CURRICULUM VITAE

Head of Civil Engineering Department
Higher Institute for Engineering and Technology, New Damietta. Ministry of Higher Education and Scientific Research, Egypt.
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Mohamed ELSayed Ahmed Gabr

Date and place of birth	16 / 1 / 1969 – Port-Said, Egypt
Nationality	Egyptian
Religion	Muslim
Marital Status	Married

EDUCATIONAL RECORD

Institution	Suez Canal University, Faculty of Engineering
Department	Civil Engineering
Location	Port Said, Egypt
Major field of study	Civil Engineering
Degree	B. Sc
General grade	Very good
Years (from-to)	1986-1991

Institution	Suez Canal University, Faculty of Engineering
Department	Civil Engineering
Location	Port Said, Egypt
Major field of study	Civil Engineering
Degree	M. Sc. Degree
Research title	"The Ideal Design for Lining and Protection of EL-Salam Canal"
Years (from-to)	1994-1997

Institution	Cairo University, Faculty of Engineering
Department	Irrigation and Hydraulics
Location	Giza, Egypt
Major field of study	Civil Engineering
Degree	Higher Diploma
Research title	"Shared water resources"
Years (from-to)	1999-2000

Institution	Suez Canal University, Faculty of Engineering
Department	Civil Engineering

Location	Port Said, Egypt
Major field of study	Civil Engineering
Degree	Ph.D.
Research title	"Generation and Transport of Sediments by Severe Flow Conditions
(from-to)	1999-2003

Major Field of Research

1- Water Resources Engineering.
2- Environmental Engineering.
3- Irrigation and Drainage Engineering.
4- Hydraulics and Hydrology.
5- Harbor Engineering and coastal Engineering.
6- Waste management.
7- Water quality
8- Construction Engineering Drawings

Professional Activities

EMPLOYMENT 1

Name of employer	Ministry of Water Resources & Irrigation, Water Resources, Irrigation, and national Infrastructure Sector in North Sinai
Address of employer	North Sinai, Egypt
Type of organization	Governmental
Activities	Construction of El-Sheikh Gaber Canal and its water structures in Sinai to reclaim 400 thousand feddans.
Positions	Supervisor Infrastructure Engineer (1994- 2003)

EMPLOYMENT 2

Name of employer	Sabha High Technical Institution, Department of Civil Engineering.
Address of employer	Sabha, Libya, P.O. 19078. Fax: 021.3602894
Type of organization	Governmental.
Activities	Educating under-graduates to be awarded the Engineering B. Sc.
Positions	Assistant Professor in Civil Engineering Department (2004-2009)

EMPLOYMENT 3

Name of employer	Ministry of Water Resources & Irrigation
Address of employer	North Sinai, Egypt
Type of organization	Governmental
Activities	Study problems facing the construction of the North Sinai development project to reclaim 400 thousand feddans regarding soil salinity, water quality, soil drainage. In addition, preparing the documents of tendering of irrigation and drainage work.
Positions	Senior Infrastructure Engineer (2009- 2015).

EMPLOYMENT 4

Name of employer	Higher Institute for Engineering and Technology, New Damietta, Ministry of Higher Education,

Address of employer	New Damietta, Egypt. P.O. 42523
Type of organization	Governmental
Activities	Educating under-graduates to be awarded the Engineering B. Sc.
Positions	Assistant professor in Civil Engineering Department (2015 up till now)

Professional Experience

Research interest and expertise

1- Water Resources Engineering.
2- Hydraulics and Hydrology.
3- Water quality
4- Irrigation and Drainage Engineering.
5- Environmental Engineering.
6- Harbor Engineering and coastal Engineering.
7- Construction Engineering Drawings
8- Waste management.

Co-Supervised PhD Students

1- Eng. Amira Mahmoud El Shorbagy " Effect of Climatic Change on Road and Transport in Egypt: Study of Flood Depth Fluctuate Function", Civil Engineering Department, Faculty of Engineering, Minia University, Minia, 61519, Egypt

Status: Awarded 2024.

