

1. M. Kondalkar, S. Attarde, U. Fegade, Inamuddin, T. Altalhi, M.M. Ibrahim, G.A.M. Mersal, M.H.H. Mahmoud, T. Kumeria, A. Shahat, M.A. El-Binary, Experimental and statistical investigation of adsorption mechanism of toxic chromium on Al-Fe-Zn oxide nanocomposite and successful application on industrial wastewater, *Int. J. Environ. Anal. Chem.*, xxx (2021).
2. Abdelghany, A. M., and Amal Behairy. "Optical parameters, antibacterial characteristics and structure correlation of copper ions in cadmium borate glasses." *Journal of Materials Research and Technology* 9.5 (2020): 10491-10497.
3. El-Damrawi, Gomaa, and Amal Behairy. "Structural role of cerium oxide in lead silicate glasses and glass ceramics." *Journal of Minerals and Materials Characterization and Engineering* 6.3 (2018): 438-447.
4. T.A. Altalhi, M.M. Ibrahim, G.A.M. Mersal, M. Alsawat, M.H.H. Mahmoud, T. Kumeria, A. Shahat, M.A. El-Binary, Mesopores silica nanotubes-based sensors for the highly selective and rapid detection of Fe²⁺ ions in wastewater, boiler system units and biological samples, *Anal. Chim. Acta*, 1180 (2021) 338860. Study the Removal of Copper Ions from Waste Solution Using an Array of Smooth and Corrugated Vibrating Zinc Discs
5. H.A. Kiwaan, F.Sh. Mohamed, A.A. El-Binary, N.A. El-Ghamaz, H.R. AboYassin, M.A. El-Binary, Synthesis, identification and application of metal organic framework for removal of industrial cationic dyes, *J. Mol. Liq.*, 342 (2021) 117435.
6. M.G. El-Desouky, M.A. El-Binary, A.A. El-Binary, Effective adsorptive removal of anionic dyes from aqueous solution, *Vietnam J. Chem.* 59(3) (2021) 341–361.
7. A.S. Al-Wasidi, Ibtisam I. S. AlZahrani, A.M. Naglah, M.G. El-Desouky, M.A. Khalil, A.A. El-Binary, M.A. El-Binary, Effective removal of methylene blue from aqueous solution using metal-organic framework; modelling analysis, statistical physics treatment and DFT calculations, *Chemistry Select*, 6(41) (2021) 11431– 11447.
8. R. Mansour, Mohamed Gamal simade and A. Zaatout, Removal of brilliant green dye from synthetic wastewater under batch mode using chemically activated date pit carbon, *RSC advances*, 11, 7851 (2021).
9. K.S. Abou-Melha, G.A. Al-Hazmi, I. Althagafi, A. Alharbi, Fathy Shaaban, N.M. El-Metwaly, A.A. El-Binary, M.A. El-Binary, Synthesis, characterization, DFT calculation, DNA binding and antimicrobial activities of metal complexes of dimedone arylhydrazone, *J. Mol. Liq.*, 334 (2021) 116498.
10. A. Z. El Sonbati, M. A. Diab, M. I. Abou Dobara, A. M. Eldesoky, H. R. Issa. "Synthesis, characterization, electrochemical studies and antimicrobial activities of metal complexes" *Journal of the Iranian Chemical Society*. Accepted: 20 July 2021. <https://doi.org/10.1007/s13738-021-02354-1>
11. Kaiwan O. Rashid, Khaled S. Mohamed, M. Abd El Salam, Ehab Abdel-Latif, Ahmed A. Fadda & Mohamed R. Elmorsy " Synthesis of Novel

Phenoxyacetamide Derivatives as Potential Insecticidal Agents Against the Cotton Leafworm, *Spodoptera littoralis*" Polycyclic Aromatic Compounds, 2021, 1-14.

12. A.L. Waly, A. Abdelghany, and A. Tarabiah, "Study the structure of selenium modified polyethylene oxide/polyvinyl alcohol (PEO/PVA) polymer blend," *Journal of Materials Research and Technology*, vol. 14, pp. 2962-2969, 2021.
