Доклади на Българската академия на науките
Comptes rendus de l'Académie bulgare des Sciences

Tome 77, No 7, 2024

CONTENTS

MATHEMATICS

Number theory:

1. *Tatyana Todorova.* On the Distribution of $\alpha p + \beta$ Modulo One for Primes of Type $p = ar^2 + 1$ p.953

Topology:

2. *Uğur Şengül, Hatice Bilge Soğukoğlu.* Rare Continuity Revisited via δb-open Sets p.963

CHEMISTRY

Kinetics and catalysis:

3. *Tony Spassov, Maya Spassova, George Tzvetkov.* 2D Copper Hydroxide Acetate Plates – a Novel Additive for Enhancing the Thermal Decomposition Performance of Ammonium Perchlorate p.972

BIOLOGY

Biophysics:

4. *Evgeni Stanev, Maria Dencheva.* Thermovisiographic Study of Epicutaneous Testing with Dental Haptens in Different Concentrations p.978

Mycology:

5. *Dayana Benkova, Vladislava Dishliyska, Jeny Miteva Staleva, Aneliya Kostadinova, Galya Staneva, Khaled Elsayed, Hisham A. Elshoky, Ekaterina Krumova.* CS and ZnO Nanoparticles as Fungicides against Potato Fungal Pathogens *Alternaria solani* and *Fusarium solani*. Mechanism Underlining Their Antifungal Activity p.986

Biotechnology:

6. *Tsvetan Tsvetkov, Denica Daskalova, Nadya Petrova, Hristina Blagova, Detelina Vitanova, Rositsa Shumkova.* Trehalose, Glycerol and Dimethyl Sulfoxide Supplementation for Cryopreservation Media of Honey Bee Drone Semen p.997

Reproductive biology:

7. *Nour El Imane Zerarki, Abdelkrim Berroukche, Farouk Boudou.* Ameliorative Effect of *Zingiber officinale* Ethanol Extract on Chromium-induced Male Reprotoxicity in Wistar Rat p.1005

GEOPHYSICS

Meteorology:

8. *Stanislava Tsalova, Krasimir Stoev, Anastasiya Stoycheva, Guergana Guerova.* Severe Weather Warnings for Sofia, Bulgaria: May – September 2010–2019 p.1013

ENGINEERING SCIENCES

Automatics and informatics:

9. *Lyubka Doukovska, Vassil Sgurev, Ekaterina Tsopanova.* Features of Network

Flow Systems for Decision Making with Motivation Accounting p.1022

Ecological engineering:

10. *Radmila Gaćina, Sanja Bajić, Bojan Dimitrijević, Tomislav Šubaranović, Čedomir Beljić, Dragoljub Bajić.* Application of the VIKOR Method for Selecting the Purpose of Recultivated Terrain after the End of Coal Mining p.1031

MEDICINE

Morphology:

11. *Andrey Ivanov, Dimitrinka Atanasova, Nikolai Lazarov.* New Insights into the Cytoarchitecture of the Rat Spinal Trigeminal Nucleus p.1042

Neurology:

12. *Valentina Reshkova, Rasho Rashkov, Ivan Milanov.* Clinical Characteristics of Patients with Primary and Secondary Fibromyalgia in Bulgaria p.1052

13. *Elena Rodopska, Nikolay Topalov, Veneta Bojinova, Iliana Aleksandrova.* Neuroimaging Findings in Children with Cerebral Palsy – Risk Assessment for Symptomatic Epilepsy p.1064

14. *Nikola Stamenov, Dimitrinka Atanasova, Angel Dandov, Lazar Jelev, Nikolai Lazarov.* GABA-immunoreactivity in Neuroepithelial Bodies of Spontaneously Hypertensive Rats p.1072

Oral medicine:

15. *Maria Shindova, Ani Belcheva.* The Effect of Er:YAG Laser Therapy in Combination with Behaviour Management Technique on the Reduction of Anxiety in Paediatric Dental Patients p.1080

16. *Zdravka Harizanova, Ferihan Popova, Tsvetanka Petleshkova, Marieta Peycheva, Atanas Baltadjiev.* Contribution of Dental Dimensions in Sex Prediction and Identification p.1090

AGRICULTURAL SCIENCES

Plant breeding:

17. *Dessislava Todorova, Zornitsa Katerova, Elena Shopova, Iskren Sergiev.* Screening for Suitable Melatonin Application Scheme to Modulate Drought Stress in Bulgarian Wheat p.1097

Animal husbandry:

18. *Stefan Manchev, Desislava Abadjieva, Paulina Taushanova, Rossen Stefanov.* Influence of Exogenous Melatonin Treatment on the Ram Fertility of the North-east Bulgarian Fine-wool Sheep Breed p.1106