Co-Supervised M. Sc. Students

1- Eng. Madlen Mohamed Salam "Treatment of Drainage wastewater using Floating wetland", Public Works Engineering Department, Faculty of Engineering, Mansoura University, Egypt.

Status: Awarded 2022.

2- Maha Yousef Alotaibi “Food security and sustainable management of water-energy-food nexus in Kuwait.” College of Graduate Studies, Environmental Sciences, Kuwait.

Status: Awarded 2022.

3- Eng: Mohamed Mansour Meky Ibrahim “Investigating the Permeable Reactive Barrier Characteristics as sustainable Groundwater Remediation Technology” Irrigation and Hydraulics Department, Faculty of Engineering, Postgraduate Studies, Ain Sham University.

Status: Ongoing.

Research Projects

1- Sustainable Agriculture Using Solar Desalination: A Pathway to Food Security in the State of Kuwait

Code CN18-35EM-05

Total Budget 33,000KD

Starting Date 2021/02/01

End Date 31/01/2024

2- Integrated Approaches at Local Scale for Enhancing Water Reuse Efficiency and Sustainable Soil Fertilization from Wastewater's Recovered Nutrients
Acronym: CIRQUA.

Total Budget 75000 Euro

Starting Date **April 2024**

End Date **May 2027**

Work Package 2

Design, construction and testing of innovative CW prototypes for enhanced wastewater reuse

Work Package 2 entails the design and construction of innovative constructed wetlands (CWs) upgraded with nanostructured filters and photocatalytic modules to enhance pollutant removal efficiency. Two new CW prototypes will be built by ASU and DUTH, and existing ones in Portugal and Tunisia will be upgraded by CIIM and ABC, respectively. These systems will incorporate nitrogen-fixing and high nitrogen-adsorbing plants to improve nitrogen content. The best performing MOFCs and advanced photocatalysts from Work Package 1 will be scaled up and integrated into these systems. The prototypes will be fully automated with online sensors to standardize operations, with data acquisition and control managed by a PLC system. The effectiveness of these CWs in removing pollutants, including heavy metals, recalcitrant organic pollutants, pathogens, viruses, and residual DNA, will be rigorously tested. Additionally, SARS-CoV-2 surveillance will be conducted to monitor pathogen removal efficiency, ensuring the systems can effectively contribute to public health protection. Key outcomes include the construction of advanced CW prototypes, comprehensive assessment of pollutant and pathogen removal efficiencies, and evaluation of SARS-CoV-2 elimination capabilities.

Work package leader: ASU

Deliverables:

Deliverable 1.1 – Design and construction of CW prototypes

Deliverable 1.2 – Automation of CW prototypes

Deliverable 1.3 – Pollutants removal efficiency of CW prototypes

Deliverable 1.4 – SARS-CoV-2 surveillance, pathogens and residual DNA removal efficiency

International training courses:

Participating in the training course about Water Quality Early Warning System for Nile River during the period from 22/11/2015 to 28/11/2015 in Delft Hydraulics Institute, Netherlands

