

Preis, Sergei; Klauson, Deniss; Gregor, Andre Journal of environmental management 2013 / p. 125-138 <https://doi.org/10.1016/j.jenvman.2012.10.042>

**Selective performance of sol-gel synthesised titanium dioxide photocatalysts in aqueous oxidation of various-type organic pollutants**

Klauson, Deniss; Budarnaja, Olga; Stepanova, Kristina; Kritševskaja, Marina; Dedova, Tatjana; Käkinen, Aleksandr; Preis, Sergei Kinetics and catalysis 2014 / p. 47-55 : ill

**Study on photocatalytic activity of ZnO nanoneedles, nanorods, pyramids and hierarchical structures obtained by spray pyrolysis method**

Klauson, Deniss; Gromöko, Inga; Dedova, Tatjana; Pronina, Natalja; Kritševskaja, Marina; Budarnaja, Olga; Oja Acik, Ilona; Volobujeva, Olga; Sildos, Ilmo; Ult, Kathriin Materials science in semiconductor processing 2015 / p. 315-324 : ill <http://dx.doi.org/10.1016/j.mssp.2014.12.012>

**Sulfametisooli fotokatalüütileine oksüdatsioon vesifaasis**

Klauson, Deniss; Kritševskaja, Marina; Borissova, Maria; Preis, Sergei XXXI Eesti keemiatänav : [28. aprill 2010, Tallinn] : teaduskonverentsi teesid = 31st Estonian Chemistry Days : abstracts of scientific conference 2010 / lk. 44

**Surface properties of sprayed and electrodeposited ZnO rod layers**

**Gromõko, Inga; Krunks, Malle; Dedova, Tatjana; Katerski, Atanas; Klauson, Deniss; Oja Acik, Ilona** Applied surface science 2017 / p. 521-528 : ill <https://doi.org/10.1016/j.apusc.2017.02.065>

**Surface wetting properties of electrodeposited and sprayed ZnO nanorod layers [Online resource]**

**Gromõko, Inga; Krunks, Malle; Dedova, Tatjana; Katerski, Atanas; Klauson, Deniss; Oja Acik, Ilona** Tartu Ülikooli ASTRA projekt PER ASPERA : Funktsionaalsed materjalid ja tehnoloogiad : [7-8 märts 2017, Tartu : teesid] 2017 / [1] p <http://fmtdk.ut.ee/teesid/>

**ZnO nanostructures by wet chemical deposition methods [Online resource]**

**Gromõko, Inga; Dedova, Tatjana; Krunks, Malle; Oja Acik, Ilona; Katerski, Atanas; Klauson, Deniss** Tartu Ülikooli ASTRA projekt PER ASPERA : Funktsionaalsed materjalid ja tehnoloogiad : [7-8 märtsil 2018, Tallinn : teesid] GSFMT Scientific Conference 2018 : Tallinn, March 7-8, 2018 : abstracts 2018 / 1 p <http://fmtdk.ut.ee/teesid-2018/>

**Template synthesis of titanium dioxide coatings and determination of their photocatalytic activity by aqueous oxidation of humic acid**

**Budarnaja, Olga; Klauson, Deniss; Dedova, Tatjana; Kärber, Erki; Viljus, Mart; Preis, Sergei** Kinetics and catalysis 2014 / p. 688-694 : ill

**The cost evaluation of advanced oxidation processes in laboratory and pilot-scale experiments**

**Kritševskaja, Marina; Klauson, Deniss; Portjanskaja, Elina; Preis, Sergei** Ozone : science & engineering 2011 / p. 211-223

**The influence of iron ions on the aqueous photocatalytic oxidation of deicing agents**

**Klauson, Deniss; Preis, Sergei** International journal of photoenergy 2007 / [7] p

**The influence of iron ions on the aqueous photocatalytic oxidation of de-icing agents**

**Klauson, Deniss; Preis, Sergei** Book of abstracts : the 1st European Conference on Environmental Applications of Advanced Oxidation Processes : Crete, Chania, September 7-9, 2006 2006 / p. 61

