



Dr. Gomaa A.M. Ali

Curriculum Vitae



Personal Details

Name:	Dr. Gomaa A.M. Ali
Rank:	Associate Professor
Nationality:	Egyptian
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Address:	University of Khorfakkan, Sharjah, UAE
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LinkedIn Profile:	Link to LinkedIn Profile
Web of Science:	Link to Web of Science
ResearchGate:	Link to ResearchGate

Academic Qualifications

BSc:	Chemistry, from Al-Azhar University, 2006, Egypt
MSc:	Physical Chemistry, from Al-Azhar University, 2012, Egypt
PhD:	Advanced Materials, Universiti Malaysia Pahang, 2015, Malaysia

Employment History

- 2024-current: University of Khorfakkan (UKF), Sharjah, United Arab Emirates – Associate Professor
- 2023-2024: Galala University (GU), Suez, Egypt – Associate Professor
- 2023-2024: Assiut Technological University (ATU), Assiut, Egypt – Associate Professor
- 2021-2024: Al-Azhar University (AU), Assiut, Egypt – Associate Professor
- 2016-2021: Al-Azhar University (AU), Assiut, Egypt – Assistant Professor
- 2007-2016: Al-Azhar University (AU), Assiut, Egypt – Lecturer
- 2016-2019: Universiti Malaysia Pahang (UMP), Pahang, Malaysia – Postdoc
- 2012-2015: Universiti Malaysia Pahang (UMP), Pahang, Malaysia – PhD researcher

Professional Membership & Activities

1. [TWAS Affiliate \(2023-2027\)](#)
2. [African Academy of Science \(AAS\) Affiliate](#)
3. American Chemical Society (ACS) USA (31010458)
4. Royal Society of Chemistry (RSC) UK (714654)
5. [Experts Network member, Non-Conventional Water Resources, Arab Water Council](#)
6. Egyptian National Committee of Pure and Applied Chemistry, ASRT, Egypt
7. Egyptian Young Academy of Sciences (EYAS), Academy of Scientific Research and Technology, Egypt
8. Al-Azhar University Excellence International Office
9. Galala University, Faculty of Science Council
10. Natural Sciences Publishing (NSP), USA (Ref. No. NSP-151159)
11. Egyptian Society of Advanced Materials and Nanotechnology (ESAMNT), Egypt
12. Egyptian Society of Crystallography and its Applications (ESCA), Egypt
13. International Union for the Arabic Language, Lebanon
14. American Society for Microbiology (ASM), USA (200334650I)

Teaching Experience

- >17 years of experience as a lecturer on chemistry undergraduate courses (e.g. Nanoscience and Nanotechnology, Industrial Chemistry, Physical Chemistry (Colloids and Surface Science), Electrochemistry (Corrosion), Renewable Energy, Unit Operation, Physical Chemistry, General Chemistry, Basic Organic Chemistry, Quality Control)
- Undergraduate supervisor for numerous Senior Research Projects (Al-Azhar Uni, Galala Uni).
- Postgraduate supervisor for 10 PhD students and 10 MSc students

Conferences & Workshops

- **Conferences**
- 1. **Gomaa A.M. Ali**, *Waste Recycling Technologies for Nanomaterials Manufacturing and Energy Sustainability*, Building a Sustainable Future: The Role of Science, Technology, and Innovation for Global Development, 29 Sept – 2 Oct. 2025, Rio de Janeiro, Brazil
- 2. **Gomaa A.M. Ali**, Keynote Speaker *Waste Recycling Technologies for Nanomaterials Manufacturing and Energy Sustainability*, 7th International Conference on New Horizons in Basic and Applied Science (ICNHBAS2025), 29-31 August 2025, Hurgada, Egypt
- 3. **Gomaa A.M. Ali**, *Advanced Nanomaterials for Water Treatment Sustainability*, The 17th International Conference on the Developments in e-Systemes Engineering, 6-8 November 2024, Sharjah, UAE
- 4. **Gomaa A.M. Ali**, Keynote Speaker: *Waste Recycling Technologies for Nanomaterial Manufacturing Sustainability*, Al-Azhar Engineering 16th International Conference (Advanced Engineering Applications and Artificial Intelligence for Sustainability), Cairo, Egypt, 24-25 Feb 2024.
- 5. **Gomaa A.M. Ali**, Keynote Speaker: *Waste Recycling Technologies for Nanomaterial Manufacturing Sustainability*, 12-14th International conference on Nanoscience and Nanotechnology, Tripoli, Libia, 12-14 December 2023.