PUBLICATIONS

1. Meky, M. M., Hassan, N. A., Soussa, H., & **Gabr, M. E.** (2025). Permeable reactive barriers for groundwater contaminant removal: Mechanisms, materials, and challenges. Journal of Degraded and Mining Lands Management, 12(4), 8005–8014. https://doi.org/10.15243/jdmlm.2025.124.8005.
2. **Gabr, M.E.** Propose canal diversion surface flow constructed wetland for drainage water treatment: a Tala drain Egypt's Nile Delta. Appl Water Sci 15, 108 (2025). https://doi.org/10.1007/s13201-025-02440-2
3. **Gabr, M.E.** (2024). Impact of climate change on irrigation water requirement, mitigation, and adaptation strategies: A case study in Egypt. Delta University Scientific Journal, 7(3), 96-114. doi: 10.21608/dusj.2024.433449
4. Gabr, M.E., Awad, A. & Farres, H.N. Irrigation Water Management in a Water-Scarce Environment in the Context of Climate Change. Water Air Soil Pollut 235, 127 (2024). https://doi.org/10.1007/s11270-024-06934-8
5. **Gabr, M.E.,** Alhajeri, N., Al-Fadhli, F., & Al Jabri, S. (2024). Aquaponics system for sustainable water, energy, and food nexus: A review. Port-Said Engineering Research Journal, 28(2), 28-41. doi: 10.21608/pserj.2024.252618.1291
6. Faheem, Hamdy B.; Shorbagy, Amira M. El; and **Gabr, Mohamed Elsayed** (2024) "Impact Of Traffic Congestion on Transportation System: Challenges and Remediations - A review," Mansoura Engineering Journal: Vol. 49 : Iss. 2 , Article 18.
7. Gabr, M.E.; El-Rawy, M.; Al-Arifi, N.; Zijl, W.; Abdalla, F. A Subsurface Horizontal Constructed Wetland Design Approach for Wastewater Treatment: Application in Ar Riyadh, Saudi Arabia. Sustainability 2023, 15, 15927. https://doi.org/10.3390/su152215927
8. Alotaibi, M., Alhajeri, N.S., Al-Fadhli, Al Jabri, S.A., **Gabr M.E.** Impact of Climate Change on Crop Irrigation Requirements in Arid Regions. Water Resour Manage 37, 1965–1984 (2023). https://doi.org/10.1007/s11269-023-03465-5
9. **Gabr, M.E**.; Fattouh, E.M.; Mostafa, M.K. Determination of the Canal Discharge Capacity Ratio and Roughness to Assess Its Maintenance Status: Application in Egypt. Water 2023, 15, 2387. https://doi.org/10.3390/w15132387

10. **Gabr, M.E.,** Awad, A. & Farres, H.N. Irrigation Water Management in a Water-Scarce Environment in the Context of Climate Change. Water Air Soil Pollut 235, 127 (2024). https://doi.org/10.1007/s11270-024-06934-8
11. **Gabr, M.E.** Impact of climatic changes on future irrigation water requirement in the Middle East and North Africa's region: a case study of upper Egypt. Appl Water Sci 13, 158 (2023). https://doi.org/10.1007/s13201-023-01961-y
12. **Gabr, M.E.**, Soussa, H. Assessing surface water uses by water quality index: application of Qalyubia Governorate, Southeast Nile Delta, Egypt. Appl Water Sci 13, 181 (2023). https://doi.org/10.1007/s13201-023-01994-3
13. **Gabr, M.E.,** El-Ghandour, H.A. & Elabd, S.M. Prospective of the utilization of rainfall in coastal regions in the context of climatic changes: case study of Egypt. Appl Water Sci 13, 19 (2023). https://doi.org/10.1007/s13201-022-01835-9
14. **Gabr ME** (2023) Land reclamation projects in the Egyptian Western Desert: management of 1.5 million acres of groundwater irrigation, Water International, 48:2, 240-258, DOI: 10.1080/02508060.2023.2185745
15. **Gabr M.E.** (2022) Design methodology for sewage water treatment system comprised of Imhoff 's tank and a subsurface horizontal flow constructed wetland: a case study Dakhla Oasis, Egypt, Journal of Environmental Science and Health, Part A, 57:1, 52-64, DOI: 10.1080/10934529.2022.2026735
16. **Gabr, M.E.**; El Shorbagy, A.M.; Faheem, H.B. Assessment of Stormwater Quality in the Context of Traffic Congestion: A Case Study in Egypt. Sustainability 2023, 15, 13927. https://doi.org/10.3390/su151813927
17. **Gabr, M.E.;** Al-Ansari, N.; Salem, A.; Awad, A. Proposing a Wetland-Based Economic Approach for Wastewater Treatment in Arid Regions as an Alternative Irrigation Water Source. Hydrology 2023, 10, 20. https://doi.org/10.3390/hydrology10010020
18. **Gabr, M.E**.; El-Rawy, M.; Al-Arifi, N.; Zijl, W.; Abdalla, F. A Subsurface Horizontal Constructed Wetland Design Approach for Wastewater Treatment: Application in Ar Riyadh, Saudi Arabia. Sustainability 2023, 15, 15927. https://doi.org/10.3390/su152215927
19. **Gabr, M.E**.; El Shorbagy, A.M.; Faheem, H.B. Assessment of Stormwater Quality in the Context of Traffic Congestion: A Case Study in Egypt. Sustainability 2023, 15, 13927. https://doi.org/10.3390/su151813927
20. **Gabr, M.E**., Fattouh, E. & Eltarabily, M.G. (2023) Design of subsurface drainage network with minimum overall cost using Lagrange multiplier optimization. Irrigation and Drainage, 1–14. Available from: https://doi.org/10.1002/ird.2886