13. M. K. Aouf and S. M. Madian, Subordination Factor Sequence Results for Starlike and Convex Classes Defined by q -Cătaş Operator, *Afrika Matematika*, 32 (2021), 1239–1251. <https://doi.org/10.1007/s13370-021-00896-4>
14. M. K. Aouf , A. O. Mostafa and S. M. Madian, Certain Classes Defined by p -Valent Meromorphic Mittag-Leffler Function, *Proceedings of the Pakistan Academy of Sciences*, 58 (2021), no. 1, 97-106.
[https://doi.org/10.53560/PPASA\(58-1\)536](https://doi.org/10.53560/PPASA(58-1)536).
15. M.G. El-Desouky, M.A.G. Khalil, M.A.M. El-Afify, A.A. El-Binary, M.A. El-Binary, Effective methods for removing different types of dyes – modelling analysis, statistical physics treatment and DFT calculations: a review, *Desalin. Water Treat.* 280 (2022) 89–127.
16. N.M. El-Metwaly, H.A. Katouah, M.G. El-Desouky, A.A. El-Binary, M.A. El-Binary, Fabricating of $\text{Fe}_3\text{O}_4@\text{Ag}$ -MOF nanocomposite and evaluating its adsorption activity for removal of doxorubicin, *J. Environ. Sci. Health A*, 57 (2022) 1099-1115.
17. G.A.A. Al-Hazmi, A.A. El-Zahhar, M.G. El-Desouky, M.A. El-Binary, A.A. El-Binary, Efficiency of $\text{Fe}_3\text{O}_4@\text{ZIF}8$ for the removal of Doxorubicin from aqueous solutions: equilibrium, kinetics and thermodynamic studies, *Environ. Technol. (United Kingdom)*, 2022.
18. G.A.A. Al-Hazmi, A.A. El-Zahhar, M.G. El-Desouky, M.A. El-Binary, A.A. El-Binary, Adsorption of industrial dye onto a zirconium metal-organic framework: synthesis, characterization, kinetics, thermodynamics, and DFT calculations, *J. Coord. Chem.*, 75 (2022) 1203-1229.
19. G.A.A. Al-Hazmi, M.A. El-Binary, M.G. El-Desouky, A.A. El-Binary, Efficient adsorptive removal of industrial dye from aqueous solution by synthesized zeolitic imidazolate framework-8 loaded date seed activated carbon and statistical physics modeling, *Desalin. Water Treat.* 258 (2022) 85- 103.
20. M.A. El-Binary, A. Shahat, I.M. El-Deen, M.A. Khalil, N. Hassan, Highly efficient metal–organic frameworks for removal of industrial dyes from aqueous solutions, *Desalin. Water Treat.* 274 (2022) 261-277.
21. N. Hassan, A. Shahat, I.M. El-Deen, M.A.M. El-Afify, M.A. El-Binary, Synthesis and characterization of $\text{NH}_2\text{-MIL-88(Fe)}$ for efficient adsorption of dyes, *J. Mol. Struct.* 1258 (2022) 132662.
22. T.A. Altalhi, M.M. Ibrahim, G.A.M. Mersal, M.H.H. Mahmoud, T. Kumeria, M.G. El-Desouky, A.A. El-Binary, M.A. El-Binary, Adsorption of doxorubicin

- hydrochloride onto thermally treated green adsorbent: Equilibrium, kinetic and thermodynamic studies, *J. Mol. Struct.* **1263** (2022) 133160.
23. A.S. Al-Wasidi, I.I.S. AlZahrani, H.I. Thawibaraka, A.M. Naglah, M.G. ElDesouki, M.A. El-Binary, Adsorption studies of carbon dioxide and anionic dye on green adsorbent, *J. Mol. Struct.*, **1250** (2022) 131736.
24. M.A. El-Binary, M.G. El-Desouky, A.A. El-Binary, Adsorption of industrial dye from aqueous solutions onto thermally treated green adsorbent: A complete batch system evaluation, *J. Mol. Liq.*, **346** (2022) 117082.
