

Advanced oxidation of airborne m-xylene in combination of pulsed corona discharge and post-plasma photocatalysis

Altöf, Kristen; Krichevskaja, Marina; Preis, Sergei; Bolobajev, Juri Journal of electrostatics 2025 / art. 104104

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Advanced oxidation technologies : sustainable solution for removal of emerging contaminants from water

Bolobajev, Juri; Trapido, Marina; Epold, Irina; Dulova, Niina TÜ ja TTÜ doktorikool "Funktsionaalsed materjalid ja tehnoloogiad" : 04.-05. märts 2014, Tartu 2014 / [1] p

Application of different techniques for activation of H₂O₂/Fe³⁺ system : a comparative study

Bolobajev, Juri; Trapido, Marina; Dulova, Niina Journal of advanced oxidation technologies 2015 / p. 347-352 : ill

<https://doi.org/10.1515/jaots-2015-0222> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Application of fly ash of lignite combustion in air and water purification

Nikitin, Dmitri; Bolobajev, Juri; Kritševskaja, Marina; Pilar, Lukas; Vitvarova, Monika; Preis, Sergei; Dulova, Niina Proceedings

2023 / art. 32 <https://doi.org/10.3390/proceedings2023092032>

Application of metal-doped organic aerogels for photodegradation of antibiotics in water

Bolobajev, Juri; Kask, Maarja; Koel, Mihkel Chemical industry digest 2019 / p. 92-95 <http://chemindigest.com/chemical-industry-digest-june-2019/>

Application of metal-doped organic aerogels for photodegradation of trimethoprim in water

Kask, Maarja; Koel, Mihkel; Bolobajev, Juri Aerogels processing, modeling and environmental-driven applications : book of abstracts. 2019 / p. 28

Catalytic ozonation of trimethoprim in aqueous solution by in situ generated hydrous manganese oxide

Goi, Anna; Bolobajev, Juri 5th European Conference on Environmental Applications of Advanced Oxidation Processes (EAAOP5) : book of abstracts 2017 / p. 330 https://photo-catalysis.org/events/901/photo/book_of_proceedings_eaaop5_prague.pdf

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

Bolobajev, Juri; Viisimaa, Marika; Goi, Anna; Trapido, Marina TÜ ja TTÜ doktorikool "Funktsionaalsed materjalid ja tehnoloogiad" 2013 / [1] p

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

https://www.researchgate.net/publication/328461690_Chemical_oxidation_for_the_treatment_of_oil_shale_industry_effluent_treatment_strategies_optimization

Chlorinated hydrocarbons contaminated soil treatment by chemical oxidation

Viisimaa, Marika; Bolobajev, Juri; Trapido, Marina; Goi, Anna Proceedings of 3rd European Conference on Environmental Applications of Advanced Oxidation Processes (EAAOP3) : Almería, Spain, October 27-30, 2013 2013 / p. O26-1 - O26-3

Column experiment on activation aids and biosurfactant application to the persulphate treatment of chlorophene-contaminated soil

Bolobajev, Juri; Bilgin Öncü, Nalan; Viisimaa, Marika; Trapido, Marina; Balcioglu, Isil Akmehtmet; Goi, Anna Environmental technology 2015 / p. 348-357 : ill <https://doi.org/10.1080/09593330.2014.948493> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Combination of advanced oxidation methods for the energy-efficient abatement of aqueous and gaseous hazardous pollutants = Süvaoksüdatsiooniprotsesside kombineerimine ohtlike saasteainete energiatõhusaks lagundamiseks vees ja õhus

Kask, Maarja 2021 https://www.ester.ee/record=b5451819*est <https://digikogu.taltech.ee/et/Item/26344f14-93e2-432d-82d6-cc540247d95b> <https://doi.org/10.23658/taltech.37/2021>

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 <https://doi.org/10.1002/jctb.4484> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Corrigendum to Improvement in iron activation ability of alachlor Fenton-like oxidation by ascorbic acid [Chem. Eng. J. 281 (2015) 566-574] Doi: 10.1016/j.cej.2015.06.115

Bolobajev, Juri; Trapido, Marina; Goi, Anna Chemical Engineering Journal 2016 / p. 19 <https://doi.org/10.1016/j.cej.2015.11.001> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Degradation of aqueous alachlor in pulsed corona discharge

Bolobajev, Juri; Gornov, Daniil; Kornev, Iakov; Preis, Sergei Journal of electrostatics 2021 / art. 103543

<https://doi.org/10.1016/j.elstat.2020.103543> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Different activation methods of H₂O₂/Fe(III) for degradation of diuron

Bolobajev, Juri; Dulova, Niina; Trapido, Marina 15th European Meeting on Environmental Chemistry : 3-6 December 2014, Brno, Czech Republic : book of abstracts 2014 / p. 22

Effect of iron ion on doxycycline photocatalytic and Fenton-based autocatalytic decomposition

Bolobajev, Juri; Trapido, Marina; Goi, Anna Chemosphere 2016 / p. 220-226 : ill <https://doi.org/10.1016/j.chemosphere.2016.03.042>
[Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Effect of ozone on photocatalytic oxidation of acetone and toluene vapours in continuous multi-section reactor