21. **Gabr, M.E.**; Salem, M.; Mahanna, H.; Mossad, M. Floating Wetlands for Sustainable Drainage Wastewater Treatment. Sustainability 2022, 14, 6101. https://doi.org/10.3390/su14106101
22. El-Rawy, M.; Fathi, H.; Zijl, W.; Alshehri, F.; Almadani, S.; Zaidi, F.K.; Aldawsri, M.; **Gabr, M.E.** Potential Effects of Climate Change on Agricultural Water Resources in Riyadh Region, Saudi Arabia. Sustainability 2023, 15, 9513. https://doi.org/10.3390/su15129513
23. **Gabr, M.E**.; El Shorbagy, A.M.; Faheem, H.B. Utilizing the Harvesting of Rainwater to Provide Safe Road Transportation Efficiency and Increase Water Resources in the Context of Climatic Change. Sustainability 2022, 14, 9656. https://doi.org/10.3390/su14159656
24. Gabr, M., El-Ghandour, H., Elabd, S. (2022). 'Rainwater Harvesting from Urban Coastal Cities Using Recharging Wells: A Case Study of Egypt', Port-Said Engineering Research Journal, 26(3), pp. 17-36. doi: 10.21608/pserj.2022.103188.1151.
25. El-Rawy, M.; Batelaan, O.; Al-Arifi, N.; Alotaibi, A.; Abdalla, F.; **Gabr, M.E.** Climate Change Impacts on Water Resources in Arid and Semi-Arid Regions: A Case Study in Saudi Arabia. Water 2023, 15, 606. https://doi.org/10.3390/w15030606
26. **Gabr, M.,** Alhajeri, N., Al-Fadhli, F., & Al Jabri, S. (2024). Aquaponics system for sustainable water, energy, and food nexus: A review. Port-Said Engineering Research Journal, in press, doi: 10.21608/pserj.2024.252618.1291
27. Gamal, G.; Abdeldayem, O.M.; Elattar, H.; Hendy, S.; **Gabr, M.E.**; Mostafa, M.K. Remote Sensing Surveillance of NO_2, SO_2, CO, and AOD along the Suez Canal Pre- and Post-COVID-19 Lockdown Periods and during the Blockage. Sustainability 2023, 15, 9362. https://doi.org/10.3390/su15129362
28. Abduljaleel, Y.; Awad, A.; Al-Ansari, N.; Salem, A.; Negm, A.; **Gabr, M.E**. Assessment of Subsurface Drainage Strategies Using DRAINMOD Model for Sustainable Agriculture: A Review. Sustainability 2023, 15, 1355. https://doi.org/10.3390/su15021355
29. **Gabr M.E**. (2021) Proposing a constructed wetland within the branch drains network to treat degraded drainage water in Tina Plain, North Sinai, Egypt, Archives of Agronomy and Soil Science, 67:11, 1479-1494, DOI: 10.1080/03650340.2020.1799353
30. Salem M., **Gabr M.E.,** Mossad M., Mahanna H. Random Forest modelling and evaluation of the performance of a full-scale subsurface constructed wetland plant in Egypt, Ain Shams Engineering Journal, Volume 13, Issue 6, 2022, 101778.
31. **Gabr, M.E**. Management of irrigation requirements using FAO-CROPWAT 8.0 model: A case study of Egypt. Model. Earth Syst. Environ. 8, 3127–3142 (2022). https://doi.org/10.1007/s40808-021-01268-4
32. Awad, A.; Luo, W.; Al-Ansari, N.; Elbeltagi, A.; El-Rawy, M.; Farres, H.N.; **Gabr, M.E.** Farmers' Awareness in the Context of Climate Change: An Underutilized Way for Ensuring

