

Chemistry Department Scientific Publication 2023

#	Title	Author(s)	Journal/Conference	DOI
1	Study of Gamma-ray Shielding of Two Different Heavy Metals and their Combination for Cs-137 and Co-60 Sources	Mohamed Eltayeb M. Eisa, M. D. M. Ali, Mustafa J. Abualreish	Engineering, Technology & Applied Science Research	https://doi.org/10.48084/etasr.5513
2	The behavior of indium in dilute sodium tetraborate containing bromide ions in the presence of some ethoxylated surfactants.	Arej S. Al-Goraira , S. Abd El Wanees, Ameena Mohsen Al-bonayand , Mohamed T. Alotaibic , Salih S. Al-Juaidf , Mahmoud G.A. Salehg , S. Noohb , M. Abdallahe.	International Journal of Electrochemical Science	https://doi.org/10.1016/j.ijoes.2023.100245
3	Mitigation of hydrogen production on C-steel in HCl solution using a benzylidene compound.	Salah Abd El Wanees, Mahmoud G. A. Saleh , Mohamed A. Hegazyd , Mohamed I. Alahmdie , Kamal A. Soliman , Nadia H. Elsayede,g, Mohamed Abdelfattahh , Meshari M. Aljohanie , Samir Nooha , Mohamed Asabj and Salah S. Elyani	Journal of Adhesion Science and Technology	https://doi.org/10.1080/01694243.2023.2255042
4	Anti-Corrosion Properties and Mitigation of Hydrogen Production on C-Steel in Hcl Solutions by an Azomethine Derivative.	S. Abd El Wanees, M. A. Hegazy, Mahmoud G. A. Saleh , K. A. Solimane,M.I. Alahmdi, Nadia H. Elsayed, Y. Atefh, M. Abd El Fatahh, M. Asab k, Salah, S.Elyan	Materials Chemistry and Physics	https://dx.doi.org/10.2139/ssrn.4354304
5	Benzotriazole-modified chitosan as a controller for the destruction of Al and H2 generation in the acidic environment.	S. Abd El Wanees, Mahmoud G. A. Saleh , Mohamed I. Alahmdi, Nadia H. Elsayed, Meshari M. Aljohani, Mohamed Abde lfattah, Ka mal A. Soliman h, Mohamed L oftyAlalati, Salah S. Elyan I.	Materials Chemistry and Physics	https://doi.org/10.1016/j.matchemphys.2023.128484
6	Ag/Ag ₂ O Electrode for Electrocatalytic Oxidation of Ethanol.	Mahmoud G. A. Saleh , S. Abd El Wanees, I. D. Alruwaili, A. Akremi, A. M.Elbasiony, M. Brakat.	International Journal of Electrochemical Science	https://doi.org/10.1016/j.ijoes.2023.100372
7	Bis(2-hydroxyethyl) ammonium dodecanoate and its constituents as inhibitors for Al corrosion and H ₂ production in acid medium	Arej S. Al-Gorair, Merfat S. Al-Sharif , S.S. Al-Juaid, Mahmoud	International Journal of Electrochemical Science	https://doi.org/10.1016/j.ijoes.2023.100452

		G.A. Saleh , Mohamed Abdelfattah, M. Abdallah, S. Abd El Wanees		
8	Potentiometric and polarization studies on the oxide film repair and retardation of pitting corrosion on indium in an alkaline aqueous solution utilizing some triazole compounds	Arej S. Al-Gorair, Mahmoud G.A. Saleh , Mohamed T. Alotaibi, Salih S. Al-Juaid, M. Abdallah, S. Abd El Wanees	Inorganic Chemistry Communications	https://doi.org/10.1016/j.inoche.2023.111497
9	Synthesis of some new antipyrine-thiophene hybrids and evaluating their antioxidant and antibacterial activities	Altaf Saleh, Ali Saeed, Ghada E. Abdel-Ghani, Ali El-Rayyes , Ehab Abdel-Latif	Bull. Chem. Soc. Ethiop.	https://dx.doi.org/10.4314/bcse.v37i1.11