6. **Gomaa A.M. Ali**, Keynote Speaker: *Waste Recycling Technologies for Nanomaterial Manufacturing Sustainability*, 2nd Nanoscience Conference, Galala University, Egypt, 29 November 2023.
7. **Gomaa A.M. Ali**, Keynote Speaker: *Nanomaterial Production by Recycling of Spent Batteries*, 4th International Conference of Egyptian Committee for Pure and Applied Chemistry (ICPAC23), Marsa Alam, Egypt, 4-7 October 2023.
8. **Gomaa A.M. Ali**, Keynote Speaker: *Advanced Nanomaterials for Water Treatment: Agriculture Sustainability*, 2th Al-Azhar International Conference of Agriculture and Food Security, Cairo, Egypt, 10-11 October 2023.
9. **Gomaa A.M. Ali**, Keynote Speaker: *Waste Recycling Technologies for Nanomaterial Manufacturing Sustainability: Waste to Wealth*, 2nd International Conference of Pharmaceutical Sciences, MUST University, Cairo, Egypt, 3-7 March 2023.
10. **Gomaa A.M. Ali**, Keynote Speaker: *Waste Recycling Technologies for Nanomaterial Sustainability*, 14th International Conference on Sustainable Green Construction and Nanotechnology, Sharm Elshaikh, Egypt, 11-12 July 2023.
11. **Gomaa A.M. Ali**, Keynote Speaker: *Nanomaterials for Electrochemical Energy Storage (Supercapacitors)*, 2nd 2nd International conference of Faculty of Pharmacy Menoufia University, Menoufia, Egypt, 10-11 May 2023.
12. **Gomaa A.M. Ali**, Keynote Speaker: *Waste Recycling Technologies for Nanomaterial Manufacturing Sustainability*, 3rd International Conference of Egyptian Committee for Pure and Applied Chemistry (ICPAC22): Chemistry and Climate Change, Hyrghada, Egypt, 12-15 October 2022.
13. International Training Workshop on Open Science and SDGs, 28th August - 8th September 2023, Beijing, China
14. International Symposium on Global Open Science Cloud (ISOSC), 4th September - 6th September 2023, Beijing, China
15. The 3rd International Forum on Big Data for Sustainable Development Goals (FBAS2023): 6-7 September 2023, Beijing, China
16. **Gomaa A.M. Ali**, Keynote Speaker: *Waste Recycling Technologies for Nanomaterial Manufacturing Sustainability*, Foreseeing the Future of Nanotechnology: Vision and Application: Obstacles and Solutions, Cairo University, Egypt, 24-26 September 2022.
17. **Gomaa A.M. Ali**, Keynote Speaker: *Waste Recycling Technologies for Nanomaterial Manufacturing Sustainability*, Sustainable Development in Sinai (Reality and Expectation), Arish University, Egypt, 14-15 March 2022.
18. **Gomaa A.M. Ali**, Invited Speaker: *Publication Peer-Review: Techniques and Standards*, the 7th International Conference on Arab Impact Factor, Nile University, Egypt, 10-12 May 2022.
19. **Gomaa A.M. Ali**, *Recycled Nanomaterials for Supercapacitors Applications: Waste to Wealth*, 5th International Conference on New Horizons in Basic and Applied Science (ICNHBAS2021), 26-29 Sept. 2021, Hurghada, Egypt
20. **Gomaa A.M. Ali**, Keynote Speaker: *Low-Cost and High-Performance Asymmetric Supercapacitor*, 3rd International Conference on Energy Science and Environmental Chemistry (ICESEC2021), 4-5 Dec. 2021, Wuhan, China
21. **Gomaa A.M. Ali**, Keynote Speaker: *MnO₂ Nanoflowers from Spent Batteries to Supercapacitors Application: Waste to Wealth*, Youth Science Forum, National Research Centre, 14-16 January 2021.
22. **Gomaa A.M. Ali**, *Recycled Nanomaterials for Supercapacitors Applications*, World Forum for Women in Science, 8-10 March 2021, Duhok university, Iraq
23. **Gomaa A.M. Ali**, Keynote Speaker: *Nanomaterials for Energy Storage (Supercapacitors) applications*, International Virtual Conference on Advanced Nanomaterials and Applications (VCAN 2020), VIT, Vellore, India, July 2020

24. **Gomaa A.M. Ali**, Keynote Speaker: *MnO₂ Nanoflowers from Spent Batteries to Supercapacitors Application: Waste to Wealth*, International Conference on Frontiers in Materials Science & Technology (ICoFMST 2020), KL, Malaysia, 22 Aug. 2020
25. **Gomaa A.M. Ali**, Keynote Speaker: *Recycled Nanomaterials for Supercapacitors Applications*, Workshop on “Energy storage devices challenges and perspectives” Beni-Swief University, 28th September 2020
26. **Gomaa A.M. Ali**, Keynote Speaker: *Recycled Nanomaterials for Energy Storage (Supercapacitors) applications*, International sustainable development conference of the Marshes, Al-Nahrin University, Iraq, 6 Oct. 2020
27. **Gomaa A.M. Ali**, Keynote Speaker: *MnO₂ Nanoflowers from Spent Batteries to Supercapacitors Application: Waste to Wealth*, The 34th Egyptian Materials Research Society International Conference (Eg-MRS), Egypt, 29-30 Aug. 2020.
28. **Gomaa A.M. Ali**, Keynote Speaker: *Recycled Nanomaterials for Energy Storage (Supercapacitors) applications*, The 3rd International Conference on Chemistry and Energy Research (ICCER2020), China, 23-25 Oct. 2020.
29. **Gomaa A.M. Ali**, O.A. Fouad, S.A. Makhlouf, A.Y. El-Sayed, *Synthesis, and Characterization of Co/SiO₂ Nanocomposite*, Materials Imperatives in The New Millennium (MINM 2010) 29 Nov.–2 Dec. 2010, Cairo, Egypt
30. **Gomaa A.M. Ali**, Invited Speaker: *Publication Peer-Review: Techniques and Standards*, 7th International Conference on Arab Impact Factor, Nile University, Egypt, 10-12 May 2022.
31. **Gomaa A.M. Ali**, M.M. Yusoff, J. Rajan, T.L. Ling, K.F. Chong, *Supercapacitance Properties for MnO₂ Prepared by Recycling of Spent Batteries*, National Conference on Industry-Academia Initiatives in Biotechnology 5–7 Dec. 2013, Equatorial Cameron Highlands, Pahang, Malaysia
32. **Gomaa A.M. Ali**, M.M. Yusoff, K.F. Chong, *Graphene Nanosheets Mesoporous Material for Supercapacitor Electrode*, International Congress on Natural Sciences and Engineering (ICNSE2014) 7–9 May 2014, Kyoto Research Park, Kyoto, Japan
33. **Gomaa A.M. Ali**, M.M. Yusoff, K.F. Chong, *Electrochemical Properties of Electrodeposited MnO₂ Nanoparticles*, International Conference on Global Sustainability and Chemical Engineering (ICGSE2014) 20–22 Aug. 2014, Cititel hotel, Midvally, Kuala Lumpur, Malaysia
34. **Gomaa A.M. Ali**, O.A. Fouad, S.A. Makhlouf, M.M. Yusoff, K.F. Chong, *Optical and Electrochemical Properties of Co₃O₄/SiO₂ Nanocomposite*, 2nd Advanced Materials Conference (AMC2014) 24–26 Nov. 2014, SIRIM Berhad, Langkawi, Kedah, Malaysia
35. **Gomaa A.M. Ali**, M.M. Yusoff, K.F. Chong, *Supercapacitor performance of electrochemically reduced graphene oxide*, National Conference on Postgraduate Studies (NCON–PGR 2015), Universiti Malaysia Pahang, Pahang, Malaysia, Jan. 2015
36. **Gomaa A.M. Ali**, M.M. Yusoff, K.F. Chong, *Graphene: Electrochemical Production and it's Energy Storage Properties*. Malaysian Technical Universities Conference on Engineering and Technology (MUCET2015), Johor Bahru, Malaysia, Oct. 2015
37. **Gomaa A.M. Ali**, K.F. Chong, *MnO₂ Nanoflowers from Spent Batteries to Supercapacitors Application: Waste to Wealth*, International Conference on Renewable Energy (INCORE2016), Zewail City of Science and Technology, 6th of October City, Sheikh Zayed District, Egypt
38. **Gomaa A.M. Ali**, K.F. Chong, *Nanomaterials for Energy Storage Applications*, The First International Conference on Modern Trends in Applied Sciences, ARID, Langkawi, Malaysia, Nov. 2017
39. **Gomaa A.M. Ali**, H. Sadegh, M.M. Yusoff, K.F. Chong, *Highly Stable Symmetric Supercapacitor from Cysteamine Functionalized Multi-Walled Carbon Nanotubes Operating in A wide Potential Window*, Conference on Biomedical & Advanced Materials (BIO-CAM2017), Langkawi, Malaysia, Nov. 2017

