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EDUCATION

دكتوراه (10-07-2013)

ORGANIC CHEMISTRY

UNIVERSITY OF GLASGOW

RESEARCH METRICS

h-index (Scopus)	13
h-index (GS)	14
Citations (Scopus)	552
Citations (GS)	851
Documents (Scopus)	65
Documents (GS)	91



MOHANAD MOUSA KAREEM

مهند موسى كريم عباس الحجامي

Professor

PROFILE

Prof.Dr. Mohanad Mousa Kareem

Research Interest:

Research Interest focuses upon the design, synthesis and characterisation of functional molecules, macromolecules, Organic Chemistry, Polymers, Photovoltaics, Carbohydrates, Spectroscopy, Green Chemistry, Supramolecular, Donor-Acceptor Materials, prodrug system

Membership:

- 1- Member of Royal Society of Chemistry (RSC)-UK.
- 2- Member of international society development and sustainability (ISDS)-Japan.
- 3- Member of Athens Institute for Education and Research (ATINER)-
- 4- Member of Iraqi Chemical Society.
- 5- Member of Iraqi Environmental Protection Association.
- 6- Member of Union of Higher Studies in Babylon University.
- 7- Member of the Higher Education Academy Association.

ACADEMIC TITLES

2020-06-14 Professor

PUBLICATIONS (1 1 3)

1. New polymers based on 1-(4-hydroxyphenyl)-1H-pyrrole-2,5-dione: Synthesis characterization, physical study, and biological activity
Aip Conference Proceedings | 2026
2. Quinazolinones: Synthesis, Reactions, and Their Impact on Medicine and Industry
ChemistrySelect 11 (5), e06712, 2026 | 2026 | Cited: 2
3. Theoretical Investigation of Thermoelectric Properties of Single-Phthalocyanine Junctions
ChemistrySelect 11 (17), e73406, 2026 | 2026
4. New functional glycogen-based polymers as breast anticancer and antibacterial agents
AIP Conference Proceedings 3408 (1), 020047, 2026 | 2026
5. Molecular Engineering of Phenothiazine Sensitizers Using Trihexyl-Dithieno [2,3]Pyridine as a Novel Heterocyclic π -Bridge for Enhanced Single and Tandem DSSC Performance
Figshare | 2026
6. Photocatalytic removal of a mixture of Azocarmine G, Methylene blue and Eosin yellow dyes from their aqueous solutions over synthesized new multiwalls carbon nanotubes/Cr2O3-NiO
AIP Conference Proceedings 3408 (1), 020016, 2026 | 2026
7. Extracting beta-carotene from strawberries and studying its chemical properties
AIP Conference Proceedings 3408 (1), 020024, 2026 | 2026
8. Preparation and identification of some alkaloids and their derivatives using Suzuki reactions and study of the biological properties of the resulting compounds
AIP Conference Proceedings 3408 (1), 020048, 2026 | 2026
9. Near-IR phenothiazine-squaraine photosensitizers: unveiling an acid-base co-sensitization strategy toward 12.11% efficient DSSCs
Dyes and Pigments, 113866, 2026 | 2026

