



INDEX OF SUBJECTS

A

- A rapid and sensitive method for separation/preconcentration and determination of Cu^{2+} from aqueous solution using modified magnetic graphene oxide nanocomposites, R. KALANTARI, A. MOGHIMI and F. AZIZINEZHAD 895
- An investigation on the DNA binding activities of melamine, cyanuric acid and uric acid, A. ŞENOL, A. K. DEVRIM, M. SUDAGIDAN and V. C. ÖZALP 521
- Analytical performance and validation of head space-gas chromatography-flame ionization detector (HS-GC-FID) method for alcohol content and evaluation of efficiency and possible toxicity of hand sanitizers at the time of pandemic, A. BERKKAN and O. K. ULUTAŞ 547
- Antimicrobial effect of *Cannabis sativa* L., D. M. POPESCU-SPINENI, A. C. MOLDOVEANU, P. ARMEAN, C. IONESCU-TÎRGOVIŞTE, C. MILITARU and A. M. MUNTEANU 417
- Assessing operational inactivation of horseradish peroxidase during Brilliant Blue G decolorization, D. MĂRTINAŞ, M. PUIU, P. OANCEA and A. RĂDUCAN 267

B

- Biojet from sugar derivatives, A. TEPELUS, R. E. DRAGOMIR and P. ROSCA 313
- {2,6-Bis[(dimethylamino)methyl]phenyl} mercury(II) acetate, [2,6-(Me_2NCH_2) C_6H_3]Hg(OAc) – a useful intermediate for selective palladation of 1,3-(Me_2NCH_2) C_6H_4 , L. KISS, S. SHOVA, M. VLASSA, A. SILVESTRU, C. I. RAŢ, C. SILVESTRU 167

C

- C-MYC* G-quadruplex stabilization and cytotoxicity of an oxadiazole-bearing ruthenium(II) complex, S. YAN, Z. ZHENG, Y. CUI, Y. MI, H. LIU, X. ZHAO and D. LUO 423
- Cannabis terpenes in relation to human health, D. M. POPESCU-SPINENI, A. M. MUNTEANU, C. IONESCU-TÂRGOVIŞTE, C. MILITARU and A. C. MOLDOVEANU 583
- Characterization of biomass renewable energy resources from some perennial species, A. NEACSU and D. GHEORGHE 321
- Co-assembled peptides hierarchically oriented for supramolecular gel formation, A. CROITORIU, L. E. NITA, A. G. RUSU, F. DOROFTEI and L. VERESTIUC 449
- Computing topological indices for silicates and honeycomb networks, X. ZUO, M. K. SIDDIQUI, N. A. REHMAN and M. NAEEM 593
- Concerning the formal kinetics of gas adsorption on solid surfaces, N. I. IONESCU 459
- Conformational coupling *via* hydrogen-bonding in the DEAD-box protein VASA, K. KARATHANOU and A.-N. BONDAR 845
- Considerations on the therapeutic potential of medicinal cannabis, from a biochemical view, D. M. POPESCU-SPINENI, R. CHIVU, A. C. MOLDOVEANU, C. IONESCU-TÎRGOVIŞTE and A. M. MUNTEANU 435
- Construction of modified nanotube carbon carboxyl by new method and application in dispersive solid phase extraction for preconcentration of Ni^{2+} , A. MOGHIMI, M. ABNIKI, M. KHALAJ and M. QOMI 493

D

- Degradation of Brilliant Blue FCF through photolysis, irradiation and photo-fenton processes: a comparative study, D. NEGOESCU, P. OANCEA, A. RĂDUCAN and M. PUIU 281
- Diagnostic product ions and fragmentation patterns for the cyclomyrsinane-type diterpenoids by higher-energy collisional dissociation mass spectrometry, T.-s. WANG and Y.-y. NIU 913
- Dihedral angles calculated with 3-sphere approach as integer in conformational analysis on D-, L- ribitol series, C.-I. MITAN, E. BARTHA, P. FILIP, C. DRAGHICI, M. T. CAPROIU and R. M. MORIARTY 941
- DNA-metal interaction and the biological activities of metal complexes: An overview in the light of recent literature, A. ŞENOL, E. A. AKANBONG, M. SUDAGIDAN and A. K. DEVRIM 701
- Dye removal from wastewaters using grape seed residues, R. ŢINCU, C. TODAŞCĂ, V. ARTEM and A.-I. NICOARĂ 185