40. **Gomaa A.M. Ali**, *MnO₂ Nanoflowers from Spent Batteries to Supercapacitors Application*, International Conference on Frontiers in Materials Science & Technology (ICoFMST 2019), Langkawi, Malaysia, Dec. 2019
41. **Gomaa A.M. Ali**, L.F. Kok, K.F. Chong, *Electronical recovery of cobalt from spent lithium ion battery*. The first International Conference on Engineering, Technology, and Applied Science (ICETA), Taiwan, April 2016

- **Workshops**

1. Workshop on Smart Sensors for Environmental and Biomedical Applications, Academy of Scientific Research and Technology (The National Committee for Pure and Applied Chemistry) at the Egyptian Petroleum Research Institute, Nasr City, Cairo, March 3, 2024
2. Introduction to Nanotechnology and its Applications–FCPN09, 28–30 Sept. 2009, National Research Centre (NRC), Egypt
3. X-Ray Diffraction from Data Collection to Computational Analysis, 4–5 Feb. 2012, Ras Sedr, Sinai, Egypt
4. Technical Writing Workshop, 8–10 Jan. 2013, UMP, Malaysia
5. AUTOLAB Electrochemical Impedance Spectroscopy Workshop, 8 May 2013, UMP, Malaysia
6. Research Methodology Course, 3–5 May 2013, UMP, Malaysia
7. Electrospinning: Nanofiber Technology, Theory and Applications 21st November 2013 University Technology Malaysia (UTM), Malaysia
8. Latex workshop, 13 Dec. 2013, UMP, Malaysia
9. National Workshop on Creative Writing and Publishing High Impact Journals, 24 June 2014, UMP, Malaysia
10. Nano Surfaces Analysis & Characterization Workshop, 28–30 Aug 2014, UM, Malaysia
11. A day Workshop on Endnote, 25 Feb. 2014, UMP, Malaysia
12. A day Course on the Effective use of Research Toolbox, 18 Feb. 2014, UMP, Malaysia
13. Viva–Voce Presentation Skills, 16 June 2015, UMP, Malaysia.

Research Interests

- Materials Science
- Water Treatment and Environment
- Advanced Materials (Nanoparticles, Nanocomposites, Graphene, etc)
- Energy storage (Supercapacitors)

Research Publications (Books, Journals & Conferences papers)

International Journal Papers

2011

1. O.A. Fouad, S.A. Makhlof, **Gomaa A.M. Ali**, A.Y. El–Sayed *Cobalt/silica nanocomposite via thermal calcination–reduction of gel precursors*, Materials Chemistry and Physics 128 (2011) 70-76. (WoS, Q2, IF= 4.778)

2012

2. O.A. Fouad, **Gomaa A.M. Ali**, M.A.I. El-Erian, S.A. Makhoulf, [Humidity Sensing Properties of Cobalt Oxide/Silica Nanocomposites Prepared Via Sol-Gel and Related Route](#), Nano, 7(5), (2012) 1250038–1250049. (WoS, Q4, IF= 1.438)

2013

3. **Gomaa A.M. Ali**, O.A. Fouad, S.A. Makhoulf, [Structural, optical and electrical properties of sol-gel prepared mesoporous Co₃O₄/SiO₂ nanocomposites](#), Journal of Alloys and Compounds 579 (2013) 606–611.

(WoS, Q1, IF= 6.371)

2014

4. M.R. Shatat, **Gomaa A.M. Ali**, G.A. Gouda, M.H. Abdall, [Rice Husk Ash for Enhancing Salts Attack Resistance of Blended Cement Containing Metakaolin](#), Canadian Chemical Transactions, 2(3), (2014), 274–285.
5. **Gomaa A.M. Ali**, O.A. Fouad, S.A. Makhoulf, M.M. Yusoff, K.F. Chong, [Co₃O₄/SiO₂ nanocomposites for supercapacitor application](#), Journal of Solid State Electrochemistry, 18 (9) (2014) 2505–2512.

(WoS, Q4, IF = 2.747)

6. **Gomaa A.M. Ali**, L.L. Tan, R. Jose, M.M. Yusoff, K.F. Chong, [Electrochemical performance studies of MnO₂ nanoflowers recovered from spent battery](#), Materials Research Bulletin, 60 (2014) 5–9.