10	Molecular design and synthesis of acetohydrazonoyl cyanide structures as efficient dye-sensitized solar cells with enhancement of the performance of the standard N-719 dye upon co-sensitization	Mohamed R. Elmorsy, Safa A. Badawy, Abdullah Y. A. Alzahrani and Ali El-Rayyes	Optical Materials	https://doi.org/10.1016/j.optmat.2022.113359
11	Synthesis and modification of photoluminescence and dielectric properties of novel fluorophosphate glass by incorporating different transition metal oxides for optoelectronic applications	OI Sallam, MM Atta, EO Taha, AM Elbasiony , AMA Henaish, RM Ahmed	Optical Materials	https://doi.org/10.1016/j.optmat.2022.113413
12	Facile gamma-ray induced synthesis of reduced graphene oxide decorated with silver nanoparticles: a green approach for symmetric supercapacitor applications	Mohamed M Atta, Mohamed Rabia, Amr M Elbasiony , Eman O Taha, Mostafa M Abdel Hamid, Ahmed MA Henaish, Qinfang Zhang	Fullerenes, Nanotubes and Carbon Nanostructures	https://doi.org/10.1080/1536383X.2023.2292705
13	Reduced Graphene Oxide-Zinc Sulfide Nanocomposite Decorated with Silver Nanoparticles for Wastewater Treatment by Adsorption, Photocatalysis and Antimicrobial Action	Hina Naeem, Hafiz Muhammad Tofil, Mohamed Soliman, Abdul Hai, Syeda Huma H. Zaidi , Nadeem Kizilbash, Dalayah Alruwaili, Muhammad Ajmal, and Muhammad Siddiq.	Molecules	https://doi.org/10.3390/molecules28030926
14	Resveratrol-laden nano-systems in the cancer environment: views and reviews	Muhammad Sarfraz , Mosab Arafat, Syeda Huma H. Zaidi , Lina Eltaib, Muhammad Irfan Siddique, Mehnaz Kamal, Abuzer Ali, Syed Mohammed Basheeruddin Asdaq, Abida Khan, Shams Aaghaz, Mohammed Sanad Alshammari, Mohd Imran	Cancers	https://doi.org/10.3390/cancers15184499
15	Design, In silico Studies, and Synthesis of Some Azole Derivatives as Antimicrobial	Syeda Huma Haider Zaidi , Abida Ash Mohd, Mohd Imran,	Oriental Journal of Chemistry	http://dx.doi.org/10.13005/ojc/390618

	Agents. Oriental Journal of Chemistry	Menwah Khalifah Alshammari, Khattab Fahed Alfrah. Design		
16	Anabasis oropediorum Maire. as a health-promoting source: Phytochemical content, in vitro antioxidant, antidiabetic, antibacterial, and anti-inflammatory potential	Noura GHERAISSA, Ahmed Elkhalfa CHEMSA, Nezar CHERRADA, Erol EBRU, Eman Ramadan ELSHARKAWY	JOURNAL OF RESEARCH IN PHARMACY	http://dx.doi.org/10.29228/jrp.474
17	Biochemical Profile and In Vitro Therapeutic Properties of Two Euhalophytes, Halocnemum strobilaceum Pall. and Suaeda fruticosa (L.) Forske., Grown in the Sabkha Ecosystem in the Algerian Sahara	Gheraissa N, ChemsA AE, Cherrada N, Erol E, Elsharkawy ER , Ghemam-Amara D, Zeghoud S, Rebiai A, Messaoudi M, Sawicka B, Atanassova M.	Molecules	https://doi.org/10.3390/molecules28083580
18	In silico evaluation of molecular interactions between macrocyclic inhibitors with the HCV NS3 protease. Docking and identification of antiviral pharmacophore site.	Hind Lafridi, Faisal A Almalki, Taibi Ben Hadda, Malika Berredjem, Sarkar MA Kawsar, Ali M Alqahtani, Eman R Esharkawy , Brahim Lakhrissi, Hsaine Zgou.	Journal of biomolecular Structure and Dynamics	https://doi.org/10.1080/07391102.2022.2029571