E

- Effect of scanning speed on AFM height images and 3D surface texture parameters explored on smooth and rough polymer surfaces, I. STOICA and E. G. HITRUC 199

Effect of UV irradiation on surface of collagen film, M. DROBOTĂ, M. BARBĂLATĂ-MÂNDRU, L. M. GRĂDINARU and I. ALEXA	81
Enhanced production of phenolic compounds from <i>Jasminum grandiflorum</i> leaves by response surface methodology, H. RIGUENE, G. RIGANE and R. BEN SALEM	661
Enhancement of the photodegradation resistance and antibacterial properties of PP-HDPE nanocomposites based nanoclay and zinc oxide, H. KOUADRI, O. BOURICHE, O. DJAOUT, N. MAUCHE and D. LERARI	613
Enthalpy-entropy compensation in reversed-phase high-performance liquid chromatography investigated for the mobile phases containing alcohols from methanol to octanol, E. CAIALI, S. C. MOLDOVEANU and V. DAVID	805
Ethoxy-tethered calix[4]arenes containing P(III) substituents and trimethylsiloxy groups as building blocks in supramolecular chemistry; <i>cis/trans</i> intra- and intermolecular complexation of dichloroplatinum(II) fragments, I. NEDA, I. BALCU and C. MACARIE	149
Evaluation of antioxidant capacities of orange, lemon, apple and banana peel extracts by FRAP and ABTS methods, A. BRATOVCIC, M. DJAPO-LAVIC, M. KAZAZIC and E. MEHIC	713
Environmentally benign synthesis of new 1,3-oxazolidines and azomethynes on the base of arylaminopropanols, A. N. KAHLILOV	719
Exciplex formation in the phenoxathiin-thioxanthone system, C. TABLET and S. IONESCU	59
Experimental and theoretical studies of polyvinylpyrrolidone-iodine on carbon steel corrosion in 1M hydrochloric solution, T. ATTAR, B. MESSAOUDI, A. BENCHADLI, I. SEGHIOR, M. A. ZENASNI, S. BOUSALEM and E. CHOUKCHOU-BRAHAM	761
Exploring the interaction of 5,6- benzocoumarin-3-carboxylic acid with bovine serum albumin at the molecular level: A biophysical investigation using molecular dynamics, A. PRECUPAS and S. IONESCU	49
Extractive spectrophotometric methods for the assay of cyproheptadine hydrochloride using alizarin red S, I. C. CONSTANTINESCU, A. NEDELCU M. FLOREA, A. A. IONESCU and C. C. ARAMA	367

G

Gas sorption phenomena on solid surfaces, N. I. IONESCU and V. BRĂTAN	239
---	-----

H

¹ H NMR and conformational analysis of diastereotopic methylene protons in achiral flexible molecules, M. D. GHEORGHIU, C. A. VALDEZ and A. RACOVEANU	135
Heterometallic supramolecular architectures constructed from cyanido-based [Co ^{III} (AA)(CN) ₄] building-blocks (AA = 1,10-phenanthroline and 2,2'-bipyridine), M.-G. ALEXANDRU, D. VISINESCU, N. MARINO, G. De MUNNO, F. LLORET, M. JULVE and M. ANDRUH	243

I

Ignition and propagation properties of coal dust – air – methane hybrid mixtures, M. PRODAN, E. GHICIOI, A. JURCA and D. OANCEA	25
Improvement mixed matrix membranes performance of MCM-41/PSf for CO ₂ separation using silane coupling agent, K. ABBASI KOLOLI, S. M. TABATABAEE GHOMSHEH, M. NOEI and M. SABERI	733
Improved selectivity of a polysulfone membrane by surface grafting of a vinyl acetate monomer, H. BOURAOUI, A. KHEMAKHEM, M. R. BEN ROMDHANE, N. TESSIER-DOYEN and E. SRASRA	747
Interaction of local anesthetic procaine with phospholipid model membrane, A. MOCANU, P. J. QUINN, C. NICULA, S. RIGA, G. TOMOAI, C.-A. BARDAȘ and M. TOMOAI-COTISEL	855
Interaction of selected amino acids in active site of BAX protein with two derivatives of syringic acid as an anti-cancer initiating process: A molecular simulation study, H. HOSSEINI, S. KETABI, R. R. KHORASANI and F. R. NIKMARAM	537
Investigation of growth kinetics of some pathogenic bacteria in agrochemical wastewater treated by subcritical water oxidation method, E. YABALAK and E. A. ERDOĞAN ELIUZ	339
Investigation of surface relief gratings on azo-copolyimide films using atomic force microscopy, I. SAVA, I. STOICA, I. MIHAILA and I. TOPALA	193
Is the net electric charge injected into a cell the only driver of its response?, D. C. VANDERWEYEN, D. R. TUCK and S. A. OPRISAN	813