(WoS, Q2, IF = 5.600)

7. **Gomaa A.M. Ali**, S.A. Abdul Manaf, A. Kumar, K.F. Chong, G. Hegde, [High performance supercapacitor using catalysis free porous carbon nanoparticles](#), Journal of Physics D: Applied Physics, 47 (2014) 495307–495313. (WoS, Q2, IF = 3.409)

2015

8. H.H. Abdel Ghafar, **Gomaa A.M. Ali**, O.A. Fouad, S.A. Makhoulf, [Enhancement of Adsorption Efficiency of Methylene Blue on Co₃O₄/SiO₂ Nanocomposite](#), Desalination and Water Treatment, 53(11) (2015) 2980–2989. (WoS, Q4, IF= 1.273)
9. **Gomaa A.M. Ali**, O.A.G. Wahba, A.M. Hassan, O.A. Fouad, K.F. Chong, [Calcium-based nanosized mixed metal Oxides for supercapacitor application](#), Ceramics International, 41(6) (2015) 8230–8234. (WoS, Q1, IF = 5.532)
10. **Gomaa A.M. Ali***, S.A. Makhoulf, M.M. Yusoff, K.F. Chong, [Structural and Electrochemical Characteristics of Graphene Nanosheets as Supercapacitor Electrodes](#), Reviews on Advanced Materials Science 41(1) (2015): 35–43. (WoS, Q3, IF = 5.028)
11. **Gomaa A.M. Ali**, M.M. Yusoff, Y.H. Ng, N.H. Lim, K.F. Chong. [Potentiostatic and galvanostatic electrodeposition of MnO₂ for supercapacitors application: A comparison study](#), Current Applied Physics 15(10) (2015) 1143–1147. (WoS, Q2, IF = 2.856)
12. G. Hegde, S.A. Abdul Manaf, A. Kumar, **Gomaa A.M. Ali**, F.K. Chong, Z. Ngaini, K.V. Sharma, [Biowaste Sago Bark Based Catalyst Free Carbon Nanospheres: Waste To Wealth Approach](#), ACS Sustainable Chemistry & Engineering, 3(9) (2015) 2247–2253. (WoS, Q1, IF =9.224)
13. **Gomaa A.M. Ali**, M.M. Yusoff, K.F. Chong, [Electrochemical properties of electrodeposited MnO₂ nanoparticles](#), Advanced Materials Research, 1113 (2015) 550–553.
14. M.R. Shatat, **Gomaa A.M. Ali**, M.A. Tantawy, [Hydration characteristics and immobilization of Cr \(VI\) in slag cement-CKD pastes under hydrothermal treatment](#), Journal of Wuhan University of Technology- Materials Science Edition 30(5) (2015) 1013–1019. (WoS, Q4, IF = 1.271)
15. G.A.H. Gouda, **Gomaa A.M. Ali**, T.A. Seaf Elnasr, [Stability studies of selected metal ions chelates with 2-\(4-amino-1,5-dimethyl-2-phenyl-1,2-dihydro-pyrazol-3-ylideneamino\) phenol](#), International Journal of Nanomaterials and Chemistry, 1(2) (2015) 39–44.

2016

16. **Gomaa A.M. Ali**, O.A. Fouad, S.A. Makhoulf, [Electrical Properties of Cobalt Oxide/Silica Nanocomposites Obtained by Sol-Gel Technique](#), American Journal of Engineering and Applied Sciences, 9(1) (2015) 12–16. (Scopus, citescore = 0.100)

17. **Gomaa A.M. Ali**, O.A. Fouad, S.A. Makhoulf, M.M. Yusoff, K.F. Chong, [Optical and electrochemical properties of Co₃O₄/SiO₂ nanocomposite](#), Advanced Materials Research, 1133 (2016) 447–451.
 18. S. Agarwal, H. Sadegh, M. Monajjemi, Abdel Salam Hamdy, **Gomaa A.M. Ali**, A.O.H. Memarb, R. Shahryari–ghoshekandi, I. Tyagi, V.K. Gupta, [Efficient removal of toxic bromothymol blue and methylene blue from wastewater by polyvinyl alcohol](#), Journal of Molecular Liquids, 218 (2016) 191–197.
(WoS, Q1, IF = 6.633)
 19. **Gomaa A.M. Ali**, S.A. Abdul Manaf, Divyashree A, K.F. Chong, G. Hegde, [Superior supercapacitive performance in porous nanocarbons](#), Journal of Energy Chemistry, 25(4) (2016) 734–739.
(WoS, Q1, IF = 13.599)
 20. **Gomaa A.M. Ali**, M.M. Yusoff, K.F. Chong, [Graphene: Electrochemical Production and its Energy Storage Properties](#), ARPN Journal of Engineering and Applied Sciences, 11(16) (2016) 9712– 9717.
(Scopus, citescore = 1.00)
 21. M.R. Shatat, **Gomaa A.M. Ali**, G.A.H. Gouda, [Effect of hydrothermal curing on hydration characteristics of metakaolin–CKD pastes at different temperatures in a closed system](#), Beni–Suef University Journal of Basic and Applied Sciences, 5(4) (2016) 299–305. (Scopus, citescore = 1.40)
 22. O. A. Habeeb, K. Ramesh, **Gomaa A.M. Ali**, R. M. Yunus, T. K. Thanusha, O.A. Olalere, [Modeling and Optimization for H₂S Adsorption from Wastewater Using Coconut Shell Based Activated Carbon](#), Australian Journal of Basic and Applied Sciences, 10(17) (2016) 136–147.
- 2017**
23. H. Sadegh, **Gomaa A.M. Ali**, V.K. Gupta, A.S.H. Makhoulf, R. Shahryari–ghoshekandi, M.N. Nadagouda, M. Sillanpää, E. Megiel, [The role of nanomaterials as effective adsorbents and their applications in wastewater treatment](#), Journal of Nanostructure in Chemistry, 7(1) (2017) 1–14. (WoS, Q1, IF = 8.000)
 24. O.A. Habeeb, K. Ramesh, **Gomaa A.M. Ali**, R.M. Yunus, [Optimization of activated carbon synthesis using response surface methodology to enhance H₂S removal from refinery wastewater](#), Journal of Chemical Engineering and Industrial Biotechnology 1 (2017) 1–17.
 25. **Gomaa A.M. Ali**, M. M. Yusoff, E. R. Shaaban, K. F. Chong, [High Performance MnO₂ Nanoflower Supercapacitor Electrode by Electrochemical Recycling of Spent Batteries](#), Ceramics International, 43(11) (2017) 8440–8448. (WoS, Q1, IF = 5.532)
 26. O.A. Habeeb, K. Ramesh, **Gomaa A.M. Ali**, R.M. Yunus, [Isothermal modelling based experimental study of dissolved hydrogen sulfide adsorption from waste water using eggshell based activated carbon](#), Malaysian Journal of Analytical Sciences, 21 (2) (2017) 334–345. (Scopus, citescore = 1.10)
 27. V.K. Gupta, S. Agarwal, H. Sadegh, **Gomaa A.M. Ali**, A.K. Bharti, A. S. Hamdy, [Facile route synthesis of novel graphene oxide-β-cyclodextrin nanocomposite and its application as adsorbent for removal of toxic bisphenol A from the aqueous phase](#), Journal of Molecular Liquids, 237 (2017) 466–472. (WoS, Q1, IF = 6.633)
 28. O.A. Habeeb, K. Ramesh, **Gomaa A.M. Ali**, R.M. Yunus, [Experimental Design Technique on Removals of Hydrogen Sulfide using CaO–Eggshells Dispersed onto Palm Kernel Shell Activated Carbon: Experiment, Optimization, Equilibrium and Kinetic Studies](#), Journal of Wuhan University of Technology-Materials Science Edition, 32(2) (2017) 305–320. (WoS, Q4, IF = 1.271)
 29. **Gomaa A.M. Ali**, E.Y.L. Teo, E.A.A. Aboelazm, H. Sadegh, A.O.H. Memar, R. Shahryari–Ghoshekandi, K.F. Chong, [Capacitive Performance of Cysteamine Functionalized Carbon Nanotubes](#), Materials Chemistry and Physics 197 (2017) 100–104. (WoS, Q2, IF= 4.778)
 30. O.A. Habeeb, K. Ramesh, **Gomaa A.M. Ali**, R.M. Yunus, O.A. Olalere, [Kinetic, isotherm and equilibrium study of adsorption capacity of hydrogen sulfide wastewater system using modified eggshells](#), IIUM Engineering Journal, 18(1) (2017) 13–25. (Scopus, citescore = 1.30)
 31. H. Sadegh, **Gomaa A.M. Ali**, Z. Abbasi, M.N. Nadagoud, [Adsorption of Ammonium Ions onto Multi-Walled Carbon Nanotubes](#), Studia UBB Chemia, 62(2) (2017) 233–245. (WoS, Q4, IF= 0.558)

