



INDEX OF SUBJECTS

A

A free non-spectral interferences method based on inductively coupled plasma optical emission spectrometry for multielemental determination in multiminerall/multivitamin preparations, D. CASONI, M. PONTA, M.-N. BIBICA, I.-V. LAZAR, T. FRENTIU	573
A new green and catalyst free strategy for synthesis of cyanodienones using task-specific ionic liquid, F. ABADAST, A. MOURADZADEGUN, M. R. GANJALI	967
A study on pellets as an alternative source of energy for fossil fuel using adiabatic combustion calorimetry, I. M. MOISE, V. MELTZER, E. PINCU	211
A voltammetry investigation of the exchange processes running on the interphase CdSb/electrolyte, V. DIICHUK, I. DIICHUK, I. WINKLER	491
(a,b)- Zagreb index of some special graph, P. SARKAR, S. MONDAL, N. DE, A. PAL	1055
Adsorption performance of anionic textile dye (Nylosan Red N-2RBL) onto raw, sodic and fractionated sodic inorganic clay material, S.TERCHI, N. LADJAL, B. ZIDELKHEIR, K. BACHARI	869
Alkali fusion co-precipitation/cation exchange/extraction enrichment for determination of trace rare earth elements in rocks by inductively coupled plasma mass spectrometry, W. ZHAO, C. ZHOU, B. LU, J. YU, Y. ZHANG	909
Amphiphiles-metals interactions for applications in modern technologies: recent developments and future perspectives, L. MAIUOLO, P. CALANDRA, D. LOMBARDO, E. I. SZERB	647
An efficient and green protocol for the one-pot synthesis of 3-amido-alkyl-4-hydroxycoumarin derivatives by choline chloride/urea as a deep eutectic solvent, H. ASADI, H. ANARAKI-ARDAKANI, P. TORABI, N. TAHERI	795
An efficient method for determination of components in docosahexaenoic acid-phosphatidylcholine using pre-column derivatization HPLC, L. LIU, T. ZHANG, X. ZHANG, J. WANG, W. SHU, X. QI, B. ZHAO, B. LI	955
Analytical performances and validation of optical emission and atomic absorption spectrometry methods for multielemental determination in vegetables and fruits, E. COVACI, M. SENILA, M. PONTA, T. FRENTIU	735
Antimicrobial and antitubercular evaluation of some new 5-amino-1,3,4-thiadiazole-2-thiol derived Schiff bases, K. A. BABU, I. SINGHVI, N. RAVINDRA, A. B. SHAIK	771
Application of carboxymethylated carob bean gum as eco-friendly water based drilling fluids additive, W.-C. DU, X.-Y. WANG, L.-X. KANG, Y. SU, X.-B. HUANG, G. CHEN, J. ZHANG	387
Application of oxidation processes in the purification of wastewaters from phenolic compounds, M. MATIJEVIĆ, M. N. STANKOVIĆ, N. S. KRSTIĆ, M. G. NIKOLIĆ, D. A. KOSTIĆ	313
Aminimides: $RCON^{\ominus}N(CH_3)_2CH_2CH(OH)CH_3$ ($R = C_6H_5$ and CF_3CF_2) natural bond orbital and topological analysis of electron density distributions. Part 3, A. RACOVEANU, M. D. GHEORGHIU	23