19	Superior adsorption and removal of toxic industrial dyes using cubic <i>Pm3n</i> aluminosilica form an aqueous solution, Isotherm, Kinetic, thermodynamic and mechanism of interaction	Alotaibi, Mohammed T., Roaa T. Mogharbel , Ali Q. Alorabi, Nasser A. Alamrani, Ahmed Shahat, and Nashwa M. El-Metwaly	Journal of Molecular Liquids	https://doi.org/10.1016/j.molliq.2023.121672
20	Superior adsorption and removal of industrial dye from aqueous solution via magnetic silver metal-organic framework nanocomposite	Mogharbel, Roaa T. , Kholood Alkhamis, Rasha Felaly, M. G. El-Desouky, A. A. El-Bindary, Nashwa M. El-Metwaly, and M. A. El-Bindary	Environmental Technology	https://doi.org/10.1080/09593330.2023.2178331
21	Polymer quantum dots doped in metal organic framework for sonocatalytic degradation of sulfamethazine	Mogharbel, Roaa T. , Ali Q. Alorabi, Kholood M. Alkhamis, Salhah H. Alrefae, Ameena M. Al-bonayan, Salhah D. Al-Qahtani, and Nashwa M. El-Metwaly	Surfaces and Interfaces	https://doi.org/10.1016/j.surfin.2023.102967
22	Post-synthetic Ln@ modified MIL (Ti) framework in sonophotocatalysis degradation of carbaryl.	Mogharbel, Roaa T. , Meshari M. Aljohani, Ali Q. Alorabi, Ameena M. Al-bonayan, Hana M. Abumelha, Turki M. Habeebullah, Ismail Althagafi, and Nashwa M. El-Metwaly.	Materials Chemistry and Physics	https://doi.org/10.1016/j.matchemphys.2023.127990

23	Preparation of photochromic solution blow spun polycarbonate nanofibers from recycled plastic for optical anticounterfeiting	Mogharbel, Roaa T. , Albandary Almahri, Omaymah Alaysuy, Seraj Omar Alzahrani, Ali Q. Alorabi, Salhah D. Al-Qahtani, and Nashwa M. El-Metwaly	Optical Materials	https://doi.org/10.1016/j.optmat.2023.113936
24	Molecular geometry and biological activity of 2-(4-substituted-phenylimino) thiazolidin-4-one compound	El-Rayyes, Ali, Roaa T. Mogharbel , Mohamed H. Abdel-Rhman, Mohamed A. Ismail, and Ehab Abdel-Latif	Bulletin of the Chemical Society of Ethiopia	https://doi.org/10.4314/bcse.v37i5.18
25	Ultrasmall Cu-Substituted NiZn Ferrite Nanoparticles: Efficiency for the Removal of the Alizarin Red S Dye and Reusability	Roaa Mogharbel · Lotfi Ben Tahar , Hichem Huili · Bilel Grindi	Arabian Journal for Science and Engineering	https://doi.org/10.1007/s13369-023-08107-x
26	Solubility measurement of syringic acid, trans-cinnamic acid, p-coumaric acid, and vanillin constituent of Deverra DC. genus in (ethyl acetate + ethyl alcohol) mixtures: Thermodynamic modeling and preferential solvation	Adel Noubigh , Mustafa Jaipallah Abualreish , Roaa T. Mogharbel , Abdullah F. Alanazi, Turki S. Alanazi, Arbi Guetat	Journal of Molecular Liquids	https://doi.org/10.1016/j.molliq.2023.122710
27	Preparation of color-tunable electrospun cellulose acetate-polycaprolactone nanofibrous film for information encryption	Roaa T. Mogharbel , Kholood Alkhamis, Sahar Sallam, Alaa M. Munshi, Mubark Alshareef, Mona Alhasani, Fathy Shaaban, Nashwa M. El-Metwaly	Journal of Applied Polymer Science	https://doi.org/10.1002/app.54631
28	TD-DFT Calculation, Equilibrium and kinetic adsorption study of removal of rose bengal dye by poly vinyl alcohol as a synthetic polymer adsorbent hybrid blend	Mogharbel, Roaa T. , Ahmed F. Al-Hossainy, and Samia M. Ibrahim	Journal of Molecular Structure	https://doi.org/10.1016/j.molstruc.2023.137261