K

Kinetic models of aqueous 2-mercaptobenzothiazole adsorption on local clay and activated carbon, N. BOUZIANE, A. ALOUI, S. BEHLOUL and A. ZERTAL	479
Kinetic parameters of the antioxidant activities of extracts and essential oil of olive leaves, N. OUIS and A. HARIRI	725

L

Laminar flame propagation in nitrogen-diluted stoichiometric H ₂ -N ₂ O mixtures – a numerical study, D. RAZUS, M. MITU, V. GIURCAN and C. MOVILEANU	255
--	-----

M

MgO obtained by chemical and green synthesis methods and applied in photocatalytic degradation of methyl orange, D. GINGAȘU, I. MÎNDRU, D. C. CULIȚĂ, L. PREDOANĂ, G. PETCU, M. CIOBANU, S. PREDA, J. PANDELE-CUȘU and S. PETRESCU	463
Microbial membranes: a challenge for bioenergy, M. D. SMITH, L. PETRIDIS, J. G. ELKINS, J. D. NICKELS, J. KATSARAS and J. C. SMITH	797
Microwave-assisted synthetic approaches to biologically active N-based five-membered heterocycles as response to green chemistry, M. GEORGIEVA, E. MATEEV, D. TZANKOVA and A. ZLATKOV	873
Molecular modeling, spectral and optical properties of HPMC in different solvents, R. M. ALBU, L. I. BURUIANA, S. L. NICA and A. I. BARZIC	381

N

New hypercoordinated triaryltelluronium derivatives of organophosphorus ligands. Synthesis and structural characterization, E. DENES, M. VLASSA, C. SILVESTRU and A. SILVESTRU	33
Non-covalent interactions evidenced by EPR spectroscopy in cyclodextrin complexes, I. MATEI, E. I. POPESCU, S. MOCANU, E. N. HRISTEA, F. SAVONEA, R. BĂRĂȚOIU AND G. IONIȚĂ	9

O

On degree- and -distance-based topological indices, I. GUTMAN	119
One new pyrone from the <i>Knema globularia</i> fruits, T. V. PHAM, D. V. HO and B. C. NGUYEN	755

Q

Quinizarin interaction with bile salts micelles as biomimetic model membranes, A. M. TOADER and M. ENACHE	75
---	----