32. **Gomaa A.M. Ali**, Divyashree A., Supriya S., K.F. Chong, A. Ethiraj, M.V Reddy, H. Algarni, G. Hegde, [Carbon nanospheres derived from Lablab Purpureus as a high performance supercapacitor electrode: Green approach](#), Dalton Transactions 46 (2017) 14034-14044. (WoS, Q1, IF= 4.569)
33. O.A. Habeeb, K. Ramesh, **Gomaa A.M. Ali**, S. Sumathi, R.M. Yunus, [Hydrogen Sulfide Emission Sources, Regulations and Removal Techniques: A Review](#), Reviews in Chemical Engineering 34(6) (2018) 837-854. (WoS, Q1, IF= 8.742)
34. O.A. Habeeb, K. Ramesh, **Gomaa A.M. Ali**, R.M. Yunus, [Low Cost and Eco-friendly Activated Carbon from Modified Palm Kernel Shell for Hydrogen Sulfide Removal from Wastewater: Adsorption and Kinetic Studies](#), Desalination and Water Treatment, 84 (2017) 205-214. (WoS, Q4, IF= 1.273)
35. O.A. Habeeb, K. Ramesh, **Gomaa A.M. Ali**, R.M. Yunus, [Application of response surface methodology for optimization of palm kernel shell activated carbon preparation factors for removal of H₂S from industrial wastewater](#), Jurnal Teknologi, 79(7) (2017) 1-10. (Scopus, citescore = 1.60)
36. M.M.E. Shakhofa, K.A. Aly, P. Sharma, **Gomaa A.M. Ali**, [On the Study of Racah Parameter B for Nickel \(II\) and Cobalt \(II\) Compounds](#), Journal of Advanced Thermal Science Research, 4 (2017) 31-33.
37. G.A. Gouda, **Gomaa A.M. Ali**, [Potentiometric Study of Rhenium\(V\) Complex Formation with Azathioprine and Ceftriaxone](#), Malaysian Journal of Analytical Sciences, 21(6), (2017), 1266-1275. (Scopus, citescore = 1.10)

2018

38. **Gomaa A.M. Ali**, M. M. Yusoff, H. Algarni, K. F. Chong, [One-step electrosynthesis of MnO₂/rGO nanocomposite and its enhanced electrochemical performance](#), Ceramics International 44(7) (2018) 7799-7807 (WoS, Q1, IF = 5.532)
39. E.A.A. Aboelazm, **Gomaa A.M. Ali**, H. Algarni, K.F. Chong, [Flakes size-dependent optical and electrochemical properties of MoS₂](#), Current Nanoscience, 14(5) (2018) 416-420. (WoS, Q4, IF = 1.513)
40. H. Sadegh, **Gomaa A.M. Ali**, A.S.H. Makhlof, K.F. Chong, N.S. Alharbi, S. Agarwal, V.K. Gupta, [MWCNTs-Fe₃O₄ nanocomposite for Hg\(II\) high adsorption efficiency](#), Journal of Molecular Liquids, 258 (2018) 345-353 (WoS, Q1, IF = 6.633)
41. E.R. Shaaban, A. Almohammed, E. Yousef, **Gomaa A.M. Ali**, K.F. Chong, A. Adel, A. Ashour, [Structural, Optical and electrical characteristics of sulfur incorporated ZnSe thin films](#), Optik, 164 (2018) 527-537 (WoS, Q3, IF = 2.840)
42. M. Sayadian, H. Sadegh, **Gomaa A.M. Ali**, [NMR spectra of Azobenzene-bridged calix \[8\] arene complexes by ab initio hartree-fock calculations as nanostructure compound](#), International Journal of Nano Dimension, 9(3) (2018) 228-237.
43. E.A.A. Aboelazm, **Gomaa A.M. Ali**, H. Yin, Y. L. Zhong, H. Algarni, K.F. Chong, [Magnetic Electrodeposition of the Hierarchical Cobalt Oxide Nanostructure from Spent Lithium-Ion Batteries: Its Application as a Supercapacitor Electrode](#), Journal of Physical Chemistry C, 122(23) (2018) 12200-12206. (WoS, Q2, IF = 4.177)
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Sheets-Like Nitrogen and Sulfur-Doped Reduced-Graphene Oxide for Water Treatment and Antimicrobial Applications, Water, Air, and Soil Pollution 235, 623 (2024). (WoS, Q2, IF=3.8)