29	Click synthesis and self-assembly of novel dendritic ethylene glycol/alkyl-substituted diarylated triazoles into supramolecular nanofibers	Alenazi, Noof A., Wael M. Alamoudi, Ahmad Fawzi Qarah, Haifa Alharbi , Alaa M. Alqahtani, Majid A. Bamaga, and Nashwa M. El-Metwaly.	Journal of Molecular Structure	https://doi.org/10.1016/j.molstruc.2023.136585
30	New thieno[2,3-b]pyridine-based compounds: Synthesis, molecular modelling, antibacterial and antifungal activities	Alenazi, Noof A., Haifa Alharbi , Ahmad Fawzi Qarah, Amerah Alsoliemy, Matokah M. Abualnaja, Alaa Karkashan, Basma Abbas, and Nashwa M. El-Metwaly	Arabian Journal of Chemistry	https://doi.org/10.1016/j.arabjc.2023.105226
31	Synthesis of (thio) alkyloxy-substituted perfluorinated terphenyl derivatives: Optical	Alatawi, Omar M., Haifa Alharbi , Mariam Mojally, Noof A. Alenazi, Ahmad Fawzi	Journal of Molecular Structure	https://doi.org/10.1016/j.molstruc.2023.137370

	properties, molecular docking and antioxidant activity.	Qarah, Rua B. Alnoman, Ahmed Hameed, and Nashwa M. El-Metwaly.		
32	Preparation of fluorescent ink using perylene-encapsulated silica nanoparticles toward authentication of documents	Abumelha, Hana M., Haifa Alharbi , Matokah M. Abualnaja, Hatun H. Alsharief, Gadeer RS Ashour, Fawaz A. Saad, and Nashwa M. El-Metwaly.	J. Photochem. Photobiol.	https://doi.org/10.1016/j.jphotochem.2023.114706
33	Synthesis, molecular modelling and docking studies of new thieno[2,3-b:4,5-b] dipyridine compounds as antimicrobial agents	Alenazi, Noof A., Ahmad Fawzi Qarah, Mansoor Alsahag, Haifa Alharbi , Abrar Bayazeed, Salhah D. Al-Qahtani, and Nashwa M. El-Metwaly.	Arabian Journal of Chemistry	https://doi.org/10.1016/j.arabjc.2023.104839
34	Electrospun glass nanofibers to strengthen polycarbonate plastic glass toward photoluminescent smart materials	Alrefaee, Salhah H., Rua B. Alnoman, Noof A. Alenazi, Haifa Alharbi , Kholood Alkhamis, Hatun H. Alsharief, and Nashwa M. El-Metwaly.	Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy.	https://doi.org/10.1016/j.saa.2023.122986
35	Photoluminescent Cellulose Nanofibers-Reinforced Alginate Hydrogel with Color-Tunable and Self-Healing Properties for Authentication Applications	Alharbi, Haifa , Noof A. Alenazi, Awatif RZ Almotairy, Sahar Sallam, Kholood Alkhamis, Khaled F. Alshammari, and Nashwa M. El-Metwaly.	J Inorg Organomet Polym Mater.	https://doi.org/10.1007/s10904-023-02766-x
36	Development of photoluminescent viscose fibers integrated with polymer containing lanthanide-doped phosphor	Yasmeen A. S. Hameed , N. Alamrani, S. Sallam, S. Ibarhiam, A. Almahri, A. Alorabi, and N. El-Metwaly	Microscopy Research and Technique	https://doi.org/10.1002/jemt.24441
37	Application of Metal.Organic Frameworks for Efficient Removal of Doxorubicin Hydrochloride: Removal Process Optimization and Biological Activity	Kholood M. Alkhamis, Meshari M. Aljohani, Saham F. Ibarhiam, Yasmeen A. S. Hameed , Hana M. Abumelha, Turki M. Habeebullah, and Nashwa M. El-Metwaly	American Chemical Society	https://doi.org/10.1021/acsomega.3c03523