P

Peak compression induced by large volume injection of hydrophobic alcohols in reversed-phase liquid chromatography, E. BACALUM, T. GALAON, V. DAVID and S. C. MOLDOVEANU	65
Performance of ethanolic extract propolis as a safe inhibitor for AA7075 alloy corrosion in neutral chloride medium, M. ACILA, H. BENSABRA and A. SAOUDI	921
Peroxo-transition metal systems: examples of redox isomerism in palladium structures, I.-A. SUCIU, A. LUPAN and R. SILAGHI-DUMITRESCU	819
Phase equilibria for the carbon dioxide + cyclopentane + cyclohexane system at high pressures, M. IONIȚĂ, S. SIMA, M. CISMONTI and C. SECUIANU	303
Physico-chemical characterization of solid state reaction between terephthalaldehyde and p-aminophenol, V. MELTZER, P. OANCEA, I. STÂNCULESCU and E. PINCU	273
Phytocannabinoids, D. M. POPESCU-SPINENI, A. C. MOLDOVEANU, E. N. BORDEA, M. E. POP-TUĐOȘE and A. M. MUNTEANU	687
Polyelectrolyte complexes formation based on carboxymethylcellulose sodium salt (NaCMC) and quaternized poly(4-vinylpyridine) (QP4VP), L. MEHIAOUI, A. BENALI, L. TENNOUGA, B. BOURAS and K. MEDJAHED	399
Polyimides containing charogen atoms in solution phase: viscoelasticity and interferometry analyses, A. I. BARZIC, R. M. ALBU and C. HULUBEI	361
Preparation and surface characterization of polyurethane hydrogels, M. BARBALATA-MANDRU, M. BERCEA, L. M. GRADINARU, M. AFLORI and R. ALBULESCU	87
Preparation, characterization and microbiological activity of amoxicillin-loaded cellulose acetate phthalate / β -cyclodextrin based microspheres and their controlled release behavior, I. ABDELMALEK, M. MOUFFOK, L. BENNABI, A. MESLI, K. GUEMRA and E. H. BELARBI	527
Presumptive screening of mixed organic solvents-derived alcohols in human blood during the forensic gas chromatographic determination of alcohols, I. WINKLER, A. M. SOLIMAN and I. LEBEDINTSEVA	741
Process mediated by gold nanoparticles encapsulated in polymeric gels evidenced by EPR spectroscopy, Iulia MATEI, M. BEM, A. R. LEONTIEȘ, C. RĂDUȚIU, E. . POPESCU, S. MOCANU, F. SAVONEA, R. BĂRĂȚOIU and G. IONIȚĂ	295
Program for prediction dihedral angle from vicinal coupling constant with 3-sphere approach, Emerich BARTHA, C.-I. MITAN, C. DRAGHICI, M. T. CAPROIU, P. FILIP, L. TARKO and R. MORIARTY	178

R

Reaction of some X-phenylazides derivatives with diethyl 1,3-acetonedicarboxylate, C. E. FATMI, S. BOUASLA and M. TEGUICHE	445
Reactions of heteroleptic $[Cu(acac)(AA)(H_2O)]^+$ complexes with carboxylate anions ($acac^-$ = acetylacetonate, AA = 2,2'-bipyridine, 1,10-phenanthroline), P. A. TARABUTA, C. MAXIM and M. ANDRUH	41
Removal of safranin from the environment by using graphene oxide paper, B. ALANYALIOĞLU, K. DAĞCI KIRANŞAN	675

