

TABLE OF CONTENTS

Click on the title of the paper to access/download it

RADIOBIOLOGY		
Aleksandra Nozdracheva, Roman Ushakov, Nadezhda Pleskach, Mirya Kuranova	ANALYSIS OF THE CAPABILITIES OF THE PROGRAMS FIJI, IPLAB AND DARFI IN THE STUDY OF DNA REPAIR ABILITIES IN THE CELLS OF PATIENTS WITH A MOSAIC FORM OF ATAXIA TELANGIECTASIA	1
Zygmunt Szepliński, Mateusz Filipek, Jakub Gotlib, Urszula Kaźmierczak	RADIOBIOLOGICAL RESEARCH AND DOSIMETRY USING A FLAT ALPHA SOURCE	7
RADIATION CHEMISTRY		
M. A. Kiseleva, S. Yu. Sokovnin, M. E. Balezin	PRODUCTION AND CHARACTERIZATION OF Al₂O₃+Ag COMPOSITE NANOPOWDERS	10
E. Tugce Sarcan, Asuman Tas, Mine Silindir-Gunay, A. Yekta Ozer, Seyda Colak, Baki Hekimoglu	ESR INVESTIGATION OF X-RAY EXPOSURE ON SOME ANTI-DIABETICS AND PROTON PUMP INHIBITORS	15
V.N. Panteleev, A.E. Barzakh, L.Kh. Batist, D.V. Fedorov, V.S. Ivanov, S.A. Molkanov, S.Yu. Orlov, M.D. Seliverstov, Yu.M. Volkov	DEVELOPMENT OF HIGH TEMPERATURE AND MASS- SEPARATION METHODS FOR SELECTIVE PRODUCTION OF MEDICAL RADIONUCLIDES	18
A. Tsygankova, V. Kanygin, A. Kasatova, E. Zavjalov, T. Guselnikova, A. Kichigin, R. Mukhamadiyarov	PRE-CLINICAL BNCT GLIOBLASTOMA RESEARCH. ICP-AES BORON DETERMINATION METHOD. STUDIES ON ¹⁰B BORON BIODISTRIBUTION IN MICE'S ORGANS	23
R. Mukhamadiyarov, A. Tsygankova, V. Kanygin	USING THE LUMINESCENT DYES FOR THE ASSESSMENT OF LIPOSOME TRANSPORT PROPERTIES AS THE BORON (¹⁰B) CARRIER FOR BORON NEUTRON CAPTURE	30
Hesham M.H. Zakaly, Mostafa Y. A. Mostafa, M. Zhukovsky	TWO LABELED EDTMP RADIOPHARMACEUTICALS WITH Sm-153 AND Lu-177 FOR HUMAN BONE RADIOTHERAPY	36
RADIATION MEASUREMENTS		
Annesha Karmakar, Anil K. Gourishetty, A. Kelkar	COMPARISON OF ENERGY RESPONSE FUNCTION OF STILBENE, BC501 AND EJ309 NEUTRON GAMMA DETECTION SYSTEM	41

E. Nazarov, A. Ekidin, A. Vasilyev, M. Pyshkina, M. Vasyanovich	TRITIUM AND CARBON-14 IN RELEASES OF NUCLEAR REACTOR FACILITIES OF VARIOUS TYPES	47
C. Brenan, S. Landsberger	ASSESSMENT OF INDUSTRIAL DIAMONDS FOR Co, Cr, Fe, Mn, Ni, AND Si USING THERMAL AND EPITHERMAL NEUTRON ACTIVATION ANALYSIS WITH COMPTON SUPPRESSION	53
RADIATION PROTECTION		
Dhahir Mohammed Dhahir, Azhar Salman Ali, Ali Abid Abojassim, Hayder H. Hussain	ASSESSMENT OF NATURAL RADIONUCLIDE LEVELS FOR TEA SAMPLES IN NAJAF, IRAQ	57
Lilian Letícia Nieri Madi, Gian-Maria Agostino Angelo Sordi, Edmir Netto de Araújo	NUCLEAR STATE LIABILITY FOR DAMAGE RESULTING FROM NUCLEAR ACTIVITIES	61
M. Wrzesień, L. Królicki, Ł. Albinia, J. Olszewski	A NEED FOR EYE LENS DOSIMETRY IN NUCLEAR MEDICINE	67
Jose Rafael Parga, Sheldon Landsberger	COMPARISON OF COMPUTATIONAL AND EXPERIMENTAL DOSE RATES IN A NEUTRON ACTIVATION ANALYSIS FACILITY	72
E. H. Ghanim, A. Salman, S. Harb	RADIOLOGICAL RISK ASSESSMENT OF PHOSPHATE MINING IN EL-SEBAIYA LOCALITY, ASWAN ZONE, EGYPT	78
Danko Živković, Nevenka M. Antović	LUNG CANCER INCIDENCE AND CANCER RISK FROM RADIOACTIVITY – SOME DATA FOR THE CAPITAL OF MONTENEGRO	83
RADIOECOLOGY		
Nevenka M. Antović, Nikola R. Svrkota	EVALUATION OF RADIOACTIVITY IN MONTENEGRO SOIL USING A STATISTICAL APPROACH	90
Ivanka Antović, Danijela Šuković, Snežana Andjelić, Nikola Svrkota	HEAVY METALS AND RADIONUCLIDES IN MUSCLES OF FISH SPECIES IN THE SOUTH ADRIATIC – MONTENEGRO	96
D. Ganzha, D. Ganzha, A. Nazarov, B. Sploshnoi	THE TENSILE BREAKING STRENGTH OF <i>PHRAGMITES AUSTRALIS</i> (CAV.) TRIN. EX STEUD. LEAVES AS A CHRONIC IRRADIATION EFFECT	103
Rena A. Mikailova, Aleksei V. Panov, Dmitry N. Kurbakov	THE PROGRAMME AND RESULTS OF THE RADIOECOLOGICAL MONITORING OF FRESHWATER ECOSYSTEMS IN THE VICINITY OF ROOPPUR NPP (PEOPLE'S REPUBLIC OF BANGLADESH)	108