38	Application of Rhodococcus jostii RHA1 glycolate oxidase as an efficient accessory enzyme for lignin conversion by bacterial Dyp peroxidase enzymes	Awatif Alruwaili , Goran M M Rashid , Timothy D H Bugg	Green Chemistry	https://doi.org/10.1039/d3gc00475a
39	Lignin Chemistry: Characterization, Isolation, and Valorization”Enzymatic and Microbial Bioconversion of Lignin to Renewable Chemicals.	Wiley, eds. Yuhe Liao, Rafael Luque, Bert Sels. Timothy D.H. Bugg, Victoria Sodr�,	Book chapter, Wiley-VCH; 1st edition	

		Awatif Alruwaili, and Goran M.M. Rashid		
40	Substituted salicylic acid analogs offer improved potency against multidrug-resistant <i>Neisseria gonorrhoeae</i> and good selectivity against commensal vaginal bacteria	HananAlmolhim , Ahmed E. M. Elhassanny, Nader S.Abutaleb, Abdallah S.Abdelsattar, Mohamed N. Selem& Paul R. Carlier	Scientific Reports	https://doi.org/10.1038/s41598-023-41442-5
41	Synthesis of new 1,2,3-triazole linked benzimidazolidinone: single crystal Xray structure, biological activities evaluation and molecular docking studies	H. Al-Ghulikah, A. Ghabi, A. Haouas , H. Mtiraoui, E. Jeanneau, M. Msaddek	Arabian Journal of Chemistry	https://doi.org/10.1016/j.arabjc.2023.104566
42	Synthesis, non-covalent interactions and chemical reactivity of 1- pentyl-3-phenylquinoxalin-2(1H)-one- Structural and computational studies	N. Abed, L. Guelmami, A. Haouas , M. Hajji, M. El Hafi, J. Sebhaoui, T, Guerfel, J. T. Mague, E. M. Essassi, Y. Ramli	Journal of Molecular Structure	https://doi.org/10.1016/j.molstruc.2023.135622
43	Design and synthesis of new N-Substituted benzimidazolidinone as predicted Human BRD4 and Human Chymase inhibitors via molecular Docking Studies	A. Ghabi, H. Mtiraoui, A. Haouas , H. Alghulikah, M. Sanselme, M. Msaddek	Journal of Molecular Structure	https://doi.org/10.1016/j.molstruc.2023.136325
44	Chemoselective chlorination of 1,5-benzodiazepin-2-one derivatives by activated DMSO	A. Ghabi, H. Mtiraoui, A. Haouas , H. Alghulikah, M. Sanselme, M. Msaddek	Journal of Molecular Structure	https://doi.org/10.1016/j.molstruc.2023.136520
45	The Unconventional Noncovalent Interactions Control: Crystallographic and Theoretical Analyses of the Crystalline Structure of 1,1'-(1-Chloro-4-methoxyphenyl)dibenzene as a Case Study	M. Hajji, A. Haouas , N. Abad, T. Guerfel	Journal of Chemistry Select	https://doi.org/10.1002/slct.202302624
46	Bis(DMAP) cobalt(II) porphyrin complexes: dielectric properties and visible light irradiated photocatalytic degradation of Toluidine Blue studies	N. Amiri, M. Guergueb, A. Haouas , M. Bourguiba, H. Nasri	Journal of Inorganic Chemistry Communications	https://doi.org/10.1016/j.inoche.2023.111551
47	Probing the significance, nature, and energetics of weak hydrogen bonding in the crystal structure of a 1 chloro 4 methoxybenzene derivative through structural and computational modeling	A Haouas	Journal of Chemical Papers	https://doi.org/10.1007/s11696-023-03245-w