10. **Design new prontosil transition metal complexes as biological agents**
Bulletin of the Chemical Society of Ethiopia 40 (7), 1405-1417, 2026 | 2026
11. **Synthesis, Characterization and Antimicrobial Evaluation of Polyacrylic acid Drug Conjugates Using Benzidine as a Spacer**
Journal of Advances in Medical and Biomedical Research, 9-9, 2026 | 2026
12. **Characterization, synthesis, and application of new barbituric acid derivatives as antibacterial agents**
AIP Conference Proceedings 3396 (1), 040013, 2026 | 2026
13. **Treatment of breast cancer by using novel barbituric acid derivatives-drug composites**
AIP Conference Proceedings 3396 (1), 040030, 2026 | 2026
14. **Synthesis, Spectral Characterization, and Antibacterial Evaluation of Citric Acid–Based Drug Modifications**
Journal of the Turkish Chemical Society Section A Chemistry | 2026
15. **Synthesis and Characterization of New Substituted 4,4'-Thiodianiline Containing Schiff Base Compounds as Corrosion Inhibitors**
Al Nahrain Journal of Science | 2026
16. **Photocatalytic removal of a mixture of Azocarmine G, Methylene red and Eosin yellow dyes from their aqueous solutions over synthesized new multiwalls carbons nanotubes / Cr₂O₃-Nio nano-composite**
Aip Conference Proceedings | 2026
17. **Synergistic design of carbazole-bearing (D– π)₂-D– π –A architectures for dye-sensitized solar cells: experimental and theoretical evaluations**
Journal of Molecular Structure, 143358, 2025 | 2025 | Cited: 7
18. **Synergistic design of carbazole-bearing (D-it)2-D-it-A architectures for dye-sensitized solar cells: Experimental and theoretical evaluations**
JOURNAL OF MOLECULAR STRUCTURE | 2025
19. **NEW GLYCOGEN DERIVATIVES AS AN ADVANTAGEOUS POLYMERS CARRIER IN BACTERIA THERANOSTICS**
Kimya Problemleri 23 (2), 166-177, 2025 | 2025 | Cited: 1
20. **New N-Substituted Maleimide Homopolymers as Drug Carrier: Synthesis and Biological Activity**
Advanced Journal of Chemistry, Section A 8 (6), 1001-1013, 2025 | 2025
21. **Synthesis and characterization of novel quinazolinone-based azo disperse dyes: molecular docking, ADMET, in vitro, and dyeing performance on polyester fabric**
RSC advances 15 (52), 44749-44765, 2025 | 2025 | Cited: 1
22. **Exploring the Chemistry of Phthalocyanines based on Phthalic Anhydride and their applications**
Proceedings of the Indian National Science Academy, 1-18, 2025 | 2025
23. **Synthesis, Biological Screening, and Molecular Docking of Drug Carrier Maleimide Derivatives**
Russian Journal of Bioorganic Chemistry 50 (3), 991–1000, 2024 | 2024 | Cited: 7
24. **Synthesis, Biological Screening, and Molecular Docking of Drug Carrier Maleimide Derivatives**
Russian Journal of Bioorganic Chemistry | 2024
25. **New N-Substituted Maleimide Drug Polymers: Synthesis, Drug Release and Antibacterial Activity**
Egyptian Academic Journal of Biological Sciences. C, Physiology and 2024 | 2024 | Cited: 3
26. **Study the effects of some nano graft co-polymer-drugs on the spread of breast cancer**
AIP Conference Proceedings 2414 (1), 2023 | 2023 | Cited: 13
27. **Synthesis, Characterization of Novel Triazin Complex, and Studying its Antimicrobial Activity**
Egyptian Academic Journal of Biological Sciences. C, Physiology and 2023 | 2023
28. **Synthesis, characterization, and evaluation of antibacterial and antioxidant activity of 1, 2, 3-triazole, and tetrazole derivatives of cromoglicic acid**
Eurasian Chemical Communications 5 (8), Pages 691-700, 2023 | 2023 | Cited: 5
29. **Synthesis and diagnosis of triazole and oxirane derivatives from hydroxyquioline with evaluating their biological and antioxidant activity**
Eurasian Chemical Communications 5 (6), Pages 466-482, 2023 | 2023 | Cited: 25