**The influence of iron ions on the aqueous photocatalytic oxidation of de-icing agents**

**Klauson, Deniss; Preis, Sergei** Proceedings of the 1st European Conference on Environmental Applications of Advanced Oxidation Processes : Chania, Greece, September 7-9, 2006 2006 / ? p

**The influence of titanium dioxide modifications on photocatalytic oxidation of lignin and humic acids**

**Portjanskaja, Elina; Stepanova, Kristina; Klauson, Deniss; Preis, Sergei** The 5th European Meeting on Solar Chemistry and Photocatalysis : Environmental Applications (SPEA5) : 04-08 October 2008, Palermo, Italy : book of abstracts 2008 / p. PP3.37

**The influence of titanium dioxide modifications on photocatalytic oxidation of lignin and humic acids**

**Portjanskaja, Elina; Stepanova, Kristina; Klauson, Deniss; Preis, Sergei** Catalysis today 2009 / 1/2, p. 26-30 : ill <https://www.sciencedirect.com/science/article/abs/pii/S0920586109000029>

**The synthesis of sulphur and boron-containing titania photocatalysts and the evaluation of their photocatalytic activity**

**Klauson, Deniss; Portjanskaja, Elina; Budarnaja, Olga; Kritševskaja, Marina; Preis, Sergei** Catalysis communications 2010 / 8, p. 715-720

**Titaandioksiidi kinnitamine keramsiidi pinnale : katete fotokatalüütile aktiivsuse määramine doküsüktliini lagundamisel ning kinnitusmeetodi optimeerimine**

**Pronina, Natalja; Moiseev, Anna; Kritševskaja, Marina; Klauson, Deniss** XXXIII Eesti Keemiapäevad : teaduskonverentsi teesid 2013 / lk. 61

**Titanium dioxide sol-gel coated expanded clay granules for use in photocatalytic fluidized bed reactor**

**Pronina, Natalja; Kritševskaja, Marina; Klauson, Deniss; Moiseev, Anna** Book of Abstracts of the 8th European Meeting on Solar Chemistry and Photocatalysis : Environmental Applications : Thessaloniki, Greece, 25-28 June, 2014 2014 / p. 66

**Titanium dioxide sol-gel-coated expanded clay granules for use in photocatalytic fluidized-bed reactor**

**Pronina, Natalja; Klauson, Deniss; Moiseev, Anna; Deubener, Joachim; Kritševskaja, Marina** Applied catalysis B : environmental 2015 / p. 117-123 : ill <http://dx.doi.org/10.1016/j.apcatb.2014.10.006>

**Unconventional oil contaminated industrial effluent treatment by catalyzed hydrogen peroxide and sodium persulfate**

**Dulova, Niina; Kattel, Eneliis; Viisimaa, Marika; Goi, Anna; Klauson, Deniss; Trapido, Marina; Saluste, Alar; Tenno, Taavo** Proceedings of the 7th International Conference on Environmental Science and Technology, June 9-13, 2014, Houston, Texas, USA 2014 / p. 262-268

**Visible light-assisted photocatalytic oxidation of organic pollutants using nitrogen-doped titania**

**Klauson, Deniss; Portjanskaja, Elina; Preis, Sergei** Environmental chemistry letters 2008 / 1, p. 35-39

**Visible-light-sensitive photocatalysts for oxidation of organic pollutants and hydrogen generation = Fotokatalüsaatorid**

**orgaaniliste saasteainete fotokatalüütileks oksüdatsiooniks ja vesiniku tootmiseks nähtavas valguses**  
**Budarnaja, Olga 2014 <https://digi.lib.ttu.ee/i/?1072> [https://www.ester.ee/record=b3084851\\*est](https://www.ester.ee/record=b3084851*est)**