RADIATION DETECTORS

I. Asensi Tortajada <i>et al.</i>	RADIATION HARD MONOLITHIC CMOS SENSORS WITH SMALL ELECTRODE SIZE FOR THE ATLAS EXPERIMENT IN THE HL-LHC	113
Tufic Madi Filho, Maria da Conceição Costa Pereira, José Roberto Berretta, Lucas Faustino Tomaz, Miriam Nieri Madi	STUDY AND DEVELOPMENT OF NEUTRON DETECTORS USING DOPED CsI CRYSTALS	117
Nesrin Tekin, Ferdi Sarimli, Zeynel Abidin Sezer, Ercan Yilmaz	ELECTRONIC READER DESIGN WITH RADFET (PMOSFET) DOSIMETER SENSOR	122
Yasmin Sarhan, Wael Badawy, Marina Frontasyeva, Wafaa Arafa, Abd ELAzeem Hussein, Hussein El-Samman	NEUTRON ACTIVATION ANALYSIS TO PROBE THE AIR POLLUTION USING PLANT BIOMONITORING IN EGYPT	125
Maria da Conceição Costa Pereira, Tufic Madi Filho, José Roberto Berretta, Lucas Faustino Tomaz, Miriam Nieri Madi	OPTICAL PROPERTIES AND RADIATION RESPONSE OF Li ION-DOPED CsI SCINTILLATOR CRYSTAL	131
Kemal Firat Oguz, Mehmet Yüksel	DETERMINATION OF THE MINIMUM DETECTABLE DOSE AND THE EFFECT OF DIFFERENT FILTERS ON THE TLD-100H 260 °C THERMOLUMINESCENCE PEAK	136
Bugra Kocaman, Mehmet Kopru, Bekir Solak, Murat Harmandali, Eylem Guven, Ercan Yilmaz	DEVELOPMENT OF RADIATION DETECTOR (RADIATION MODULE) WITH THREE DIFFERENT SENSORS FOR SPACE APPLICATIONS	139
Ercan Yilmaz, Emre Doganci, Farid Ahmadov, Gadir Ahmadov, Azar Sadigov, Samir Suleymanov	ELECTRICAL CHARACTERISTICS AND ALPHA PARTICLE DETECTION PERFORMANCE OF A NEWLY DEVELOPED PIN PHOTODIODE	145
Nikola Kržanović, Annette Röttger, Viacheslav Morosh, Maksym Luchkov, Stefan Neumaier	CADMIUM ZINC TELLURIDE SOLID-STATE DETECTOR CHARACTERISATION FOR ITS USE AS A SPECTRO-DOSEMETER	148

RADIATION EFFECTS

Aysegul Kahraman, Berk Morkoc, Alex Mutale, Umutcan Gurer, Ercan Yilmaz	IRRADIATION EFFECT ON Er₂O₃/n-Si STRUCTURE UNDER HIGH GAMMA-RAY DOSE	152
Umutcan Gürer, Ercan Yilmaz	Co-60 GAMMA RADIATION INFLUENCES ON THE ELECTROCHEMICAL, PHYSICAL AND ELECTRICAL CHARACTERISTICS OF RARE-EARTH DYSPROSIUM OXIDE (Dy₂O₃)	156