C

Calculation of the thermodynamic functions using a mean field model for the fluid-solid transition in nitrogen, Ö. AKAY, H. YURTSEVEN	425
Catalytic synthesis of 4-methyl-2-(α -methyl benzyl) phenol over Fe-Al-MCM-41 for extraction-separation rubidium from brine, Z. FENG, L. AN, Z. HUANG, X. ZHAO, B. WANG	141
Characterization of eco-friendly inhibitor by AAS, FT-IR and GC-MS for protection of AISI 304 in acidic environment, I. Y. SULEIMAN, A. KASIM, M. Z. SIRAJO, A. T. MOHAMMED	997
Chemical composition and antimicrobial activity of essential oil of <i>Citrus sinensis</i> : interaction with ampicillin and fluconazole, E. A. E. ELIUZ, E. YABALAK, Y. SICAK	899
Click synthesis and complexation properties of a new unsymmetrical macrocycle bearing 1,4-dioxabenzene and triazole units, T. A. CUCUIET, C. C. ANGHEL, E. BOGDAN, A. CRIŞAN, M. MATACHE, L. POP, A. TERC, N. D. HĂDADE ...	567
Commercial aqueous additives as used eco-friendly corrosion inhibitors for carbon steel in natural seawater, S. CAPRARESCU, V. PURCAR, C. MODROGAN	77
Computing topological indices of crystallographic structures, M. A. RASHID, S. AHMAD, M. K. SIDDIQUI, M. NAEEM	447
Concerning the logarithmic law used in adsorption-desorption of solid-gas reactions, N. I. IONESCU, V. BRĂTAN	707
Construction of polynuclear copper(II) complexes from mono- and binuclear modules, A. A. PATRASCU, C. MAXIM, M. ANDRUH	553
Correlation of isoconcentration profiles resolution of water parameters with on-site sampling methodology, M. C. HORJA, D. ISTRATI, I. CALINESCU, D. E. MIHAIIESCU, A. L. MARTON, A. IONESCU, G. UNGUREANU	43
Corrosion inhibition of steel by Prickly Pear: extraction, characterization and electrochemical studies, I. ABIDLI, N. SOUISSI, X. R. NÓVOA	353

D

- Design, synthesis and biological evaluation of pyrimidine-based derivatives as antitumor agents, M. M. ALBRATTY, K. A. EI-SHARKAWY, H. A. AIHAZMI 227
- Determination of CO₂ gas hydrates surface tension in the presence of nonionic surfactants and TBAC, A. BOZORGIAN, Z. A. ABOOSADI, A. MOHAMMADI, B. HONARVAR, A. AZIMI 1061
- Development and validation of a stability-indicating ultra-fast liquid chromatographic analysis for the simultaneous determination of fenticonazole and its related substances in pharmaceutical formulations, C. ÖNAL, E. BINAY, A. ÖNAL 201
- Dielectric properties of some polymers/ metal oxide nanoparticles nanocomposites using fast technique, F. Z. BENABID, F. ZOUAI, D. BENACHOUR 1009
- Dispersion interaction of the type-bismuth- π arene in substituted bismuthines, A.-M. FRITZSCHE, T. RÜFFER, H. LANG, M. MEHRING 677

E

- Eccentricity based topological indices of chain octahedron structure, D. GUO, D. TAO, M. K. SIDDIQUI, M. NAEEM, A. Q. BAIG, M. R. AZHAR 433
- Effect of some solvents on the molecular interaction between filler/Matrix: case of PMMA/SiO₂ nanocomposites, D. BOULERBA, A. ZOUKEL, M. B. TAOUTI 461
- Efficient synthesis of *bis*-(4-hydroxycoumarin) using sulfanilic acid as recyclable catalyst in water, M. SADAT-JALALI, M. MANAFI, S. S. HOMAMI, B. GORJI, A. MONZAVI 473
- Electrocatalytic activity survey of some cathode materials for the reduction of nitrites and nitrates in aqueous solution, Y. ANGAR, S. DAOUDI, S. KEBBOUCHE-GANA, N.-E. DJELALI 1019
- Electrochemical synthesis and characterizations of new nanocomposite electrodeposition on Co67Cr29W4 alloy substrate, F. BRANZOI 815
- Estimation of biocidal activity of some imidazole derivatives by using pathogenic bacterial and yeast strains, A. M. MOCANU, M. DIACONU, L. BULGARIU 893
- Examination of structure-activity relationship of new *N*-acylhydrazones, A. G. COMAN, A. PAUN, C. C. POPESCU, N. D. HADADE, A. HANGANU, A. M. MĂDĂLAN, M. MATACHE 109
- Excess molar volumes and partial molar volumes for binary mixtures propanoic acid with 1-propanol, 2-propanol, 1-butanol and 1-pentanol, M. GEORGESCU, V. MELTZER, E. PINCU 269
- Experimental evaluation of free chlorine adsorption from circulating water in cooling towers by activated carbon in a fixed bed column, B. BEHZADI, M. NOEI, A. AZIMI, M. MIRZAEI, H. ANARKI-ARDAKANI 1067
- Extraction and analysis of oleanolic acid and ursolic acid from apple processing waste materials using ultrasound-assisted extraction technique combined with high performance liquid chromatography, I. RUBASHVILI, M. TSITSAGI, M. ZAUTASHVILI, M. CHKHAIDZE, K. EBRALIDZE, V. TSITSISHVILI 919