Sustainable Farmland Adaptation and Surface Water Quality. Sustainability 2021, 13, 11802. https://doi.org/10.3390/su132111802

33. **Gabr M.E.** (2022) Modelling net irrigation water requirements using FAO-CROPWAT 8.0 and CLIMWAT 2.0: a case study of Tina Plain and East South ElKantara regions, North Sinai, Egypt, Archives of Agronomy and Soil Science, 68:10, 1322-1337, DOI: 10.1080/03650340.2021.1892650
34. **Gabr M.E**., Ehab Mostafa Fattouh, Assessment of irrigation management practices using FAO-CROPWAT 8, case studies: Tina Plain and East South El-Kantara, Sinai, Egypt, Ain Shams Engineering Journal, Volume 12, Issue 2, 2021, Pages 1623-1636.
35. **Gabr, M.** (2020). A Roadmap for Establishment of an Early Warning System for Nile Water Quality in Egypt. Port-Said Engineering Research Journal, 24(2), 40-51. doi: 10.21608/pserj.2020.18756.1014
36. **Gabr M.E.,** Hoda Soussa, Ehab Fattouh, Groundwater quality evaluation for drinking and irrigation uses in Dayrout city Upper Egypt, Ain Shams Engineering Journal, Volume 12, Issue 1, 2021, Pages 327-340.
37. El-Ghandour H. A., Elbeltagi E., **Gabr M.E**. Design of irrigation canals with minimum overall cost using particle swarm optimization – case study: El-Sheikh Gaber canal, north Sinai Peninsula, Egypt. Journal of Hydroinformatics 1 September 2020; 22 (5): 1258–1269. doi: https://doi.org/10.2166/hydro.2020.199
38. **Gabr, M.** (2020). Design Methodology of a New Surface Flow Constructed Wetland System, Case Study: East South EL-Kantara Region North Sinai, Egypt. Port-Said Engineering Research Journal, 24(1), 23-34. doi: 10.21608/pserj.2020.19040.1016
39. **Gabr, M**. (2020). Study of Reclaimed Water Reuse Standards and Prospects in Irrigation in Egypt. Port-Said Engineering Research Journal, 24(1), 65-75. doi: 10.21608/pserj.2019.16840.1008
40. **Gabr, M. (2019)** Drainage Management Problems Evaluation: Case Study Baloza and EL-Farama Drains, North Sinai, Egypt. Journal of Water Resource and Protection, 11, 675-689. doi: 10.4236/jwarp.2019.116039.
41. **Gabr, M. (2019)** Drainage Management Problems Evaluation: Case Study Baloza and EL-Farama Drains, North Sinai, Egypt. Journal of Water Resource and Protection, 11, 675-689. doi: 10.4236/jwarp.2019.116039.
42. **Gabr M (2018)** Evaluation of Irrigation Water, Drainage Water, Soil Salinity, and Groundwater for Sustainable Cultivation. Irrigat Drainage Sys Eng 7: 224. doi: 10.4172/2168-9768.1000224

43. **Gabr M.E.**, El-Zahar M., "Study of the Quality of Irrigation Water in South-East El-Kantara Canal, North Sinai, Egypt," International Journal of Environmental Science and Development vol. 9, no. 6, pp. 142-146, 2018.