48	Effectiveness of Stem Cell Secretome on Wound Healing: A Systematic Review and Meta-Analysis	Cecep Suhandi, Ahmed Fouad Abdelwahab Mohammed, Gofarana Wilar, Ali El-Rayyes , Nasrul Wathoni,	J. Tissue Engineering and Regenerative Medicine,	https://doi.org/10.1007/s13770-023-00570-9
49	Procalcitonin assessment by using optical sensor terbium hydrochlorothiazide complex for early diagnosis of lung cancer	Safwat A. Mahmoud, Ali El-Rayyes, Shahenda S. Ahmed, Mohamed S. Attia	Microchemical Journal	
50	Synthesis of some new thiophene, thienyl-thiazole and thienyl-	Altaf S. Almatari, Ali Saeed, Ghada E. Abdel-	Journal of Heterocyclic Chemistry	

	benzofuran analogues and evaluation of their anticancer activity	Ghani, Ali El-Rayyes , Ehab Abdel-Latif		
51	Solubility Modeling and Preferential Solvation of Benzamide in Some Pure and Binary Solvent Mixtures at Different Temperatures	Adel noubigh; Lotfi Ben Tahar ; Aboulbaba Eladeb	Journal of Chemical & Engineering Data	https://doi.org/10.1021/acs.jced.3c00024
52	Preferential solvation of azoxystrobin in binary solvent mixtures of (methyl alcohol + ethyl ethanoate) and (n-propyl alcohol + ethyl ethanoate)	Adel noubigh ; Manef Abderrabba	Brazilian Journal of Chemical Engineering	https://doi.org/10.1007/s43153-023-00401-3
53	CuCe Ferrite/TiO ₂ Nanocomposite as an Efficient Magnetically Separable Photocatalyst for Dye Pollutants Decolorization	Elsayed T Helmy, Usama A Soliman, AM Elbasiony , Ba-Son Nguyen	Topics in Catalysis	https://doi.org/10.1007/s11244-022-01671-w
54	Natural level of uranium and ²³⁴ U/ ²³⁸ U activity ratios in Tunisian phosphates	Faten Boujelbane, Amina Ismailia, Lobna Khelifi , Mohamed Samaali, Mansour Oueslati, Radhia Souissi	Arabian Journal of Geosciences	https://doi.org/10.1007/s12517-022-10006-8
55	A differential equations model for sustainable circular economy	Ridha Selmi, Fatma Saadi, Lobna khelifi	Supported search in eleventh cycle	
56	Optimization on the heterogeneous photocatalytic degradation of Azorubine E122 dye using nanocomposite via CuO nanoparticles with sodium mordenite	Tahani N. Alenazi , Hatun H. Alsharief, Albandary Almahri, Hanan K. Al-Zahrani, Hanadi A. Katuah, Reem Shah b, Fawaz A. Saad b, Nashwa M. El-Metwaly	Journal of Molecular Liquids	https://doi.org/10.1016/j.molliq.2023.123926
57	The Kinetic Behaviour of Mn ⁷⁺ /H ⁺ Ions Towards Mannose Molecule	M. J. A. Abualreish	Journal of Physical Science	https://doi.org/10.21315/jps2023.34.3.2
58	Nanosized nickel hexacyanoferrate modified platinum electrode for promoting hydrogen evolution reaction in alkaline medium	Khaled G. Mahmoud, Mustafa J. Abdelmageed Abualreish , Mohamed Khairy	Journal of Electroanalytical Chemistry	https://doi.org/10.1016/j.jelechem.2023.117513
59	Comprehensive Catalytic and Biological Studies on New designed oxo- and dioxo Metal(IV/VII) organic Complexes of Aroylhydrazone frameworks	M. J. A. Abualreish M. Mohamad Ahmad Desoky, and Mohamed Shaker S. Adam	Journal of Molecular Liquids	https://doi.org/10.1016/j.molliq.2023.121309
60	Uncatalyzed Oxidation Of L(-)Arabinose By Acidic Manganese (Vii). Optimization, Stoichiometry, Activation Functions And Mechanism	M. J. A. Abualreish	Scientific Study & Research Chemistry & Chemical Engineering, Biotechnology, Food Industry	