25. M.G. El-Desouky, A.A. El-Binary, M.A. El-Binary, Low-temperature adsorption study of carbon dioxide on porous magnetite nanospheres iron oxide, *Biointerf. Res. Appl. Chem.*, **12(5)** (2022) 6252–6268.
26. M.G. El-Desouky, A. Shahat, A.A. El-Binary, M.A. El-Binary, Description, kinetic and equilibrium studies of the adsorption of carbon dioxide in mesoporous iron oxide nanospheres, *Biointerf. Res. Appl. Chem.*, **12(1)** (2022) 1022-1038.
27. M.A. El-Binary, M.G. El-Desouky, A.A. El-Binary, Metal-organic frameworks encapsulated with an anticancer compound as drug delivery system: Synthesis, characterization, antioxidant, anticancer, antibacterial and molecular docking investigation, *Appl. Organomet. Chem.*, **36(5)** (2022) e6660.
28. M.A. El-Binary, A.A. El-Binary, Synthesis, characterization, DNA binding, and biological action of dimedone arylhydrazone chelate, *Appl. Organomet. Chem.*, **36(4)** (2022) e6576.
29. O.A. El-Gammal, A.A. El-Binary, F.Sh. Mohamed, G.N. Rezk, M.A. ElBinary, Synthesis, characterization, design, molecular docking, anti COVID19 activity, DFT calculations of novel Schiff base with some transition metal complexes, *J. Mol. Liq.*, **346** (2022) 117850.
30. M.A. Diab , R.A. El-Fayoumy , A.M. Eldesoky , S.A. El-Sayad. Synthesis, Characterization, Electrochemical Studies and Biological Activities of Complexes of Tridentate Schiff Base Ligand with Divalent Metal Ions. *A.Z. El-Sonbatia, Egypt. J. Chem.* Vol. 65, No. 3 pp. 51 - 72 (2022).
31. Mahmoud Arafat, Ehab Abdel-Latif, Fathy M. El-Taweel, Seif-Eldin N. Ayyad and Khaled S. Mohamed " Synthesis and biological assessment of new benzothiazolopyridine and benzothiazolyl-triazole derivatives as antioxidant and antibacterial agents.*Bull. Chem. Soc. Ethiop.* 2022, **36(2)**, 451-463
32. M.G. El-Desouly, M.A. Khalil, A.A. El-Binary, M.A. El-Binary, Biological, biochemical and thermochemical techniques for biofuel production: An updated review, *Biointerf. Res. Appl. Chem.*, **12(3)** (2022) 3034–3054.
33. H. S. Gadow, Thoraya A. Farghaly,A. M. Eldesoky ,In an Acidic Environment, Perimidin 10 one Derivatives were Evaluated as Potential Copper Corrosion Inhibitors (Experimental and Theoretical Examinations).. *Journal of Bio- and Triboro-Corrosion* (2022) 8:51. <https://doi.org/10.1007/s40735-022-00650-8>.

34. Green inhibitor of carbon steel corrosion in 1 M hydrochloric acid: *Eruca sativa* seed extract (experimental and theoretical studies). *RSC advances* 12.15 (2022): 8953-8986.
35. A.L. Waly, A. M. Abdelghany, and A. E. Tarabiah, "A comparison of silver nanoparticles made by green chemistry and femtosecond laser ablation and injected into a PVP/PVA/chitosan polymer blend," *Journal of Materials Science: Materials in Electronics*, vol. 33, no. 29, pp. 23174-23186, 2022.
36. E. M. Abdelrazek, A. M. Abdelghany, A. E. Tarabiah, and A.L. Waly, "Mechanical and electrical studies of PVA/PVP blend filled with MWCNTs," *Polymer Bulletin*, pp. 1-14, 2022.
37. 1-A. Atta, H. Wahba, A.L. Waly, B. Al-hasni, and E.M. Ahmed, "On the electric and dielectric properties of some boro-lead sulphate glasses," *Glass Physics and Chemistry*, vol. 48, no. 3, pp. 187-201, 2022.