30. **TLR2 Gene Polymorphism and MicroRNA 301 gene Expression Level as Signatures for Hepatocellular Carcinoma in Egyptian Patients**
EGYPTIAN JOURNAL OF CHEMISTRY | 2023
31. **Application and Theoretical Study: New Barbiturate Derivatives as Corrosion Inhibitors**
Egyptian Academic Journal of Biological Sciences. C, Physiology and..., 2023 | 2023 | Cited: 2
32. **New n-substituted itaconimide polymers: synthesis, characterization and biological activity**
Eurasian Chemical Communications 5 (9), Pages 866-884, 2023 | 2023 | Cited: 5
33. **Synthesis and Characterization of New Modified Poly(vinyl chloride) Polymers and Study of their Photodegradation under Irradiation with Ultra-Violet Radiation**
Brazilian Archives of Biology and Technology | 2023 | Cited: 9
34. **Review of: "Synthesis and Antibacterial Screening of Cefradine Schiff Bases and Their Metal Salts"**
2023
35. **SYNTHESIS, CHARACTERIZATION, THEORETICAL STUDY AND BIOLOGICAL EVALUATION OF SCHIFF BASE AND THEIR La(III), Ce(IV) AND UO₂(II) COMPLEXES**
Bulletin of the Chemical Society of Ethiopia | 2023 | Cited: 22
36. **Synthesis and characterization of new 4, 6-dimethoxy-1H-indole derivatives as antibacterial and antitumor agents**
Aurasian Chem. Commun 5 (5), 411-424, 2023 | 2023 | Cited: 1
37. **Synthesis and characterization of a new azo dye and study of its photodegradation on the surface of cobalt oxide as a catalyst**
AIP Conference Proceedings 2834 (1), 2023 | 2023 | Cited: 1
38. **Inhibition of spread of the breast cancer by using of some nano co-polymer-drugs**
AIP Conference Proceedings 2414 (1), 2023 | 2023 | Cited: 14
39. **SYNTHESIS, CHARACTERIZATION AND INVESTIGATION OF ANTIBACTERIAL ACTIVITY FOR SOME NEW FUNCTIONALIZED LUMINOL DERIVATIVES**
Bulletin of the Chemical Society of Ethiopia | 2023 | Cited: 9
40. **Synthesis and characterization of new 4,6-dimethoxy-1H-indole derivatives as antibacterial and antitumor agents**
Eurasian Chemical Communications | 2023 | Cited: 2
41. **Spectroscopic Elucidation and Biological Assay of Hybrid Salicylaldehyde-Thiosemicarbazone Nickel & Copper Complexes**
Journal of Pharmaceutical Negative Results, 872-877, 2022 | 2022 | Cited: 2
42. **Synthesis of biological active compounds based on derivatives of maleimide**
AIP Conference Proceedings 2547 (1), 2022 | 2022 | Cited: 7
43. **Removal of cyanide from wastewater using iron electrodes**
IOP Conference Series: Earth and Environmental Science 1088 (1), 012002, 2022 | 2022 | Cited: 5
44. **Facile Synthesis of Spinel CoCr₂O₄ and Its Nanocomposite with ZrO₂: Employing in Photocatalytic Decolorization of Fe (II)-(luminol-Tyrosine) Complex**
Egyptian Journal of Chemistry | 2022 | Cited: 13
45. **CCDC 1005772: Experimental Crystal Structure Determination**
The Cambridge Structural Database | 2022
46. **Spectroscopic Elucidation and Biological Assay of Hybrid Salicylaldehyde-Thiosemicarbazone Nickel & Copper Complexes**
JOURNAL OF PHARMACEUTICAL NEGATIVE RESULTS | 2022
47. **PHOTOCATALYTIC OXIDATION OF BUTAN-2-OL OVER MULTI WALLED CARBON NANOTUBES / COBALT PHTHALOCYANINE COMPOSITES**
Bull. Chem. Soc. Ethiop. 36 (1), 197-207, 2022 | 2022 | Cited: 9
48. **Complex Anti-microbial Ability of Salicylaldehyde Thiosemicarbazone towards Zn^{II}, Ag^I & La^{III} Ions**
HIV Nursing | 2022
49. **The efficiency of purified bacteriocin from Lactobacillus acidophilus as a bioremediator of the burned engine and motor oils**
IOP Conference Series: Earth and Environmental Science 1088 (1), 012017, 2022 | 2022