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3.2 Handbooks

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2. **Gomaa A.M. Ali**, A.S.H. Makhoulf, *Handbook of Biodegradable Materials*, 2023, Springer-Nature, ISBN: 978-3-030-83783-9, DOI: 10.1007/978-3-030-83783-9
3. **Gomaa A.M. Ali**, K.F. Chong, A.S.H. Makhoulf, *Handbook of Nanosensors: Materials and Technological Applications*, 2023, Springer-Nature, ISBN: 978-3-031-16338-8, DOI: 10.1007/978-3-031-16338-8

3.3 Book Chapters

1. M. Hashem, **Gomaa A.M. Ali*** (2024). *Chitosan and Its Applications as a Sensing Material*. In: Ali, G.A.M., Chong, K.F., Makhoulf, A.S.H. (eds) Handbook of Nanosensors. Springer, Cham. https://doi.org/10.1007/978-3-031-16338-8_74-1
2. M.R. Abdelnour, Z.H. Bakr, **Gomaa A.M. Ali*** (2024). *Advanced Nanomaterials for Humidity Sensing*. In: Ali, G.A.M., Chong, K.F., Makhoulf, A.S.H. (eds) Handbook of Nanosensors. Springer, Cham. https://doi.org/10.1007/978-3-031-16338-8_74-1

3. D. Elfadil, G.S. El-Sayyad, **Gomaa A.M. Ali*** (2024). [Metal-Organic Framework Composite-Based Biosensors: Biomedical Applications](#). In: Ali, G.A.M., Chong, K.F., Makhoulf, A.S.H. (eds) Handbook of Nanosensors. Springer, Cham. https://doi.org/10.1007/978-3-031-16338-8_74-1
4. E.E. Ammar, A.A.S. Sayed, M.M. Rabee, A.E. Keshta, M.G. Daher, **Gomaa A.M. Ali*** (2024). [Environmental and Agricultural Applications of Sensors](#). In: Ali, G.A.M., Chong, K.F., Makhoulf, A.S.H. (eds) Handbook of Nanosensors. Springer, Cham. https://link.springer.com/referenceworkentry/10.1007/978-3-031-16338-8_50-1
5. H.R. Abuzeid, A.F. Abdelaal, S. Elsharkawy, **Gomaa A.M. Ali*** (2024). [Basic Principles and Applications of Biological Sensors Technology](#). In: Ali, G.A.M., Chong, K.F., Makhoulf, A.S.H. (eds) Handbook of Nanosensors. Springer, Cham. https://link.springer.com/referenceworkentry/10.1007/978-3-031-16338-8_28-1
6. M.A. Abdelkawy, D.M. El-Sherif, **Gomaa A.M. Ali*** (2024). [Biodegradable Materials-Based Sensors](#). In: Ali, G.A.M., Chong, K.F., Makhoulf, A.S.H. (eds) Handbook of Nanosensors. Springer, Cham. https://link.springer.com/referenceworkentry/10.1007/978-3-031-47180-3_8
7. **Gomaa A.M. Ali***, A.S.H. Makhoulf, [Fundamentals of Waste Recycling for Nanomaterial Manufacturing, Waste Recycling Technologies for Nanomaterials Manufacturing](#), Springer-Nature, pp. 3-24.
8. **Gomaa A.M. Ali***, Z.H. Bakr, V. Safarifard, K.F. Chong, [Recycled Nanomaterials for Energy Storage \(Supercapacitor\) Applications](#), *Waste Recycling Technologies for Nanomaterials Manufacturing*, Springer-Nature, pp. 175-202.
9. E.A.A. Aboelazm, N. Mohamed, **Gomaa A.M. Ali***, A.S.H. Makhoulf, K.F. Chong, [Recycling of Cobalt Oxides Electrodes from Spent Lithium-Ion Batteries by Electrochemical Method](#), *Waste Recycling Technologies for Nanomaterials Manufacturing*, Springer-Nature, pp. 91-123.
10. A. Alhanish, **Gomaa A.M. Ali**, [Recycling the Plastic Wastes to Carbon Nanotubes](#), *Waste Recycling Technologies for Nanomaterials Manufacturing*, Springer-Nature, pp. 701-721.
11. S. Yasin, Z.H. Bakr, **Gomaa A.M. Ali***, I. Saeed, [Recycling Nanofibers from Polyethylene Terephthalate Waste Using Electrospinning Technique](#), *Waste Recycling Technologies for Nanomaterials Manufacturing*, Springer-Nature, pp. 805-821.
12. F.S. Soliman, H.H. El-Maghrabi, **Gomaa A.M. Ali**, M.A. Kammoun, A.A. Nada, [Reinforcement of Petroleum Wax By-Product Paraffins as Phase Change Materials for Thermal Energy Storage by Recycled Nanomaterials](#), *Waste Recycling Technologies for Nanomaterials Manufacturing*, Springer-Nature, pp. 823-850.
13. A.A. Nada, F.S. Soliman, **Gomaa A.M. Ali**, A. Hamdy, H. Selim, M.A. Elsayed, M.E. Elmowafy, H.H. El-Maghrabi, [Conversion of waste cheap petroleum paraffinic wax by-products to expensive valuable multiple carbon nanomaterials](#), *Waste Recycling Technologies for Nanomaterials Manufacturing*, Springer-Nature, pp. 729-751.
14. H.H. El-Maghrabi, A.A. Nada, F.S. Soliman, P. Raynaud, Y.M. Moustafa, **Gomaa A.M. Ali**, M.F. Bekheet, [Recovery of metal oxide nanomaterials from electronic waste materials](#), *Waste Recycling Technologies for Nanomaterials Manufacturing*, Springer-Nature, pp. 203-227.
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16. H.T. Das, S. Dutta, E.B. T, P. Das, N. Das, **Gomaa A.M. Ali**, [Biodegradable Electrode Materials for Sustainable Supercapacitors as Future Energy Storage Devices](#), *Handbook of Biodegradable Materials*, Springer-Nature, pp. 1-25.
17. A.S. Ibrahim, D.A.M. Farage, **Gomaa A.M. Ali***, [Biodegradation of Carbon Nanotubes](#), *Handbook of Biodegradable Materials*, Springer-Nature, pp. 1-34.
18. R. Tarek, **Gomaa A.M. Ali***, [Genetically Engineered Bacteria Used in Bioremediation Applications](#), *Handbook of Biodegradable Materials*, Springer-Nature, pp. 1-22.