38. 2- E.M. Ahmed, N. El-Ghamaz, and A.L. Waly, "Structure and emission properties of $P_2O_5-Na_2O-Pb_3O_4-MO$, ($MO = SrO, Y_2O_3, MoO_3, Ag_2O, CdO$ and SnO) glass and glass ceramics," *Ceramics International*, vol. 48, no. 15, pp. 21479-21491, 2022.
39. M. K. Aouf and S. M. Madian, Fekete-Szegö Properties for Classes of Complex Order and Defined by New Generalization of q-Mittag Leffler Function, *Afrika Matematika, Afr. Mat.* 33, 15 (2022), DOI: 10.1007/s13370-021-00940-3.
40. S. M. Madian, Properties of Neighborhood for Certain Classes Associated with Complex Order and m-q-p-Valent Functions with Higher Order, *J. Egypt Math. Soc.*, 30, 16 (2022), <https://doi.org/10.1186/s42787-022-00149-8>.
41. B.M.Munasser, S.M.Madian and A.O.Mostafa, Subordinating results for classes of functions defined by Ruscheweyh q-difference operator, *Int. J. Open Problems Complex Analysis*, Vol. 14, No. 2, November 2022.
42. R.A.Nasr, A.O.Mostafa and S.M.Madian, Subordination properties for a class of analytic functions with complex order defined by q-derivative operator, *Int. J. Open Problems Complex Analysis*, Vol. 14, No. 2, November 2022.
43. Uncertain Concepts on graph theory
44. Alharbi, A., Al-Ahmed, Z. A., El-Metwaly, N. M., Shahat, A., & El-Binary, M. A. (2023). A novel strategy for preparing metal-organic framework as a smart material for selective detection and efficient extraction of Pd (II) and Au (III) ions from E-wastes. *Journal of Molecular Liquids*, 369, 120862. Efficiency of Fe 3 O 4 @ZIF-8 for the removal of Doxorubicin from aqueous solutions: Equilibrium, kinetics and thermodynamic studies
45. Mohammed M. El-Gamil, and Ahmed M. Eldesoky, Tunable Anticorrosive Effects of Newly Synthesized Benzothiazole Azo Dyes by Potassium Iodide Synergism for Carbon Steel in 1 MHCl: Combined Experimental and Theoretical Studies <https://doi.org/10.1021/acsomega.3c02105> ACS Omega 2023, 8, 28314–28332
46. Maksoud, M. A., Bekhit, M., Waly, A. L., & Awed, A. S. (2023). Optical and dielectric properties of polymer nanocomposite based on PVC matrix and

- Cu/Cu₂O nanorods synthesized by gamma irradiation for energy storage applications. *Physica E: Low-dimensional Systems and Nanostructures*, 148, 115661.
47. El Gohary, H. G., Qahtan, T. F., Alharbi, H. G., Asnag, G. M., & Waly, A. L. (2023). Studies of the Structural, Optical, Thermal, Electrical and Dielectric Properties of a Polyvinyl Alcohol/Sodium Alginate Blend Doped with Cu Nanoparticles and ZnO Nanorods as Hybrid Nanofillers for Use in Energy Storage Devices. *Journal of Polymers and the Environment*.
48. Behairy, A., Atef, R., & El Damrawi, G. (2023). Influence of Vanadium Oxide on The Structure and Properties of Silicate Glasses Modified by Zinc Oxide. *Egyptian Journal of Chemistry*, 66(8), 41-46.
49. Elkenany, E. B., Alfrnwani, O. A., & Sallah, M. (2023). Insight into pressure effect on optoelectronic, mechanical, and lattice vibrational properties of nanostructured GaxIn_{1-x}PySbzAs_{1-y-z} for the solar cells system. *Scientific Reports*, 13(1), 3891.
50. Seyam, E. A., El-Sayed, S. M., Amin, A. E., El-Farrash, A. H., & Sallah, M. (2023). Influence of physical and radiobiological models on evaluation of radiotherapy treatment fractionation schedules for GBM brain tumours. *Journal of Taibah University for Science*, 17(1), 2228020.
51. Dawood, N. M., AbouEl-Magd, L. M., Abdel-Aty, A. H., Awad, W. S., Elgarayhi, A., & Sallah, M. (2023). Brain Tumors Detection using Computed Tomography Scans Based on Deep Neural Networks.