II. Referred Conference Proceedings

1. **Gabr M.E.** "Environmentally Friendly Wastewater Treatment in Egypt: Opportunities and Challenges". Journal of Engineering Research, 7, 5, 2023, 100-107. doi: 10.21608/erjeng.2023.236988.1246
2. **Gabr, M.,** Rageh, O. Strategic planning model for the construction and remediation of irrigation networks: A case study for Egypt. Delta University Scientific Journal, 2023; 6(1): 85-102. doi: 10.21608/dusj.2023.291016
3. **Gabr M.E.** (2018) Magnitude and Characteristics of Sand Dunes Encroachment towards El-Sheikh Gaber Channel, North Sinai, Egypt. 21st International Water Technology Conference, Ismailia, 28-30 June 2018, 43-47.
4. **Gabr M.E.** "Wastewater Reuse Standards for Agriculture Irrigation in Egypt", 21 st International Water Technology Conference, Ismailia, 28-30 June 2018, 234-246.

LANGUAGE PROFICIENCY

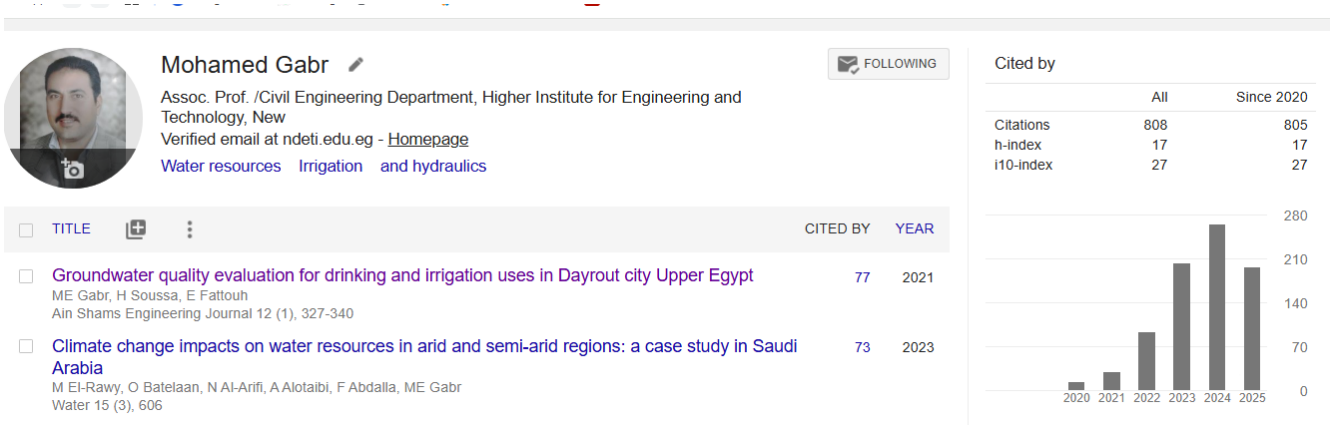
Arabic	Mother tongue
English	Very Good

COMPUTER SKILLS

☒ large experience in internet research

High performance in using software (Auto Cad, SAP 2000, WaterCAD, SewerCAD, MS Project, EPNET, CropWat 8, …).

Google Scholar



	All	Since 2020
Citations	808	805
h-index	17	17
i10-index	27	27

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Water resourcesIrrigationand hydraulics

Title	Cited By	Year
Groundwater quality evaluation for drinking and irrigation uses in Dayrout city Upper Egypt ME Gabr, H Soussa, E Fattouh Ain Shams Engineering Journal 12 (1), 327-340	77	2021
Climate change impacts on water resources in arid and semi-arid regions: a case study in Saudi Arabia M El-Rawy, O Batelaan, N Al-Arifi, A Alotaibi, F Abdalla, ME Gabr Water 15 (3), 606	73	2023
Management of irrigation requirements using FAO-CROPWAT 8.0 model: A case study of Egypt	66	2022