19. A. Alhanish, **Gomaa A.M. Ali***, [Biodegradable Polymers](#), *Handbook of Biodegradable Materials*, Springer-Nature, pp. 1-25.
20. A. Barhoum, A.E. Shalan, S.I. El-Hout, **Gomaa A.M. Ali**, S.M. Abdelbasir, E.S. Abu Serea, A.H. Ibrahim, K. Pal, [A broad Family of Carbon Nanomaterials: Classification, Properties, Synthesis, and Emerging Applications](#), *Handbook of Nanofibers*, pp. 1-40, 2019, Springer-Nature, https://doi.org/10.1007/978-3-319-42789-8_59-1.
21. **Gomaa A.M. Ali**, M. Chahardori, H. Sadegh, [Remediation of dioxin: past, present, and future](#), *Dioxin: Environmental Fate and Health/Ecological Consequences*, Taylor & Francis, pp. 155-162
22. N. Shehata, E.T. Sayed, M.A. Abdelkareem, **Gomaa A.M. Ali**, A. Olabi, [Smart Electronic Materials, Materials Science and Materials Engineering](#), Elsevier, 2021. <https://doi.org/10.1016/B978-0-12-815732-9.00066-8>
23. A. Alhanish, **Gomaa A.M. Ali**, [Recent Developments in Wastewater Treatment Using Polymer/Clay Nanocomposites](#). In: *Advances in Nanocomposite Materials for Environmental and Energy Harvesting Applications*. Springer (2022) 419-459. https://doi.org/10.1007/978-3-030-94319-6_14
24. M.R. Thalji, **Gomaa A.M. Ali**, K.F. Chong, [History and Progress of Polymers for Energy Applications](#), *Polymers in Energy Conversion and Storage*, Taylor & Francis, 2022, pp. 1-11, eBook ISBN9781003169727.
25. A.S.A. Ahmed, A. Jan, **Gomaa A. M. Ali**, [Polymers and Their Composites for Solar Cell Applications](#), *Polymers in Energy Conversion and Storage*, Taylor & Francis, 2022, pp. xxxxx, eBook ISBN9781003169727.
26. R.S. Lalehloo, **Gomaa A.M. Ali**, H. Sadegh, [Review on Fisher-Tropsch Synthesis Method in Liquid Fuel Production: FTS Method in Fuel Production](#), *Advanced Catalysis Processes in Petrochemicals and Petroleum Refining: Emerging Research and Opportunities*, IGI Global, pp. 96-109, 2020, DOI: 10.4018/978-1-5225-8033-1.ch003.
27. H. Sadegh, **Gomaa A.M. Ali**, H. J. Nia, Z. Mahmoodi, [Nanomaterial Surface Modifications for Enhancement of the Pollutant Adsorption from Wastewater: Adsorption of Nanomaterials, Nanotechnology Applications in Environmental Engineering](#), IGI Global, pp. 143-170, 2019, DOI: 10.4018/978-1-5225-5745-6.ch007.
28. H. Sadegh, **Gomaa A.M. Ali**, [Potential Applications of Nanomaterials in Wastewater Treatment: Nanoadsorbents Performance](#), *Advanced Treatment Techniques for Industrial Wastewater*, IGI Global, pp. 51-61, 2019, DOI: 10.4018/978-1-5225-5754-8.ch004.

3.4 Patents

1. [MY 188329 A \(PI 2013702077\)](#), [A Method of Producing Electrodes for Supercapacitor](#), Intellectual Property Corporation of Malaysia, Nov. 2015, Granted/Published.
2. [MY 186766 A \(PI 2015704170\)](#), [Energy Storage Supercapacitor from Biomass](#), Intellectual Property Corporation of Malaysia, Nov. 2015, Granted/Published.

Peer Review Activities

1. International Journal of Minerals, Metallurgy and Materials ([WoS, Q1, IF= 11.7](#))
2. Scientific Reports (Q1, IF=3.9)
3. [Plos One \(Q1, IF=2.9\)](#)
4. [C-Journal of Carbon Research \(WoS, Q2, IF=3.9\)](#)
5. [Frontiers in Chemistry \(WoS, Q2, IF= 3.8\)](#)
6. [Frontiers in Nanotechnology \(WoS, Q2, IF=4.1\)](#)
7. Journal of Chemistry (WoS, Q2, IF= 2.8)
8. [SN Applied Sciences \(WoS, Q2, IF=2.8\)](#)
9. [Current Nanoscience \(WoS, Q4, IF= 1.4\)](#)

10. [Nanoscience & Nanotechnology-Asia \(Scopus, CS= 1.9\)](#)
11. [International Journal of Thin Film Science and Technology \(Scopus, CS= 1.5\)](#)
12. [Journal of Asian Scientific Research \(Scopus, CS= 1.0\)](#)

5.3 Journals Reviewer (500 papers for 100 WoS journals)

<https://www.webofscience.com/wos/author/record/640073>

Research, Teaching Grants

- PI: Waste Recycling for Supercapacitor: Waste to Wealth, ASRT, COP27 call, project ID: 19402, 2022-2024.
- PI: Preparation of Liquid Nano-Sand (LNS) for the reclamation of desert and non-arable lands, ASRT, FYP grant 2022
- FGRS, UMP grant 2013

