

Table of Contents

Nanoparticles for water disinfection by photocatalysis: A review – Michał Bodzek	3
Microbiome dynamics modeling and analysis in relation to spatio-temporal changes in physicochemical conditions of the water ecosystem – Andrzej Woźnica, Mirosław Kwaśniewski, Karolina Chwialkowska, Bartosz Łozowski, Damian Absalon, Marcin Libera, Michał Krzyżowski, Agnieszka Babczyńska	18
Impact of flow and damming on water quality of the mountain Raba River (southern Poland) – long-term studies – Ewa Szarek-Gwiazda, Robert Gwiazda	31
High-resolution mapping to assess risk of groundwater pollution by nitrates from agricultural activities in Wielkopolska Province, Poland – Sebastian Zabłocki, Sadzide Murat-Błażejewska, Joanna Alicja Trzeciak, Ryszard Błażejewski	41
Microbial and chemical quality assessment of the small rivers entering the South Baltic. Part II: Case study on the watercourses in the Puck Bay catchment area – Emilia Bączkowska, Agnieszka Kalinowska, Oskar Ronda, Katarzyna Jankowska, Rafał Bray, Bartosz Płóciennik, Żaneta Polkowska	58
Encapsulation of halloysite with sodium alginate and application in the adsorption of copper from rainwater – Anna Marszałek	75
Survey of applied ammonia mitigation technologies in the Hungarian pig production practice – Tibor Vojtela, Marianna Magyar, Sándor Koós, Nóra Péterfalvi, László Fenyvesi, Béla Pirkó	83
Comparison of different municipal sewage sludge products for potential ecotoxicity – Anna Borgulat, Aleksandra Zgórska, Marcin Głodniok	92
The land surface deformation caused by the liquidation of the Anna mine by flooding – Mateusz Dudek, Krzysztof Tajduś, Janusz Rusek	100

Table of Contents

Agglomeration and green technology innovation efficiency of industrial enterprises – Based on spatial statistical analysis – MIngran Wu, Weidong Huang	3
Remediation of aged hydrocarbon contaminated soil by washing in fluidized bed column – Mohammed Aouf, Salah Dounit	15
Urban mining: Phytoextraction of noble and rare earth elements from urban soils – Stanisław Gawroński, Grzegorz Łutczyk, Wiesław Szulc, Beata Rutkowska	24
Adsorption of oxytetracycline and ciprofloxacin on carbon-based nanomaterials as affected by pH – Filip Gamoń , Mariusz Tomaszewski, Grzegorz Cema, Aleksandra Ziemińska-Buczyńska	34
Antimony speciation in soils in areas subjected to industrial anthropopressure – Magdalena Jabłońska-Czapla, Katarzyna Grygoyć, Marzena Rachwał	42
Identification of catchment areas with nitrogen pollution risk for lowland river water quality – Aleksandra Steinhoff-Wrześniewska, Maria Strzelczyk, Marek Helis, Anna Paszkiewicz-Jasińska, Łukasz Gruss, Krzysztof Pulikowski, Witold Skorulski	53
Groundwater impact assessment of the Czorsztyn Lake after 25 years of its operation – Włodzimierz Humnicki, Ewa Krogulec, Jerzy Małecki, Marzena Szostakiewicz-Hołownia, Anna Wojdalska, Daniel Zaszewski	65
Identification of Face Mask Waste Generation and Processing in Tourist Areas with Thermo-Chemical Process – Mega Mutiara Sari, Takanobu Inoue, Iva Yenis Septiariva, I. Wayan Koko Suryawan, Shigeru Kato, Regil Kentaurus Harryes, Kuriko Yokota, Suprihanto Notodarmojo, Sapta Suhardono, Bimastyaji Surya Ramadan	79
Odours and ammonia emission from a mechanically ventilated fattening piggery on deep litter in Poland – Paulina Mielcarek-Bocheńska, Wojciech Rzeźnik	86
Solidification/Stabilization Treatment for organic oil immobilization in Algerian Petroleum Drill Cuttings: Optimization and Acceptance Tests for Landfilling – Abbas Hadj Abbas, Abidi Saad Aissa, Khodja Mohamed, Sagala Farad, Hacini Messaoud	95
Chemical characterization of bulk depositions in two cities of Upper Silesia (Zabrze, Bytom), Poland. Case study – Rajmund Michalski, Paulina Pecyna-Utylska	106