MELS Gabr Modeling Earth Systems and Environment 8 (3), 3127-3142		
Modelling net irrigation water requirements using FAO-CROPWAT 8.0 and CLIMWAT 2.0: A case study of Tina Plain and East South ElKantara regions, North Sinai, Egypt MELS Gabr Archives of Agronomy and Soil Science 68 (10), 1322-1337	54	2022
Assessment of irrigation management practices using FAO-CROPWAT 8, case studies: tina plain and east South El-Kantara, Sinai, Egypt ME Gabr, EM Fattouh Ain Shams Engineering Journal 12 (2), 1623-1636	52	2021
Random Forest modelling and evaluation of the performance of a full-scale subsurface constructed wetland plant in Egypt M Salem, EL Mohamed, M Mossad, H Mahanna Ain Shams Engineering Journal 13 (6), 101778	38	2022
Impact of climatic changes on future irrigation water requirement in the Middle East and North Africa's region: a case study of upper Egypt ME Gabr Applied Water Science 13 (7), 158	36	2023
Impact of climate change on crop irrigation requirements in arid regions M Alotaibi, NS Alhajeri, FM Al-Fadhli, S Al Jabri, M Gabr Water Resources Management 37 (5), 1965-1984	34	2023
Study of reclaimed water reuse standards and prospects in irrigation in Egypt MEL Gabr Port-Said Engineering Research Journal 24 (1), 65-75	23	2020
Evaluation of Irrigation Water, Drainage Water, Soil Salinity, and Groundwater for Sustainable Cultivation M Gabr Irrigation & Drainage Systems Engineering 7 (3), 224-234	23	2018
Potential effects of climate change on agricultural water resources in Riyadh region, Saudi Arabia M El-Rawy, H Fathi, W Zijl, F Alshehri, S Almadani, FK Zaidi, M Aldawsri, ... Sustainability 15 (12), 9513	22	2023
Land reclamation projects in the Egyptian Western Desert: Management of 1.5 million acres of groundwater irrigation ME Gabr Water International 48 (2), 240-258	21	2023
Assessing surface water uses by water quality index: application of Qalyubia Governorate, Southeast Nile Delta, Egypt ME Gabr, H Soussa	19	2023

Applied Water Science 13 (9), 181		
Design methodology for sewage water treatment system comprised of Imhoff's tank and a subsurface horizontal flow constructed wetland: A case study Dakhla Oasis, Egypt ME Gabr Journal of Environmental Science and Health, Part A 57 (1), 52-64	19	2022
Prospective of the utilization of rainfall in coastal regions in the context of climatic changes: Case study of Egypt ME Gabr, HA El-Ghandour, SM Elabd Applied Water Science 13 (1), 19	18	2023
Impact of traffic congestion on transportation system: Challenges and remediations-a review HB Faheem, AME Shorbagy, ME Gabr Mansoura Engineering Journal 49 (2), 18	17	2024
Proposing a wetland-based economic approach for wastewater treatment in arid regions as an alternative irrigation water source ME Gabr, N Al-Ansari, A Salem, A Awad Hydrology 10 (1), 20	17	2023
Floating wetlands for sustainable drainage wastewater treatment ME Gabr, M Salem, H Mahanna, M Mossad Sustainability 14 (10), 6101	15	2022
Remote Sensing Surveillance of NO_2, SO_2, CO, and AOD along the Suez Canal Pre- and Post-COVID-19 Lockdown Periods and during the Blockage G Gamal, OM Abdeldayem, H Elattar, S Hendy, ME Gabr, MK Mostafa Sustainability 15 (12), 9362	13	2023
Proposing a constructed wetland within the branch drains network to treat degraded drainage water in Tina Plain, North Sinai, Egypt MES Gabr Archives of Agronomy and Soil Science 67 (11), 1479-1494	13	2021
WASTEWATER REUSE STANDARDS FOR AGRICULTURE IRRIGATION IN, EGYPT M Gabr Twenty-first International Water Technology Conference, IWTC21-Ismailia …	13	2018
Design of irrigation canals with minimum overall cost using particle swarm optimization–case study: El-sheikh Gaber canal, north Sinai Peninsula, Egypt HA El-Ghandour, E Elbeltagi, ME Gabr Journal of Hydroinformatics 22 (5), 1258-1269	12	2020
Study of the Quality of Irrigation Water in South-East El-Kantara Canal, North Sinai, Egypt M Gabr, M El-Zahar International Journal of Environmental Science and Development,	12	2018