Awards and Recognitions

1. [TWAS-AREP, 2018, TWAS](#)
2. [ARSCO Award 2023.](#)
3. [Fawzy Hammad Award in Materials Technology](#), 2021, ASRT, Egypt.
4. [Mohamed Farid Khamis Research Excellence Award](#) (SDG13 Climate Action, 2023, Nationwide Track), British University in Egypt,
5. [AWC2022](#), Arab Water Council Award, Arab Water Council and Egyptian Ministry of Foreign Affairs
6. [Obada-Prize, 2021](#), African Academy of Science
7. [Stanford University's List of World's Top 2% of Scientists](#), Egypt, 2020.
8. [Stanford University's List of World's Top 2% of Scientists](#), Egypt, 2021 (Both lists: The career-long database 2011-2021 list, and the single recent year dataset 2021 list).
9. [Gold Medal](#): Recovery of Mn from spent Zn–C batteries for supercapacitance applications, [CITREX 2013](#), Universiti Malaysia Pahang (UMP), Malaysia, March 2013
10. [Gold Medal](#): Recovery of Mn from spent Zn–C batteries for supercapacitance applications, [ITEX 2013](#), Kuala Lumpur, Malaysia, May 2013
11. [Silver Medal](#): Flexible cum transparent energy storage supercapacitor, [CITREX 2014](#), Universiti Malaysia Pahang (UMP), Malaysia, March 2014
12. [Gold Medal](#): Recycled spent battery storage supercapacitor, [Archimedes 2014](#) (The Moscow International Salon of Inventions and Innovation Technologies), Russia, April 2014.
13. [Gold Medal](#): Energy storage supercapacitor materials from biowaste, [CITREX 2015](#), Universiti Malaysia Pahang (UMP), Malaysia, March 2015
14. [Green Technology Award](#): Energy storage supercapacitor materials from biowaste, [CITREX 2015](#), Universiti Malaysia Pahang (UMP), Malaysia, March 2015
15. [Gold Medal](#): Green energy storage supercapacitor materials from biowaste, [ITEX 2015](#), Kuala Lumpur Convention Centre, Malaysia, May 2015
16. [Gold Medal](#): Energy storage Supercapacitor materials from Biowaste, [British Invention Show \(BIS\)](#), London, UK, Oct. 2015
17. [Platinum Medal](#): Energy storage Supercapacitor materials from Biowaste, [British Invention Show \(BIS\)](#), London, UK, Oct. 2015
18. [Diamond Medal](#): Energy storage Supercapacitor materials from Biowaste, [British Invention Show \(BIS\)](#), London, UK, Oct. 2015

19. **Silver Medal:** Supercapacitor from Recycled Lithium-Ion Battery (SuperReLIB), **CITREX 2018**, Universiti Malaysia Pahang (UMP), Malaysia, March 2018
20. **Silver Medal:** Graphene Aerogel For Oil Superabsorbent, **CITREX 2018**, Universiti Malaysia Pahang (UMP), Malaysia, March 2018
21. **Silver Medal:** Graphene composite hydrogel as drug delivery system, **CITREX 2018**, Universiti Malaysia Pahang (UMP), Malaysia, March 2018
22. **Doctoral Scholarship Scheme (DSS)**, Universiti Malaysia Pahang (UMP), Malaysia.

University & Community Services

Service to the University:

- **Member of the Examinations Committee at UKF**
- **Member of the Innovation Committee at UKF**
- **Member of the Students Misconduct Committee at UKF**
- **Member of the Teaching and Learning Committee at UKF**
- Member of the College Council of College of Marine Sciences and Aquatic Biology, UKF
- Head of the Student Scholarship Committee at the College of Marine Science and Aquatic Biology, UKF
- Member of the Scientific Research Committee at the College of Marine Science and Aquatic Biology, UKF
- Member of the Student Disciplinary Investigation Committee at the College of Marine Science and Aquatic Biology, UKF
- Member of the Appointment Committee at the College of Marine Science and Aquatic Biology, UKF
- Member of the Strategic Planning Committee at the College of Marine Science and Aquatic Biology, UKF
- Member of the Faculty Promotion Committee at the College of Marine Science and Aquatic Biology, UKF
- Member of the Teaching and Learning Committee at the College of Marine Science and Aquatic Biology, UKF
- Member of the Quality Assurance and Academic Accreditation Committee at the College of Marine Science and Aquatic Biology, UKF
- Member of the Practical Training Committee at the College of Marine Science and Aquatic Biology, UKF
- Member of the Academic Scheduling and Examinations Committee at the College of Marine Science and Aquatic Biology, UKF

Service to the Community:

Voluntary Work & Society Service

I joined many activities and gave talks during many events such as:

1. Evaluator of ISEF international competition 2022
2. Evaluator of STEM schools Capstone projects (2020-2023)
3. Judge of the international SEA Case Competition
4. Talk "My Career, My Story" African Science Frontiers Initiatives
5. Scientific Writing and Publications, ASRT, Egypt

6. Scientific Writing and Publications, Al-Sharqia University, Oman
7. Peer-Review Basics and Standards, Al-Azhar University, Egypt
8. Winter school on scientific writing and the international publication, Alexandria Uni. & ASRT
9. Scientific Writing and Publications, Al-Azhar University, Egypt
10. References Management using Endnote, Al-Azhar University, Egypt
11. References Management using Endnote, ARID

TV Interviews (Talk show)

Many interviews (TV talk shows) with Egyptian national TV such as:

1. Ch. 2, Misr Gamila, <https://youtu.be/4eMfxlZbvK4>
2. Ch. 2, Misr Gamila, <https://youtu.be/SZy0HgXg1QY>
3. Ch. 2, Nigoom On Live, <https://youtu.be/COxBxWhmZwI>
4. Ch. 2, Recycling Technologies, <https://youtu.be/Y-0sL-bkvv4>
5. Ch. 1, Good morning, Egypt, <https://youtu.be/H15eFPlak9M>
6. Ch. 2, Rahma TV, <https://youtu.be/Z-qCe-TbPu8>
7. Ch 2, Future of Egypt, <https://youtu.be/5ucAX9qVLYA>
8. Ch. 7, Upper Egypt, https://youtu.be/UliaCY_3KJE
9. Ch. 7, Upper Egypt, <https://youtu.be/7muE91MP2-k>
10. Ch. 7, Upper Egypt, <https://youtu.be/1ZYrfJBvcFI>