F

- Fabrication of transition metal-doping TiO₂ composite and its photocatalytic degradation performance toward the ammonia nitrogen compounds in farm wastewater, S. WANG, Q. XU, Y. ZHANG, G. JIN, W. HE, N. ZHANG 789
- Facile synthesis, solubilization studies and anti-inflammatory activity of amorphous zinc(II) centered aldime complexes, U. ALI, A. MAALIK, M. B. TAJ, A. RAHEEL, A. K. QURESHI, M. IMRAN, M. SHARIF, S. A. TIRMIZI, S. NOOR, H. ALSHATER 929
- Fatty acids profile (GC-FID) and analytical evaluation of *Chemlali* olive oil according to a combined laboratory scale ultrasounds and microwave extraction, K. KALLEL, G. RIGANE, H. GHAZGHAZI, R. BEN SALEM 1121

G

- atifloxacin-1,2,3-triazole-isatin hybrids tethered through methylene and acetyl and their antibacterial activities, H. GUO, Q.-P. DIAO 239

H

- Heterogeneous transesterification of castor oil for biodiesel production by Al₂O₃, Al₂O₃-NiO and Al₂O₃-CoO modified bentonite as catalyst, R. EL AHMAR, C. HARRATS, D. BASSOU, S. KACIMI 825
- Hypercoordinated organotin(IV) compounds containing (imino)aryl ligands - [(*E*)-2-(2',6'-¹Pr₂C₆H₃N=CH)C₆H₄]SnR₂X (R = Me; X = Cl, I; R = ⁿBu, X = Cl, F, Br). Molecular structures and supramolecular aspects, C. COMSA, R. A. VARGA, A. SORAN, C. SILVESTRU 539

I

- Injection molded part material failure analysis, N. SOLOMON, I. SOLOMON 329
- Investigation of dyeing properties of different fabric species with *Curcuma Longa* extracts, A. ONAL, K. C. TOMBUL, S. NACHED 983

Iron(III), gold(III), platinum(IV) and palladium(II) trimethoprim drug complexes: synthesis, morphological and anticancer assessments, L. A. ALBEDAIR	1145
Iron(III) reduction as a measure of "antioxidant power" using homo and copolymer of pyrrole and aniline electrosynthesized, N. HAJIABDOLAH, A. PARSAN, H. ANARAKI-ARDAKANI, H. JALALI-JAHROMI	247

K

Kinetics of isothermal ignition and combustion of some oxygenated VOCs on platinum wire, V. MUNTEANU, M. MITU, D. RAZUS, D. OANCEA	693
--	-----

M

Margareta Avram (1920 – 1984): a life dedicated to organic chemistry, M. D. GHEORGHIU	5
Microwave-assisted multicomponent synthesis of benzo[<i>f</i>]pyrrolo [1,2- <i>a</i>]quinoline derivatives, E. GEORGESCU, F. GEORGESCU, F. DUMITRĂSCU, C. DRAGHICI, A. NICOLESCU, D. MARINESCU, C. DELEANU	97
MoCo/ γ -Al ₂ O ₃ -catalyzed hydrodesulfurization to synthesis of cantharidin-based molecules, C.-B. TAN, A.-Q. FANG, X.-L. LIU, H.-F. DU	305
Molecular descriptors of neural networks with chemical significance, S. MONDAL, N. DE, A. PAL	1031
Molecular structure and supramolecular association of trichloro-2-thienyl-diphenylmethylsilane, A. SORAN, I. HAIDUC	685
Molecular structures of (2-bromophenyl)diphenylstibane and {2'-bromo-[1,1'-biphenyl]-2-yl}diphenylstibane, M. OLARU, K. T. KEGYES, C. I. RAȚ	719
Monitorization of patulin and hydroxymethylfurfural in fruit juice and commercial fruity baby foods by an HPLC-DAD method, E. DURAL	191
Mononuclear lanthanide(III) complexes with tripodal ligands as ammonium cation receptors, A. COSTACHE, A. M. MĂDĂLAN	761
MPSC ₆ binuclear complexes immobilized on graphene oxide for oxidation of lignin model compounds and lignin, X.-F. ZHOU, Z.-R. ZOU, X.-J. YANG	973