MATERIAL SCIENCE

Erhan Budak, Serdar Hizarci, Ercan Yilmaz	RECYCLING OF HAZELNUT SHELL: SYNTHESIS OF BORON CARBIDE BY CARBOTHERMIC REACTION	162
---	---	-----

Yasin Ergunt, Merve Pinar Kabukcuoglu, Ozden Basar Balbasi, Bengisu Yasar, Yunus Eren Kalay, Mehmet Parlak, Rasit Turan	CdZnTe BULK-CRYSTAL GROWTH AND SURFACE PROCESSING TECHNOLOGY AT METU-CGL	167
Sinan Oztel, Zeynel Abidin Sezer, Erhan Budak, Ercan Yilmaz	SENSING CHARACTERISTICS OF SnO₂ THIN FILM GAS SENSORS	172
MEDICAL PHYSICS		
Evgeniia S. Sukhikh, Andrey V. Vertinskiy, Leonid G. Sukhikh, Alexandr V. Taletsky, Mariya A. Tatarchenko	INFLUENCE OF THE DISTANCE BETWEEN IMPLANTED SOURCES ON THE TUMOUR CONTROL PROBABILITY	176
Andrey V. Vertinskiy, Leonid G. Sukhikh, Evgeniia S. Sukhikh, Yana N. Sutygina	FIRST RESULTS AND ASPECTS OF <i>IN VIVO</i> DOSIMETRY SYSTEM IMPLEMENTATION OF EXTERNAL RADIATION THERAPY IN TOMSK REGIONAL ONCOLOGY CENTER	181
Alena Demianovich, Dmitriy Sanin, Natalia Borysheva, Valeriya Martynova, Sergey Ivanov, Andrey Kaprin	RADIATION-INDUCED SKIN PIGMENTATION AFTER ACCELERATED PARTIAL BREAST IRRADIATION: DOSE-VOLUME HISTOGRAM ANALYSIS	187
RADIOLOGY		
Olga Girjoaba	RECURRENT EXPOSURE OF PATIENTS WITH CHRONIC CONDITIONS IN A SMALL PRIVATE MEDICAL CENTER	191
Soimita Suciu, Dana Dabala, Adrian Florea, Alexandra Sevastre- Berghian, Emanoil Surducun, Vasile Surducun, Camelia Neamtu	PRELIMINARY RISK ASSESSMENT STUDY – NEUROBIOLOGICAL EFFECTS IN EXPERIMENTAL LONG-TIME EXPOSURE TO LOW GSM RADIATION	195
RADIOTHERAPY		
Bogdan Ile, Iosif Malaescu, Marius Spunei, Catalin Nicolae Marin, Serban Negru	USING SILICONE-BASED RUBBERS AS BOLUS MATERIALS IN RADIOTHERAPY	202
MICROWAVE, LASER, RF AND UV RADIATIONS		
A.M. Abdullaeva, L.P. Blinkova, I.G. Seryogin, D.I. Udavliev, S.S. Shikhov, Yu.D. Pakhomov	PREVENTIVE TREATMENT OF DRYING CHAMBER WITH UV RADIATION AND OZONIZATION FOR PROTECTION AGAINST SPOILAGE OF RAW SMOKED SAUSAGES	206

PHARMACEUTICAL SCIENCES

O. A. Zlygosteva, S. Yu. Sokovnin,
V. G. Ilves

**METHODS FOR MANAGING TEXTURAL PROPERTIES
OF NANOPOWDERS TO CREATE A DRUG DELIVERY
SYSTEM BASED ON SiO₂, SiO₂-MnO₂**

212

BIOCHEMISTRY

Nataša Popović, Vesna Stojiljković,
Snežana Pejić, Ana Todorović, Ivan
Pavlović, Snežana B. Pajović, Ljubica
Gavrilović

**INTERRELATIONSHIP OF PREFRONTAL BRAIN-
DERIVED NEUROTROPHIC FACTOR AND
NEUROENDOCRINE SYSTEM DURING CHRONIC
RESTRAINT STRESS**

216

BIOPHYSICS

S. Mitropoulos, V. Tsiantos, A.
Americanos, I. Sianoudis, A.
Skouroliakou

**BLUE LIGHT REDUCING SOFTWARE APPLICATIONS
FOR MOBILE PHONE SCREENS: MEASUREMENT OF
SPECTRAL CHARACTERISTICS AND BIOLOGICAL
PARAMETERS**

220