Kask, Maarja; Bolobajev, Juri; Kritševskaja, Marina 6th European Conference on Environmental Applications of Advanced Oxidation Processes, Portorož - Portorose, Slovenia, 26-30 June 2019 : book of abstracts 2019 / p. 657

Effect of ozone on photocatalytic oxidation of acetone vapour [Online resource]

Kask, Maarja; Bolobajev, Juri; Kritševskaja, Marina Tartu Ülikooli ASTRA projekt PER ASPERA : Funktsionaalsed materjalid ja tehnoloogiad : [4.-5. veebr. 2019, Tartu : teesid] 2019 / 1 p <http://fntdk.ut.ee/teesid-2019/>

Effects of organic reducing agents on the Fenton-like degradation of contaminants in water with a ferric sludge reuse = Orgaaniliste redutseerijate mõju rauasette taaskasutamiseega Fenton-tüüpi protsessile reovees sisalduvate saasteainete lagundamisel

Bolobajev, Juri 2016 <https://digi.lib.ttu.ee/i/?5248> https://www.ester.ee/record=b4570888*est

Emerging micropollutants in water/wastewater : growing demand on removal technologies

Trapido, Marina; Epold, Irina; Bolobajev, Juri; Dulova, Niina Environmental science and pollution research 2014 / p. 12217-12222 : ill <https://doi.org/10.1007/s11356-014-3020-7> [Journal metrics at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Emerging micropollutants in water/wastewater : growing demand on removal technologies

Trapido, Marina; Dulova, Niina; Epold, Irina; Bolobajev, Juri Proceedings of 3rd European Conference on Environmental Applications of Advanced Oxidation Processes (EAAOP3) : Almería, Spain, October 27-30, 2013 2013 / p. P171-1 - P171-3

Gas-phase photocatalytic degradation of acetone and toluene, and their mixture in the presence of ozone in continuous multi-section reactor as possible air post-treatment for exhaust from pulsed corona discharge

Kask, Maarja; Bolobajev, Juri; Kritševskaja, Marina Chemical engineering journal 2020 / art. 125815, 9 p. : ill <https://doi.org/10.1016/j.cej.2020.125815> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Gas-phase photocatalytic degradation of VOCs and ozone in continuous multi-section reactor as possible air post-treatment for exhaust from pulsed corona discharge

Kask, Maarja; Bolobajev, Juri; Kritševskaja, Marina GSFMT Scientific Conference 2020 : Tallinn, February 4-5, 2020 : abstracts 2020 / p. 40 <http://fntdk.ut.ee/wp-content/uploads/2020/01/GSFMT2020.pdf>

Improvement in iron activation ability of alachlor Fenton-like oxidation by ascorbic acid

Bolobajev, Juri; Trapido, Marina; Goi, Anna Chemical engineering journal 2015 / p. 566-574 : ill <https://doi.org/10.1016/j.cej.2015.06.115> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Interaction of tannic acid with ferric iron to assist 2,4,6-trichlorophenol catalytic decomposition and reuse of ferric sludge as a source of iron catalyst in Fenton-based treatment

Bolobajev, Juri; Trapido, Marina; Goi, Anna Applied catalysis B : environmental 2016 / p. 75-82 : ill <https://doi.org/10.1016/j.apcatb.2016.01.015> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Koroona-impulss elektrilahendus kui õhupuhastuse tehnoloogia

Bolobajev, Juri 2024 / lk. 30-32 : fot https://www.ester.ee/record=b1242496*est

Laboratory and pilot plant scale study on the removal of radium, manganese and iron from drinking water using hydrous manganese oxide slurry

Bolobajev, Juri; Leier, Maria; Vaasma, Taavi; Nilb, Nele; Salupere, Siiri Journal of environmental chemical engineering 2022 / art. 108942 <https://doi.org/10.1016/j.jece.2022.108942> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Metal-doped organic aerogels for photocatalytic degradation of trimethoprim

Bolobajev, Juri; Kask, Maarja; Kreek, Kristiina; Kulp, Maria; Koel, Mihkel; Goi, Anna Chemical engineering journal 2019 / p. 120-128 : ill <https://doi.org/10.1016/j.cej.2018.09.127> Tehnikaülikooli teadlaste meetod aitab puhastada reovett antibiootikumijääkidest <https://keskkonnatehnika.ee/reovee-puhastamine-kasutades-aerogeele/> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Osooni mõju atsetooniauru fotokatalüütilisele oksüdeerimisele

Kask, Maarja; Bolobajev, Juri; Kritševskaja, Marina XXXIV Eesti keemiapäevad : 100. aastapäeva teaduskonverentsi teesid 2019 / lk. 17

Ozonation and ultrasound-assisted advanced oxidation processes for degradation of polychlorinated biphenyls in soil
Viisimaa, Marika; Bolobajev, Juri; Trapido, Marina; Goi, Anna TÜ ja TTÜ doktorikool "Funktsionaalsed materjalid ja tehnoloogiad" 2013 / [1] p