N

New hypercoordinated organoantimony(V) bromides. Synthesis and structural characterization, E. DENES, C. LINDORFER, L. DRAGOMIR, C. I. RAȚ, A. SILVESTRU	587
New <i>in vivo</i> glucose test by localized dynamic deuterium nuclear magnetic resonance, A. YE, B. EROKWU, M. TWIEG, C. A. FLASK, G. D. MATEESCU	39
New mixed-valence disk-like [Co ₇] clusters with aminoalcohol ligands, A. A. APOSTOL, G. VASILE, T. MOCANU, C. MAXIM, V. TUDOR, M. ANDRUH	711
New silver(I) and mercury(II) metal complexes containing the heteroleptic diorganoselenium(II) ligand (n-Bu)[2(Me ₂ NCH ₂)C ₆ H ₄]Se. Synthesis and structural characterization, D. DUMITRAS, A.-M. HODOROGEA, D. MĂRGINEANU, A. POP	755
New stable 2,3-dichloro,1,3-diphosphapropenes; synthesis and characterization, R. SEPTLEAN, A. MURESAN, A. SORAN, I.-T. MORARU, G. NEMES	579
New tocopherol derivatives for functionalization of amino or carboxyl groups with lipid anchors, R. SPRINGER, J. LIEBSCHER	517
Novel chitosan-hydroxyapatite microporous composites for medical applications, I. A. DUCEAC, F. TANASA	1111
Numerical study of pressure and composition influence on laminar flame propagation in nitrogen-diluted H ₂ -O ₂ mixtures, D. RAZUS, M. MITU, V. GIURCAN, C. MOVILEANU, D. OANCEA	529

O

Octa-substituted Co(II) and Mn(II) phthalocyanines containing butyl-4-hydroxybenzoate groups: Synthesis, characterization, aggregation, and investigation of their anti-microbial and anti-fungal activity properties, M. B. SAGLAM	367
On the green catalytic synthesis of purpurogallin, S. DIB, D. VILLEMIN, B. MOSTEFA-KARA, A. HAMHAMI, N. BAR, M. DEKHICI, N. CHEIKH	1153
One-pot three-component synthesis of α -aminonitriles using sodium dihydrogen phosphate as a catalyst at room temperature, Z. KARIMI-JABERI, A. BAHRANI	1093
Optimization and control of aeration distribution in the WWTP nitrification reactor, M. SIMON-VÁRHELYI, V. M. CRISTEA, A. V. LUCA, M. A. BREHAR	601
Oxidation of sp ² versus sp ³ phosphorus atom in 1,3-diphosphapropenes. A DFT study, I.-T. MORARU, R. SEPTLEAN, G. NEMES	747

P

Parametric study of high temperature water gas shift reaction for hydrogen production in an adiabatic packed bed membrane reactor, I. EDDI, L. CHIBANE	149
Phenolic, tocopherols and squalene profiles (HPLC-UV) of <i>Chemlali</i> -Sfax olive oil according to extraction procedure, M. CHIRA, G. RIGANE, C. CALAS-BLANCHARD, R. ROUILLON, R. BEN SALEM	179