52. Al Alwan, B., Abu Bakar, M., Faridi, W. A., Turcu, A. C., Akgül, A., & Sallah, M. (2023). The Propagating Exact Solitary Waves Formation of Generalized Calogero–Bogoyavlenskii–Schiff Equation with Robust Computational Approaches. *Fractal and Fractional*, 7(2), 191.
53. Faridi, W. A., Asjad, M. I., Ahmad, S., Iftene, A., Abd El-Rahman, M., & Sallah, M. (2023). Deterministic and Fractional-Order Co-Infection Model of Omicron and Delta Variants of Asymptomatic SARS-CoV-2 Carriers. *Fractal and Fractional*, 7(2), 192.
54. AlTahhan, F. E., Khouqueer, G. A., Saadi, S., Elgarayhi, A., & Sallah, M. (2023). Refined Automatic Brain Tumor Classification Using Hybrid Convolutional Neural Networks for MRI Scans. *Diagnostics*, 13(5), 864.
55. Ahmad, D., Naz, K., Buttar, M. E., Darab, P. C., & Sallah, M. (2023). Extremal Solutions for Surface Energy Minimization: Bicubically Blended Coons Patches. *Symmetry*, 15(6), 1237.
56. Rahman, M., Haq, F., Darab, P. C., Sallah, M., Abdelmohsen, S. A., Fadhl, B. M., & Makhdoum, B. M. (2023). Mixed convection and activation energy impacts on MHD bioconvective flow of nanofluid with irreversibility assessment. *Heliyon*, 9(6).

57. R. A. Naser, A. O. MOSTAFA, S. M. MADIAN , QUASI CONVOLUTION RESULTS FOR CLASSES RELATED TO $q - p$ - SAL⁺ AGEAN OPERATOR, Journal of Fractional Calculus and Applications Vol. 14(2) July 2023, No. 1 ISSN: 2090-5858. <http://jfca.journals.ekb.eg/>
58. M. A. Mowafy , A. O. Mostafa and S. M. Madian, Majorization For Class Of Meromorphic Functions Defined By An Integral Operator, Int. J. Open Problems Complex Analysis, Vol. 15, No. 1, 2023.
59. Mowafy, M. A., Mostafa, A. O., & Madian, S. M. PROPERTIES FOR A CLASS RELATED TO Q-FRACTIONAL DIFFERENTIAL OPERATOR.
60. Madshal, M. A., Abdelghany, A. M., Behairy, A., & El-Damrawi, G. (2023). Shielding parameters and UV spectral studies on modified borate glasses doped with Gd₂O₃. Applied Physics A, 129(11), 759.
61. Abdel Rahman, A. N., Amer, S. A., Behairy, A., Younis, E. M., Abdelwarith, A. A., Osman, A., ... & Ibrahim, R. E. (2023). Using Azadirachta indica protein hydrolysate as a plant protein in Nile tilapia (*Oreochromis niloticus*) diet: Effects on the growth, economic efficiency, antioxidant-immune response and resistance to *Streptococcus agalactiae*. Journal of Animal Physiology and Animal Nutrition, 107(6), 1502-1516.
62. Awad, K. H., Awad, M. M., & Hamed, A. M. (2023). Outdoor Testing of Double Slope Condensation Surface for Extraction of Water from Air. In *Atmospheric Water Harvesting Development and Challenges* (pp. 15-40). Cham: Springer International Publishing.
63. Munasser, B. M., Mostafa, A. O., Sultan, T., EI-Sherbeny, N. A., & Madian, S. M. (2024). Inclusion Properties for Classes of-Valent Functions. Journal of Function Spaces, 2024.
64. Yehia, A. M., S. M. Madian, and M. M. Tharwat. "Class of Meromorphic Functions Related to New Operator." Electronic Journal of Mathematical Analysis and Applications 12.1 (2024): 1-10.
65. Mowafy, Mohamed, Adela Mostafa, and Samer Madian. "Inclusion Properties for Classes of Univalent Functions." Electronic Journal of Mathematical Analysis and Applications 12.1 (2024): 1-9.