S

Screening for biological activities of essentials oil profiles (GC-FID) and ethanolic extracts from <i>Pinus brutia</i> (Ten) and <i>Pinus canariensis</i> (C. Smith), H. GHAZGHAZI, B. ESSGHAIER, I. CHARFI, M. ELALOU, M. A. OUESLATI, R. BEN SALEM, G. RIGANE and T. RZIGUI	557
Simple and fast square wave voltammetric method for histamine H ₂ -receptor antagonist famotidine quantification, I. G. DAVID, M. G. GÂSNAC, M. BULEANDRĂ and D. E. POPA	573
Simultaneous determination of epinephrine and norepinephrine by electrochemical reduction at the pre-treated pencil graphite electrode, M. BULEANDRĂ, A. A. CIUCU, I. G. DAVID, D. E. POPA, A. M. CIOBANU and C. D. ȘTEFĂNESCU	567
Spin label studies of some biological materials performed by collaborative work of roumanian and foreign scientists – a brief review, G. BENGA	789
Stereochemistry – key role in the rearrangements of dibenzo-C ₈ and -C ₉ derivatives, A. HIRTOPEANU, C. FLOREA and M. D. STANESCU	105
Structural aspects in diorganotin(IV) complexes. Ph ₂ Sn(S ₂ CNMe ₂)(NCS) case study, C. ȘALGĂU, C. SILVESTRU and A. SILVESTRU	231
Structural investigation and Hirsfeld surface analysis of Cu(II) triethanolamine 4-nitrobenzoate, A. GOROBET, M. E. CRISAN, P. N. BOUROSH and L. CROITOR	355
Studing the association of trypsin-benzamidine complex using enhanced sampling molecular dynamics, S. E. STONE, D. RAY and I. ANDRICIOAEI	835
Study of ring-open fragmentation in two rosane-type diterpenoid lactones by ESI-MS ⁿ (quadrupole time-of-flight and ion trap), T.-s. WANG	409
Surface tension and hydroperoxide content of vegetable oils: effect of repeated deep frying, M. NADDAF, A. ALZIER and H. ALLAHAM	931
Synthesis and antimicrobial efficiency of some new types of the quaternary ammonium compounds, V. CHORNOUS, Y. LUKAN, A. GROZAV, O. PERPELYTSIA, M. TURASH and I. BURDENIUK	907
Synthesis and biological activities of some novel strobilurin derivatives containing 1, 2, 4- triazole moiety, X.-Y. WANG, Z.-X. ZHOU, X. LIU, J.-Y. ZHENG, Y.-P. PANG, W. WANG, X. ZHAO and G.-C. WU	347
Synthesis and characterization of a new hydrazyl free radical, a formyl-derivative of DPPH, IONITA P.	205
Synthesis and characterization of zinc oxide based poly vinylalcohol nanocomposite membranes and their fuel cell measurement, M. PATIL	391
Synthesis and molecular structure of 1,1'-(ethylene-1,2-diyl)dipyridinium tetrachloridocuprate(II), M. K. SABRA, M. M. AL-KTAIFANI, A. Alaziz ALSHARIF and F. MAKSOUD	625
Synthesis, antioxidant and DFT study of some 4-methyl-2H-chromen-2-one derivatives, S. BOUASLA, C. SOBHI, H. ALLAL, W. MECIBAH, M. CHERIFI and I. BOUGDAH	653
Synthesis, characterization and antifungal evaluation of some novel Mo(VI) complexes, P. NAG and D. SHARMA	331
Synthesis, crystal structure, quantum chemical calculation and molecular docking on (<i>E</i>)-1-(4-fluorobenzylidene)-4-(3,5-dimethylphenyl)thiosemicarbazone, F. QI, S. WANG, C. WEL, Z. GUO, J. SONG and J. HUANG	509
Synthesis, enzyme inhibition and docking studies of 1,2,4-triazoles derived from aliphatic esters, S. RIFHAT, A. OBAID-UR-RAHMAN, S. NIGHAT, R. WAJID, N. MOHSAN, B. IRAM, A. WADOOD, A. SARDAR, S. DAUD, H. MEHBOOB, A. BAHADER and F. MENAA	771
Synthesis of a hydroxybisphosphonic-derived amphiphilic compound, S. C. RIZEA, C. IONESCU, V. BARRAGAN-MONTERO and J. NEAMȚU	375

T

The antifungal activity of zein nanoparticles loaded with transition metal ions, R. SHAKIR SHNAIN AL-SHAMMARI, A. KAREEM HAMMOOD JABERI, A. LUNGU, I. BREBENEL, W. KHALED KADDEM AL-SUDANI, J. HAFEDH MOHAMMED AL-SAEDI, C.-E. POP, M. MERNEA, G. STOIAN and D. F. MIHAILESCU	829
The first 40 years of soft anticholinergic agents, N. BODOR and E. BODOR	125
The structure-activity relationships from DSC data, A. M. MUSUC and D. OANCEA	161
The use of polysaccharides as dietary fibers to improve the functionality of fast food meat products, M. COSTACHE, I. MANEA and L. C. MANEA	605
Theoretical study of chalcone derivatives as corrosion inhibitors for aluminum in acidic environment, W. MECIBAH, H. ALLAL, M. CHERIFI, S. BOUASLA and N. BOUTEMINE	633
Thermal and photochemical degradation of cooked sunflower, olive and palm oils, C. COBZARU, G. BORDEIANU, G. A. APOSTOLESCU, R.-E. TATARU-FARMUȘ, N. APOSTOLESCU and C. CERNATESCU	645
Thermal behavior of Cu-doped TiO ₂ gels synthesized by the sol-gel method, J. PANDELE-CUSU, I. ATKINSON, A. RUSU, N. APOSTOL, V. TEODORESCU, L. PREDOANA, I. M. SZILÁGYI, G. POKOL and M. ZAHARESCU	219
Ti-SBA-15 mesoporous photocatalysts modified with lanthanides for degradation of dyes in aqueous solution, D. NEGOESCU, D. C. CULITA, I. ATKINSON, V. BRATAN, S. PETRESCU and V. PARVULESCU	287