50. **العضوي التشخيص Organic Spectroscopy (Investigation)**
Unpublished | 2021
51. **Dye removal from textile wastewater using solar-powered electrocoagulation reactor**
IOP Conference Series: Materials Science and Engineering 1058 (1), 012016, 2021 | 2021 | Cited: 28
52. **Plant-based coagulants for water treatment**
IOP Conference Series: Materials Science and Engineering 1058 (1), 012001, 2021 | 2021 | Cited: 20
53. **Synthesis of new biological active derivatives and their polymers based on N-substituted Maleimide**
NVEO-NATURAL VOLATILES & ESSENTIAL OILS Journal| NVEO, 1978-1997, 2021 | 2021 | Cited: 3
54. **Engineered electrocoagulation reactor for the removal of E. coli from wastewaters**
IOP Conference Series: Earth and Environmental Science 877 (1), 012048, 2021 | 2021 | Cited: 1
55. **Electrochemical remediation of wastewater contaminated by phenol**
IOP Conference Series: Earth and Environmental Science 877 (1), 012051, 2021 | 2021 | Cited: 1
56. **New Functional Biologically Active Polymers Based On N-Substituted Maleimides**
NVEO-NATURAL VOLATILES & ESSENTIAL OILS Journal| NVEO, 12383-12393, 2021 | 2021
57. **Synthesis, Characterization And Biological Activity Applications Of New Mefenamic Acid Derivatives**
NVEO-NATURAL VOLATILES & ESSENTIAL OILS Journal| NVEO, 1964-1977, 2021 | 2021 | Cited: 1
58. **Functional biologically active derivatives as anticancer and antibacterial agents based on mefenamic acid**
<https://doi.org/10.3390/ECMC2021-11416>, 2021 | 2021
59. **Synthesis, Characterization and Biological activity study for new hybrid polymers by grafting 1,3,4-triazole and 1,2,4-oxadiazle moieties onto polyvinyl chloride**
Egyptian Journal of Chemistry | 2021 | Cited: 18
60. **العضوي التشخيص 1 محاضرة Organic Spectroscopy (Investigation)**
Unpublished | 2021
61. **Pt(II)-Thiocarbohydrazone Complex as Cytotoxic Agent and Apoptosis Inducer in Caov-3 and HT-29 Cells through the P53 and Caspase-8 Pathways**
Pharmaceuticals | 2021 | Cited: 101
62. **العضوي التشخيص 3 محاضرة Organic Spectroscopy (Investigation)**
Unpublished | 2021
63. **Synthesis, Characterization and Gas Sensor Application of New Composite Based on MWCNTs:CoPc:Metal Oxide**
BAGHDAD SCIENCE JOURNAL | 2021 | Cited: 17
64. **Synthesis and Characterization of New Zinc phthalocyanine - dodeceny succinic Anhydride Benzoic groups**
Current Organic Synthesis | 2020 | Cited: 3
65. **ST**
2020
66. **Preparation of MWCNTs/Cr 2 O 3-NiO Nanocomposite for Adsorption and Photocatalytic Removal of Bismarck Brown G Dye from Aqueous Solution**
Indonesian Journal of Chemistry 20 (3), 554-566, 2020 | 2020 | Cited: 6
67. **Synthesis, characterization and study of some of new mefenamic acid derivatives as cytotoxic agents**
Journal of Physics: Conference Series 1664 (1), 012081, 2020 | 2020 | Cited: 17
68. **SYNTHESIS OF SPINEL Mn₃O₄ AND SPINEL Mn₃O₄/ZrO₂ NANOCOMPOSITES AND USING THEM IN PHOTO-CATALYTIC DECOLORIZATION OF Fe(II)-(4,5-DIAZAFLUOREN-9-ONE 11) COMPLEX**
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69. **Al-Baiati; Inter**
J. Pharma. Rese 12 (4), 850-859, 2020 | 2020 | Cited: 3
70. **Synthesis a novel nano co-polymer and using as carrier drug system**
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71. **Improving Asphalt Binder Properties Using Recycled Polyethylene Terephthalate and Natural Liquid Rubber**
