

CONTENTS

CHEMISTRY

Chemical technology:

1. *Kadriye Ozlem Saygi.* Green Synthesis of Nickel Nanoparticles Using Pomegranate Peel for Cr(VI) Removal from Wastewater: A Sustainable and Low-cost Approach p.1157

GEOLOGY

Mineralogy:

2. *Nikoleta Tzankova.* Reconstructing Ancient Copper Smelting Practices in the Eastern Part of the Srednogorie Metallogenic Zone (SE Bulgaria) Using Slag Mineralogy and Chemistry p.1167

Engineering geology:

3. *Tina Đurić, Dragoslav Rakić, Jovana Janković Pantić, Jelka Lukić, Stevan Ćorluka.* Assessment of Undrained Soil Strength Using the Fall Cone Test and Empirical Modelling p.1176

PHYSICAL GEOGRAPHY

Climatology:

4. *Nadia Mateeva.* Methodological Integration in Psycho-ecological Research: A Structured Study and Interdisciplinary Framework p.1186

GEOFYSICS

Seismology:

5. *Stela Simeonova, Dimcho Solakov, Irena Aleksandrova, Plamena Raykova.* Modelling of a Macroseismic Impact Field for Bulgaria p.1191

Meteorology:

6. *Reneta Dimitrova, Angel M. Dzhambov, Angel Burov, Danail Brezov, Margret Velizarova, Veronika Dimitrova, Nevena Germanova, Elena Hristova.* Integrated Methodological Framework for Air Quality and Human Health Risk Assessment in Urban Areas p.1202

7. *Ventsislav Danchovski.* Surface Ozone Variability and Meteorological Drivers at Coastal and Mountain Sites in Bulgaria p.1212

ENGINEERING SCIENCES

Electrical engineering:

8. *Chun Xiang Huang, Yifan Xu, Victor Busher, Valerii Tytiuk, Vitalii Kuznetsov, Mykola Babyak, Liudmyla Ivanova.* Mathematical Modelling of Multiphase Induction Machines Based on the Phase-domain Approach p.1220

Renewable energy:

9. *Rizky Ajie Aprilianto, Faiq Mananul Faqih, Tiang Jun-Jiat, Abdrabbi Bourezg, Abdelbasset Azzouz.* A Numerical Eval-

uation Performance of Bio-inspired Meta-heuristic MPPT Algorithms for Low-power PV Systems p.1230

MEDICINE

Clinical medicine:

10. Angel Bozhkov, Yordan Dochev, Dmitrii Dmitrenko, Elenko Popov, Chavdar Slavov. Transperineal versus Transrectal Prostate Biopsy: Comparative Analysis of Efficacy and Safety p.1238

Pulmonology:

11. Muazzez Elçin Özkan, Mutlu Onur

Güçsav, Damla Serçe Unat, Ömer Selim Unat, Mukaddes Hande Özgen, Erdal İlhan, Dilara Özdemir, Onur Akçay, Orhan Meral. Fixed Ratio versus Z-score/LLN Interpretation in Spirometry: Effects on Ventilatory Pattern Classification p.1247

Obstetrics and gynecology:

12. Boyan Terziyski, Irina Markova, Svetlozar Slavov, Sergei Slavov. Associations of Acetylsalicylic Acid, Low-molecular-weight Heparin and Nattokinase Use with the Presence and Size of Subchorionic Hematoma in a Prospective Cohort p.1254