Ozonation and ultrasound-assisted advanced oxidation processes for degradation of polychlorinated biphenyls in soil
Viisimaa, Marika; Bolobajev, Juri; Goi, Anna Ozone and related oxidants in : safe water along its cycle : April 23–24, 2013, Berlin, Germany 2013 / p. 3.1-1 - 3.1-7

Ozone-assisted degradation of 2-methoxyethanol in a prototype plug flow photocatalytic reactor
Altof, Kristen; Krichevskaya, Marina; Preis, Sergei; Tähemaa, Toivo; Bolobajev, Juri Chemical engineering journal 2024 / art. 148488 <https://doi.org/10.1016/j.cej.2023.148488> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Oxidation of airborne m-Xylene in pulsed corona discharge: Impact of water sprinkling
Altof, Kristen; Krichevskaya, Marina; Preis, Sergei; Bolobajev, Juri ChemEngineering 2024 / art. 99
<https://doi.org/10.3390/chemengineering8050099> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Oxidation of aqueous N-nitrosodiethylamine: experimental comparison of pulsed corona discharge with H₂O₂-assisted ozonation
Kask, Maarja; Kritševskaja, Marina; Preis, Sergei; Bolobajev, Juri Journal of environmental chemical engineering 2021 / art. 105102 <https://doi.org/10.1016/j.jece.2021.105102> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Oxidation of aqueous toluene by gas-phase pulsed corona discharge in air-water mixtures followed by photocatalytic exhaust air cleaning
Kask, Maarja; Kritševskaja, Marina; Preis, Sergei; Bolobajev, Juri Catalysts 2021 / art. 549, 11 p. : ill
<https://doi.org/10.3390/catal11050549> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Photocatalytic degradation of trimethoprim enhanced by organic aerogels
Bolobajev, Juri; Kreek, Kristiina; Koel, Mihkel; Goi, Anna 5th European Conference on Environmental Applications of Advanced Oxidation Processes (EAAOP5) : book of abstracts 2017 / p. 110 https://photo-catalysis.org/events/901/photo/book_of_proceedings_eaaop5_prague.pdf

Regeneration of filter materials contaminated by naturally occurring radioactive compounds in drinking water treatment plant
Goi, Anna; Nilb, Nele; Suursoo, Siiri; Putk, Kaisa; Kiisk, Madis; Bolobajev, Juri Journal of water process engineering 2019 / 100464, p. 1-10 : ill <https://doi.org/10.1016/j.jwpe.2017.08.002> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Reuse of ferric sludge as an iron source for the Fenton-based process in wastewater treatment
Bolobajev, Juri; Kattel, Eneliis; Viisimaa, Marika; Goi, Anna; Trapido, Marina; Tenno, Taavo; Dulova, Niina Chemical engineering journal 2014 / p. 8-13 : ill <https://doi.org/10.1016/j.cej.2014.06.018> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Role of organic wastewater constituents in iron redox cycling for ferric sludge reuse in the Fenton-based treatment
Bolobajev, Juri; Trapido, Marina; Goi, Anna World Academy of Science, Engineering and Technology. International journal of chemical, molecular, nuclear, materials and metallurgical engineering 2016 / p. 391-396 : ill <http://scholar.waset.org/1999.2/10004092>

Sonolytic degradation of chlorophene enhanced by Fenton-mediated oxidation and H•-scavenging effect
Bolobajev, Juri; Goi, Anna Chemical engineering journal 2017 / p. 904-914 : ill <https://doi.org/10.1016/j.cej.2017.07.043> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Sonolytic degradation of pesticide metazachlor in water : The role of dissolved oxygen and ferric sludge in the process intensification
Kask, Maarja; Kritševskaja, Marina; Bolobajev, Juri Journal of environmental chemical engineering 2019 / art. 103095, 7 p. : ill
<https://doi.org/10.1016/j.jece.2019.103095> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Teadlane selgitab: miks ei tohi ravimeid mingil juhul visata kanalisatsiooni või olmeprügisse
digi.geenius.ee 2023 [Teadlane selgitab: miks ei tohi ravimeid mingil juhul visata kanalisatsiooni või olmeprügisse](#)

Tehnikaülikooli teadlased leiutasid uudse õhupuhastamise tehnoloogia
Bolobajev, Juri digi.geenius.ee 2024 <https://digi.geenius.ee/blogi/teadus-ja-tulevik/tehnikaülikooli-teadlased-leiutasid-uudse-ohupuhastamise-tehnoloogia/>

Upscaling of toluene oxidation using water-sprinkled pulsed corona discharge and photocatalysis

Teittinen, Daniel Anselm; Preis, Sergei; Bolobajev, Juri Processes 2025 / art. 2982 <https://doi.org/10.3390/pr13092982>

Ученый: чтобы снизить загрязнение, нужно умерить свои аппетиты

Tisler, Julia; **Bolobajev, Juri** rus.err.ee 2023 [Ученый: чтобы снизить загрязнение, нужно умерить свои аппетиты](#)