Table of Contents

Preliminary analysis of the state of municipal waste management technology in Poland along with the identification of waste treatment processes in terms of odor emissions – Marcin Pawn, Bartosz Szulczyński, Emilia den Boer, Izabela Sówka	3
Mobile forms vs the total content of thallium in activated sludge – Joanna Zembrzuska, Karbowska Bożena, Włodzimierz Zembrzuski	21
Study on the purification capacity of rain garden paving structures for rainfall runoff pollutants – Weijia Liu, Qingbao Pei, Wenbiao Dong, Pengfan Chen	28
Simultaneous removal of phenol and Cu(II) from wastewater by tallow dihydroxyethyl betaine modified bentonite – Xiangyang Hu, Bao Wang, Gengsheng Yan, Bizhou Ge	37
Procedure for detoxication of linuron contaminated soil based on ozonation and fluidization process – Radosław Józefczyk, Piotr Antos, Marcin Pieniążek, Maciej Balawejder	48
Biomass and wind energy as sources of renewable energy for a more sustainable environment in Indonesia: A review – Erdiwansyah Erdiwansyah, Asri Gani, Rizalman Mamat, Mahidin Mahidin, K. Sudhakar, S.M Rosdi, Husni Husin	57
Application of response surface methodology to improve methane production from jerusalem artichoke straw – Yan Meng, Yi Li, Laisheng Chen, Rui Han	70
Baseline study in environmental risk assessment: site-specific model development and application – Asifa Alam, Adeel Mahmood, M. Nawaz Chaudhry, Sajid Ahmad, Noor Safa, Huda Alghamdi, Heba Alhamdi, Rizwan Ullah	80
A review on advances and perspectives of glyphosate determination: challenges and opportunities – Kumsal Kocadal, Fehmi Alkas, Dilek Battal, Sahan Saygi	89
Three months of “Cumbre Vieja” – analysis of consequences of volcano eruption – Andrzej Mazur	99
Application of the FAPPS system based on the CALPUFF model in short-term air pollution forecasting in Krakow and Lesser Poland – Jolanta Godłowska, Kamil Kaszowski, Wiesław Kaszowski	109

Archives of Environmental Protection

Vol. 48

4

2022

Table of Contents

Petroleum hydrocarbon contamination assessment and characterization of three quagmire soils in the Gassi El Agreb oil field (Hassi Messaoud, Algeria) – Samia Kout, Abdessemed Ala, Mohamed Seddik Oussama Belahmadi, Amina Hassaine, Ouahiba Bordjiba, Ali Tahar	3
Threshold effect of economic growth on domestic waste production: evidence from China – Li Yang, Hong-Yan Wang, Lan Yi, Xiang-Zhen Shi, Wei Deng	13
Comparative effectiveness of biochar derived from tropical feedstocks on the adsorption for ammonium, nitrate and phosphate – Ganghua Zou, Ying Shan, Minjie Dai, Xiaoping Xin, Muhammad Nawaz, Fengliang Zhao	25
WWTP effluent treatment with ultrafiltration with different mixed matrix nanocomposite membranes. Comparison of performance and fouling behavior – Gabriela Kamińska	35
Bioeffects of silver nanoparticles (AgNPs) synthesized by producer of biosurfactant <i>Bacillus subtilis</i> strain: in vitro cytotoxicity, antioxidant properties and metabolic activities of mammalian cells – Joanna Małgorzata Chojniak-Gronek, Łukasz Jałowicki, Grażyna Anna Płaza	45
Assessment of phosphogypsum waste use in plant nutrition – Kamila Stępień, Piotr Stępień, Urszula Piszcz, Zofia Spiak	53
Recycling of selected fraction of municipal solid waste as artificial soil substrate in support of the circular economy – Mohamed Alwaeli	68
An attempt to describe the correlation between granulometric structure and the concentration of speciated forms of phosphorus and selected metals in the bottom sediments of a thermally contaminated dam reservoir – Maciej Kostecki	78
Composition of norfloxacin-resistant bacteria and isolation of norfloxacin-degrading bacteria in subtropical aquaculture ponds in China – Lutian Mao, Lifen Chen, Xirui Wang, Zhongbao Xu, Hui Ouyang, Biyou Huang, Libin Zhou	95
Removal of microplastics in unit processes used in water and wastewater treatment: a review – Michał Bodzek, Alina Pohl	102