Photoinitiated functionalization of minerals fillers for dental composites, S. BAYOU, M. MOUZALI, L. LECAMP, P. LEBAUDY	859
Phytochemical and antioxidant activities of <i>Schinus molle</i> L. extract, M. BEN HMED, G. RIGANE, R. BEN SALEM, N. ZOUARI, S. CHERIF	173
Poly(1-vinylimidazole) grafted on magnetic nanoparticles - attainment of novel nanostructures, A. NAN, R. TURCU	611
Predicted singlet point mutations in ganglioside-binding domain of SARS-CoV-2 S and recognition by 9-O-acetylated sialic acid and hydroxychloroquine, P. M. MITRASINOVIC	1099
Preparation and characterisation of montmorillonite-Fe ³⁺ (MMT-Fe ³⁺) nanoclay mineral for crystal violet (CV) removal from aqueous solutions, S. BOUDJEMAA	945
Preparation and evaluation of photocatalytic activity of tin-doped titanium hydrogen phosphate for the removal of Methyl Red dye, M KASSEM	277
Preparation of nanocomposite hydrogels with nanoclay: characterization, swelling properties and dye adsorption behavior, N. SEDDIKI, D. ALIOUCHE, I. BOUDHENE	119
Progress in Photocatalysis of New Two-Dimensional Layered Materials MXenes, C. KAI, F. ZHANG, C. KONG, W. CAI	1079

R

Reduction of α,β -unsaturated carbonyl compounds and 1,3-diketones in aqueous media, using a Raney Ni-Al alloy, C. SIMION, Y. MITOMA, Y. KATAYAMA, A. M. SIMION	51
Removal properties of methylene blue from aqueous solutions by organomodified montmorillonite: isotherm, thermodynamics and kinetic studies, S. BOUDJEMAA, B. ZIDELKHEIR	499
Response surface historical method, simulation of CO ₂ absorption process by DEA in FFR using COMSOL Multiphysics, N. MALEKI, S. Z. ABADI, A. AZIMI, A. S. KOOTENAEI	1133
Ring size effect in McMurry cyclization of 1, ω -di((azulen-1-yl)-carbonyl) alkanes, E. A. DRAGU, A. C. RAZUS	83
RuO ₄ – mediated oxidation of tertiary amines. Stereoelectronic effects, H. PETRIDE, C. FLOREA, A. HÎRTOPEANU, C. STAVARACHE	89

S

Selective hydration of electron-rich aryl-alkynes by a Schrock-type molybdenum alkylidene catalyst, A. CRIȘAN, A. POP, E. BOGDAN, M. MATACHE, L. POP, A. TEREÇ, I. GROSU, N. HĂDADE	699
Separation and synthesis of the new DSFs, C.-B. TAN, C.-Q. CHANG, C.-L. HE, L.-H. ZHANG, X.-L. LIU	403
Simultaneous determination of quercetin and luteolin in mate and white tea samples by voltammetry, K. KARABODUK, E. HASDEMİR	375
Small-angle X-ray powder diffraction analyses, microstructure and morphology of some synthesized template silica samples related to the 2-methoxyethanol content, A.-M. PUTZ, P. PLOCEK, P. BEZDICKA, C. SAVII	135
Solvent-free, microwave assisted oxidation of alcohols with 4-hydroxypyridinium chlorochromate functionalized silica gel, S. S. GHALEHBANDI, D. GHAZANFARI, S. A. AHMADI, E. SHEIKHHOSSEINI	283
Spectro-analytical, antimicrobial and antitumor studies of the first and second generation of cephalosporin combined with ruthenium(III) ion as a drug model, L. A. ALBEDAIR, S. O. ALJAZZAR, A. S. ALTURIQI, M. I. KOBEASY, M. S. REFAT	255
Surface passivation of carbon nanoparticles with 1,2-phenylenediamine towards photoluminescent carbon dots, A. P. CRISAN, A.-M. CRACIUN, I. MIHALACHE, M. FOCSAN, C. SOCACI, D. MANIU, S. ASTILEAN, L. M. VECA, A. TEREÇ	559
Synthesis and characterization of graphene oxide/ gold nanoparticles/ dibenzothiophene heterogeneous nanostructures, F. B. NIȘANCI	777
Synthesis and characterization of novel homobimetallic organotin(IV) compounds, A.-A. SOMEȘAN, I. BARBUL, S.-M. VIERIU, R. A. VARGA	725
Synthesis and characterization of a novel sugar based cross-linker, ANAMICA, P. P. PANDE	801
Synthesis and evaluation of cytotoxic activity of new acenaphtho triazin benzamide derivatives, S. A. SEDEH, M. K. MOHAMMADI, M. FEREDOONNEZHAD, A. JAVID	467
Synthesis and structural analysis of some nitroderivatives of a dopamine analog, A. M. MĂDĂLAN, M. MATACHE, P. IONITA	103
Synthesis and structural characterization of mercury(II) metal complexes containing the 2-(Me ₂ NCH ₂)C ₆ H ₄ Se ligand, C. E. ȘALGĂU, A. POP	595
Synthesis and structure of 6-diphenylphosphinoacenaphth-5-yl bismuth compounds, S. FURAN, E. HUPF, E. LORK, J. BECKMANN	673
Synthesis, antimicrobial activity, urease inhibition and molecular docking studies of new proline linked thiourea derivatives, A. RAHEEL, I.-U.-DIN, S. H. IFTIKHAR, M. B. TAJ, R. AYUB, A. ZAFAR, S. ABBAS, M. AL-SHAKBAN	783
Synthesis, characterization, aggregation and electrochemical properties of peripheral octa-2-{{4-(2-benzylphenoxy) benzyl}thio} ethoxy group substituted cobalt(II) phthalocyanine, M. B. SAĞLAM, Z. BIYIKLIOĞLU	807
Synthesis condition effects on the anti-polyelectrolyte behaviour of poly(acrylamide-co-(4-vinylpyridine)) (AM/4VP) copolymers in aqueous media, B. BOURAS, T. HOCINE, K. I. BENABADJI, L. TENNOUGA, A. MANSRI	839
Synthesis, crystal structures and solid-state optical properties of two Mannich derivatives of 2',7'-dichlorofluorescein, M. RĂDUCĂ, A. M. MĂDĂLAN	617