IOP Conference Series: Materials Science and Engineering 671, 012107, 2020 | 2020 | Cited: 2
72. **Removal of iron from wastewater using a hybrid filter**
IOP Conference Series: Materials Science and Engineering 888 (1), 012035, 2020 | 2020 | Cited: 83
73. **Determination of Vitamin C (Ascorbic acid) concentration in some of Commercial Products, by Redox Titration**
Ministry of Health 15, 2020 | 2020 | Cited: 12
74. **SYNTHESIS OF SPINEL Mn₃O₄ AND SPINEL Mn₃O₄/ZrO₂ NANOCOMPOSITES AND USING THEM IN PHOTO-CATALYTIC DECOLORIZATION OF Fe(II)-(4,5- DIAZAFLUOREN-9-ONE 11) COMPLEX**
PERIÓDICO TCHÊ QUÍMICA 17 (n°34), 689-699, 2020 | 2020 | Cited: 24
75. **Preparation of MWCNTs/Cr₂O₃-NiO Nanocomposite for Adsorption and Photocatalytic Removal of Bismarck Brown G Dye from Aqueous Solution**
Indonesian Journal of Chemistry | 2020
76. **Synthesis of spinel Mn₃O₄ and spinel Mn₃O₄/ZrO₂ nanocomposites and using them in photo-catalytic decolorization of Fe(II)-(4,5-diazafluoren-9-one 11) complex,Síntese dos nanocompositos espinélio Mn₃O₄ e espinélio Mn₃O₄/ZrO₂ e usando-os na decolorização foto-catállica do complexo Fe(II)-(4,5- diazafluoren-9-ona 11)**
Periodico Tche Quimica | 2020
77. **Photocatalytic degradation efficiency of azo dye in aqueous phase using different photo catalysts**
Bulletin of the Chemical Society of Ethiopia 34 (3), 463-469, 2020 | 2020 | Cited: 13
78. **Malnutrition**
BoD—Books on Demand, 2020 | 2020 | Cited: 3
79. **Removal of organic matter from water using ultrasonic-assisted electrocoagulation method**
IOP Conference Series: Materials Science and Engineering 888 (1), 012033, 2020 | 2020 | Cited: 75
80. **Improved asphalt binder using recycle polyethylene terephthalate polymer**
IOP Conference Series: Materials Science and Engineering 571, 012094, 2019 | 2019 | Cited: 15
81. **New prodrug polymers functionalized based on Maleimide**
Journal of Physics: Conference Series 1294, 052031, 2019 | 2019 | Cited: 12
82. **Synthesis of Carbon Nanotubes from Graphite and Investigation of the Catalytic Activity of MWCNTs/Cr₂O₃-NiO with the Removal of Bismark Brown G Dye from Its Aqueous Solution**
2019
83. **Improved asphalt binder using recycled polyethylene terephthalate polymer**
Material Science Engineering 571, 82-92, 2019 | 2019 | Cited: 2
84. **Synthesis of carbon nanotubes from graphite and investigation of the catalytic activity of MWCNTs/Cr₂O₃-NiO with the removal of BismarCk brown G dye from Its aqueous solution**
Ukrainian journal of physics 64 (4), 276-276, 2019 | 2019 | Cited: 6
85. **Preparation and Characterization of New Carrier Drug Polymers Based Maleimide and Its Drug Release Behaviour**
Asian Journal of Chemistry 31 (3), 569-574, 2019 | 2019 | Cited: 32
86. **Synthesis and Characterization of New Theophylline and Chlordiazepoxide Prodrug Polymers based on Maleimide**
Asian J Chem 30, 2424-2430, 2018 | 2018 | Cited: 7
87. **Photocatalytic Decolorization of Celestine Blue B from Industrial Wastewaters Over Ni₃O₄-MgO Coupled Oxides**
ASIAN JOURNAL OF CHEMISTRY 30 (7), 1685-1688, 2018 | 2018 | Cited: 2
88. **Photocatalytic decolorization of celestine blue b from industrial wastewater using Ni₃O₄-MgO coupled oxides**
Asian Journal of Chemistry | 2018
89. **Synthesis and Theoretical Study of New Barbituric Acid Derivatives as Corrosion Inhibitors for Mild Steel**
Asian Journal of Chemistry 30 (12), 2761-2764, 2018 | 2018 | Cited: 3