66. El-Zahed, M. M., Diab, M. A., El-Sonbati, A. Z., Saad, M. H., Eldesoky, A. M., & El-Binary, M. A. (2024). Synthesis, spectroscopic characterization studies of chelating complexes and their applications as antimicrobial agents, DNA binding, molecular docking, and electrochemical studies. Applied Organometallic Chemistry, 38(1), e7290.
67. El-Binary, Mohamed A., and Ahmed M. Fathy. "Azo naringenin-based copper (II) complex as DNA binder: Synthesis, spectroscopic characterization, and diverse biological potentials." Applied Organometallic Chemistry: e7460.
68. Alsuhaimani, A. M., Alayyafi, A. A., Albedair, L. A., El-Desouky, M. G., & El-Binary, A. A. (2024). Efficient fabrication of a composite sponge for Cr (VI) removal via citric acid cross-linking of metal-organic framework and chitosan:

- Adsorption isotherm, kinetic studies, and optimization using Box-Behnken design. *Materials Today Sustainability*, 26, 100732.
69. El-Binary, Mohamed A., and Ahmed M. Fathy. "Azo naringenin-based copper (II) complex as DNA binder: Synthesis, spectroscopic characterization, and diverse biological potentials." *Applied Organometallic Chemistry*: e7460.
70. El-Desouky, M. G., Alayyafi, A. A., Al-Hazmi, G. A., & El-Binary, A. A. (2024). Effect of metal organic framework alginate aerogel composite sponge on adsorption of tartrazine from aqueous solutions: Adsorption models, thermodynamics and optimization via Box-Behnken design. *Journal of Molecular Liquids*, 399, 124392.
71. Abd El-Fattah, W., Guesmi, A., Hamadi, N. B., El-Desouky, M. G., & Shahat, A. (2024). A green synthesis of cellulose nanocrystals biosorbent for remediation of wastewater containing industrial dye. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 681, 132729.
72. Nassem, H. M., Al-Hazmi, G. A., Alayyafi, A. A., El-Desouky, M. G., & El-Binary, A. A. (2024). Synthesis and characterization of new composite sponge combining of metal-organic framework and chitosan for the elimination of Pb (II), Cu (II) and Cd (II) ions from aqueous solutions: Batch adsorption and optimization using Box-Behnken design. *Journal of Molecular Liquids*, 394, 123741.
73. Alsuhaibani, A. M., Alayyafi, A. A., Albedair, L. A., El-Desouky, M. G., & El-Binary, A. A. (2024). Synthesis and characterization of metal-organic frameworks based on thorium for the effective removal of 2, 4-dichlorophenylacetic pesticide from water: Batch adsorption and Box-Behnken Design optimization, and evaluation of reusability. *Journal of Molecular Liquids*, 124252.
74. Amin, S., Hasanin, A., Mansour, R., Mostafa, M., Zakaria, D., Arafa, A. S., ... & Ziada, H. (2024). Oral midodrine for prophylaxis against post-spinal anesthesia hypotension during hip arthroplasty in elderly population: a randomized controlled trial. *BMC anesthesiology*, 24(1), 64.
75. Faisal Hassan Sorour, Y. M. Marouf, Nabil Mahmoud Abd-ElMonem, N. M. Aboeleneen & R. A. Mansour, Raw sawdust utilization for the removal of acid red57 and basic fuchsin dyes from aqueous solution: equilibrium, kinetics, and thermodynamic investigation, *International Journal of Phytoremediation*, doi=10.1080/15226514.2023.2259999.
76. Sorour, F. H., Aboeleneen, N. M., Abd El-Monem, N. M., Ammar, Y. A., & Mansour, R. A. (2024). Removal of malachite green from wastewater using date seeds as natural adsorbent; isotherms, kinetics, Thermodynamic, and batch adsorption process design. *International Journal of Phytoremediation*, 1-15.
77. Abdulwaha, D. A., & Mansour, R. A. (2024). The Microbiological Landscape of Diabetic Foot Infections: Implications for Treatment and Prevention. *International Journal of Medical Science and Dental Health*, 10(02), 65-85.