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Design methodology of a new surface flow constructed wetland system, case study: East South EL-Kantara Region North Sinai, Egypt ME Gabr Port-Said Engineering Research Journal 24 (1), 23-34	11	2020
Assessment of subsurface drainage strategies using DRAINMOD model for sustainable agriculture: A review Y Abduljaleel, A Awad, N Al-Ansari, A Salem, A Negm, ME Gabr Sustainability 15 (2), 1355	10	2023
Climate change impacts on water resources in arid and semi-arid regions: a case study in Saudi Arabia. Water 15 (3): 606 M El-Rawy, O Batelaan, N Al-Arifi, A Alotaibi, F Abdalla, ME Gabr	10	2023
Utilizing the harvesting of rainwater to provide safe road transportation efficiency and increase water resources in the context of climatic change ME Gabr, AM El Shorbagy, HB Faheem Sustainability 14 (15), 9656	10	2022
Assessment of stormwater quality in the context of traffic congestion: a case study in Egypt ME Gabr, AM El Shorbagy, HB Faheem Sustainability 15 (18), 13927	9	2023
Drainage Management Problems Evaluation: Case Study Baloza and EL-Farama Drains, North Sinai, Egypt M Gabr Journal of Water Resource and Protection 11 (ISSN Online: 1945-3108), 675-689	9	2019
Study of Lowlands Drainage Problems, Case Study Kamal El-Den Hessen Reclaimed Area, North Sinai, Egypt M Gabr Journal of Water Resource and Protection 87202 (Vol.10 No.09(2018)), 13 pages	9	2018
Farmers' awareness in the context of climate change: An underutilized way for ensuring sustainable farmland adaptation and surface water quality A Awad, W Luo, N Al-Ansari, A Elbeltagi, M El-Rawy, HN Farres, ... Sustainability 13 (21), 11802	8	2021
Irrigation water management in a water-scarce environment in the context of climate change ME Gabr, A Awad, HN Farres Water, Air, & Soil Pollution 235 (2), 127	7	2024
A Subsurface Horizontal Constructed Wetland Design Approach for Wastewater Treatment: Application in Ar Riyadh, Saudi Arabia ME Gabr, M El-Rawy, N Al-Arifi, W Zijl, F Abdalla Sustainability 15 (22), 15927	7	2023

Determination of the canal discharge capacity ratio and roughness to assess its maintenance status: Application in Egypt ME Gabr, EM Fattouh, MK Mostafa Water 15 (13), 2387	7	2023
Rainwater harvesting from urban coastal cities using recharging wells: a case study of Egypt M Gabr, H El-Ghandour, S Elabd Port-Said Engineering Research Journal 26 (3), 17-36	6	2022
Climate Change Impacts on Water Resources in Arid and Semi-Arid Regions: A Case Study in Saudi Arabia. Water 2023, 15, 606 M El-Rawy, O Batelaan, N Al-Arifi, A Alotaibi, F Abdalla, ME Gabr	4	2023
A roadmap for establishment of an early warning system for nile water quality in Egypt ME Gabr Port-Said Engineering Research Journal 24 (2), 40-51	4	2020
Design of subsurface drainage network with minimum overall cost using Lagrange multiplier optimization ME Gabr, E Fattouh, MG Eltarabily Irrigation and Drainage 73 (2), 613-626	3	2024
MAGNITUDE AND CHARACTERISTICS OF SAND DUNES ENCROACHMENT TOWARDS EL-SHEIKH GABER CANAL, NORTH SINAI, EGYPT M Gabr Twenty-first International Water Technology Conference, IWTC21-Ismailia …	3	2018
Aquaponics system for sustainable water, energy, and food nexus: A review ME Gabr, N Alhajeri, F Al-Fadhli, S Al Jabri Port-Said Engineering Research Journal 28 (2), 28-41	2	2024
Strategic planning model for the construction and remediation of irrigation networks: A case study for Egypt ME Gabr, OS Rageh Delta University Scientific Journal 6 (1), 85-102	1	2023
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