90. **Synthesis, characterization and study the physical properties of new 1, 2, 4-Triazoles Mannich-Base derivatives**
Materials Science and Engineering | 2018
91. **Removal of Dye Bismarck Brown G by Photocatalytic Reaction over Prepared Co-Oxide Cr₂O₃-NiO: A Kinetic Study**
ASSIAN JOURNAL OF CHEMISSTRY 30 (11), 2527-2532, 2018 | 2018 | Cited: 7
92. **دراسة تركيز بعض العناصر الزرّة والايونات الموجبة والسالبة في المياه الجوفية لمناطق مختارة من محافظة بابل**
University of Babylon Repository, 2017 | 2017
93. **Biological Activity of Cefotaxime Sodium and their Complexes with Iron and Copper Metals**
journal of global pharma technology | 2017
94. **Synthesis and Characterization of New Zinc-phthalocyanine with Four Dodecenyl-benzoic Pendant Groups**
JUBPAS 25 (2), 420-415, 2017 | 2017 | Cited: 8
95. **Preparation and characterization of (Co,Mn)(Co,Mn)₂O₄/MgO catalysts**
International Journal of Industrial Chemistry 7, 93-101, 2016 | 2016 | Cited: 11
96. **Preparation and characterization of (Co,Mn)(Co,Mn)₂O₄/MgO catalysts**
INTERNATIONAL JOURNAL OF INDUSTRIAL CHEMISTRY | 2016
97. **Synthesis and Characterization of New Prodrug Polymers and Study of Their Biological Activity**
International Journal of ChemTech Research 9 (8), 398-413, 2016 | 2016 | Cited: 6
98. **The Impact of Driving Force on Electron Transfer Rates in Photovoltaic Donor-Acceptor Blends**
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99. **Manal Al-Eid, Brian Fitzpatrick, Vincent M. Rotello, Graeme Cooke, and Ifor DW Samuel. The Impact of Driving Force on Electron Transfer Rates in Photovoltaic Donor-Acceptor Blends**
Adv. Mater 27 (15), 2496-2500, 2015 | 2015 | Cited: 2
100. **Correction: Zainalabdeen, N., et al., Synthesis and Characterization of Naphthalenediimide-Functionalized Flavin Derivatives. Int. J. Mol. Sci. 2013, 14, 7468–7479.**
Int. J. Mol. Sci. | 2014
101. **Synthesis and Characterization of Naphthalenediimide-Functionalized Flavin Derivatives (vol 14, pg 7468, 2013)**
INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES | 2014
102. **Novel redox active building blocks for the creation of functional macromolecules**
University of Glasgow, 2013 | 2013
103. **Synthesis and characterization of naphthalenediimide-functionalized flavin derivatives**
International journal of molecular sciences 14 (4), 7468-7479, 2013 | 2013 | Cited: 9
104. **Determination of vitamin C concentration in some of commercial products by redox titration**
Babylon Journal of Applied and Pure Sciences 18 (3), 917-924, 2010 | 2010 | Cited: 5
105. **Biological activity of cefotaxime sodium and their complexes with iron and copper metals**
Journal of Global Pharma Technology 9 (10), 2009 | 2009
106. **Photocatalytic Cracking of n – Hexacosane (n- C₂₆H₅₄) Using Zinc Oxide Sensitized and Visible Light**
2007
107. **Synthesis and antibacterial activity of 4,6-di(methyl-B-thiourea)-m-xylene**
Journal of Kerbala University 5 (3), 1-3, 2007 | 2007
108. **ARTICLE INFO ABSTRACT**
0
109. **Determination of Selected Essential and Trace Elements in Traditional Vegetables in Middle Euphrates, Iraq**
0
110. **University of Babylon, College of Science, Chemistry Department, Babylon, Hilla, PO Box 51002, Iraq E-mail: sci. mohanad. mousa@ uobabylon. edu. iq**
0
111. **Al-Baiati;(2019)**
Asian J. Chemistry 31 (3), 569, 0 | 0 | Cited: 4

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Pharmaceuticals 14 (6), 509, 0 / 0 | Cited: 5
113. Comparative Study on Photocatalytic Degradation Efficiency Between ZnO and CdS Using Azo Dye
Nour Abd Alrazzak, Suad T. Saad, Hazim Y. Al-gubury, Mohanad Mousa Kareem b and ...
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