Synthesis of novel sugar based xanthates for the removal of copper and nickel harmful heavy metals from water, A. NATH, P. P. PANDE	395
Synthesis of some new <i>N</i> -acetylated pyrazoline derivatives <i>via</i> the efficient one-pot reaction by using <i>p</i> -toluenesulfonic acid, H. KHODADAD, K. POURSHAMSIAN, F. HATAMJAFARI, B. SADEGHI	165
Synthesize palladium and nickel oxide nanoparticles in the presence of 4-aminoantipyrine derivative as a precursor: decolorization efficiency of methylene blue, K. A. ALIBRAHIM, F. F. AL-FAWZAN, M. S. REFAT	343

T

The association effect of cocoa butter with vegetable oils on the obtaining of lipid nanocarriers loaded with antidepressant and antipsychotic drugs, A. BRATU, C. OTT, B. BALANUCA, N. BADEA, I. LACATUSU	57
The efficiency of Fe@Mg-Al layered double hydroxide for cadmium removal from water samples, R. MOTALLEBI, A. MOGHIMI, H. SHAHBAZI, H. FARAJI	291
The effect of the composition of the alloy of RuO ₂ and Pt nanocrystals on intermediate adsorption during methanol oxidation, M. SPASOJEVIĆ, L. RIBIC-ZELENOVIĆ, M. SPASOJEVIĆ, T. TRIŠOVIĆ	481
The role of the substituents in the chemistry of organoantimony(III) compounds, H. J. BREUNIG	635
Thermal and mechanical properties of P(MMA-co-BMA)/MWNTs nanocomposites, F. HUANG, F. GUO, G. LIU	361
Topological properties of chemical structures, Z.-Q. CHU, M. K. SIDDIQUI, M. F. NADEEM, M. NAEEM	411

U

Ultrasound-assisted synthesis and antimicrobial evaluation of some novel benzoxanonylhydrazone derivatives, N. CHETTIBI, H. BENTOUMI, M. LIACHA	885
UV-VIS studies on interaction between sodium dioctylsulfosuccinate (AOT) and methyl red, B. KHADKA, A. BHATTARAI	989

V

Visible light promoted synthesis of disubstituted 1,2,3-thiadiazoles, V. SRIVASTAVA, P. K. SINGH, P. P. SINGH	221
---	-----

W

Wine industry waste valorisation as repellent support, C. TODASCA, D. GUDOVAN, M. TOCIU, R. TRUSCA, A. I. NICOARA, B. N. MANOLESCU, F. MANOLACHE	69
--	----

