



CURRICULUM VITAE

Prof. Ahmed Tawfik -DSc in Environmental
Science

KUWAIT UNIVERSITY, COLLEGE OF LIFE
SCIENCES, ENVIRONMENTAL SCIENCE
DEPARTMENT

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1. ACADEMIC QUALIFICATIONS

Scientific degree	Year	University /country
Doctor of Science (DSc)	2022	Mansoura University, Egypt
Ph-D	2002	Wageningen University, Sub-department of Environmental Technology, The Netherlands
M.Sc.	1998	Tanta University, Egypt
B.Sc.	1992	Mansoura University, Egypt

2. PROFESSIONAL QUALIFICATIONS

Academic position	Date	University/Institute/college
Professor	2023- present	Environmental sciences dept. College of life sciences, Kuwait university
Professor and acting dean of environmental and climate change institute	2023	Environmental and climate change institute, Cairo, Egypt
Professor and vice Dean of environmental and climate change institute	2020-2023	Environmental and climate change institute, Cairo, Egypt
Professor	2018-2019	Environmental and climate change institute, Cairo, Egypt
Professor and Chairperson of Environmental Engineering department	2016- 2018	Egypt-Japan University of Science and Technology, Alexandria, Egypt
Professor	2012- 2016	Egypt-Japan University of Science and Technology, Alexandria, Egypt
Associate professor	2010-2012	Egypt-Japan University of Science and Technology, Alexandria, Egypt
Associate professor	2007-2010	Environmental and climate change institute, Cairo, Egypt
Assistant professor	2005- 2007	Environmental and climate change institute, Cairo, Egypt
Assistant professor	2003- 2004	Nagaoka University of Technology, Environmental technology Department; Japan
Assistant professor	2002- 2003	Wageningen University, Sub- department of Environmental Technology; The Netherlands

3. RESEARCH INTEREST

Environmental Science/Biotechnology, Water Pollution, Waste Valorization, Wastewater Treatment Technologies; Energy from Waste Materials

4. COURSES DELIVERED FOR POST-GRADUATE (MSC AND PH-D)

- ENV501 Environmental Management System (EMS)
- ENV502 Principles of Environmental Engineering
- ENV503 Water Quality and Treatment
- ENV506 Advanced Wastewater Treatment
- ENV509 Solid Waste Management
- ENV701 Project Based Learning
- ENV603 Hazardous Waste Management
- ENV608 Industrial Waste Treatment
- ENV702 Advanced Research Seminar
- ENV703 Research Seminar on Recent Topics
- ENV604 Environmental Processes and Systems

COURSES DELIVERED FOR UNDERGRADUATE

- 1800-101 Introduction to environmental sciences
- 1800-135 Leadership development
- 1800-260 Career perspectives
- 1850-432 Environmental statistics
- 1850-088 Portfolio review
- 1850-499 Capstone
- 1850-320 Unit treatment technologies
- 1850-421 Industrial pollution control

5. AWARDS

Award	Organization/Academy	Year	Country
1. Creativity and Innovation AWARD in the field of Water Science for Arab Countries” with special focus on Non-Conventional Water Resources”	The Arab Water Council Prize	2021	Dubai- UAE
2. Excellency State Award in The Advanced Technological Science	Academy of Scientific Research and Technology (ASRT)	2017	Egypt
3. Abdul Hameed Shoman Award for Arab Researchers in Basic science (water pollution field)	Abdul Hameed Shoman foundation	2015	Jordan
4. State Award in Environmental Research and Education Research	Academy of Scientific Research and Technology (ASRT)	2013	Egypt
5. The Best Publication Award	Misr El-Kheir Foundation	2013	Egypt
6. The Best Publication Award	Misr El-Kheir Foundation	2012	Egypt
7. Encouragement State Award in the Advanced Technological Science Which Serves the Basic Science	Academy of Scientific Research and Technology (ASRT)	2010	Egypt
8. State Award in Environmental Research and Education Research	Academy of Scientific Research and Technology (ASRT)	2007	Egypt
9. Encouragement Award in the Environmental Science	National Research Centre, ministry of research and higher education	2006	Egypt

6. PUBLICATIONS IN PEER REVIEWED INTERNATIONAL OUTSTANDING JOURNALS

Publications in international outstanding journals	Publications in international conferences	Published book chapter by international publisher	H-Index		Citations	
			Scopus	Google Scholars	Scopus	Google Scholars
190	9	22	45	52	6796	9832

No.	Authors	Title	Journal name/publication date	Impact factor	Rank
	Ahmed Tawfik , Nawaf S. Alhajeri, Mahmoud Nasr	Integrated waste-to-energy process for hazardous landfill leachate valorization: economic profits related to sustainability and environmental assessment	Biochemical Engineering Journal, in press	3.7	Q2
1	Attia A.A.; Khalil T.E.; Elbadawy H.A.; Tawfik A. ; El-Sayed D.S.; El-Dissouky A.	Effective removal of tetracycline from wastewater using carbonaceous materials derived from Brassica oleracea plant: Experimental and computational perturbation	Journal of Molecular Liquids 424 (2025) 127106 https://doi.org/10.1016/j.molliq.2025.127106	5.3	Q1
2	Tawfik A. ; Attia A.A.; Nasr M.; Khalil T.E.; Elbadawy H.A.; El-Dissouky A.	Synergetic interaction of Fe ₃ O ₄ nanoparticles and activated carbon to mitigate inhibition effect of 4-nitrophenol on biogas recovery from petroleum sludge	Journal of Water Process Engineering 72 (2025) 107564 https://doi.org/10.1016/j.jwpe.2025.107564	6.3	Q1
3	Tawfik A. ; Alhajeri N.S.; Elsamadony M.; Meng F.	Mitigation of Pharmaceutical Wastewater Toxicity in Anaerobic Reactors Using Metal-Modified Biochar	ACS ES and T Engineering, 4, 12, 29 87-3000, 2024 https://doi.org/10.1021/acsestengg.4c00393	7.5	Q1
4	Yu Z.; Gan Z.; Tawfik A. ; Meng F.	Exploring interspecific interaction variability in microbiota: A review	Engineering Microbiology 4 (2024) 100178 https://doi.org/10.1016/j.engmic.2024.100178		Q1
5	Hafez R.M.; Tawfik A. ; Hassan G.K.; Kandil Zahran M.; Younes A.A.; Ziembińska-Buczyńska A.; Gamoń F.; Nasr M.	Valorization of paper-mill sludge laden with 2-chlorotoluene using hydroxyapatite@biochar nanocomposite to enrich methanogenic community: A techno-economic approach	Biomass and Bioenergy 190 (2024) 107401 https://doi.org/10.1016/j.biombioe.2024.107401	5.8	Q1
6	Eraky M.; Elsayed M.; Ping A.; Tangjuan Z.; Yiqing Y.; Liu N.; Tawfik A.	A sustainable, zero-waste approach for production of biohydrogen from chicken manure slurry by hybrid recycling of digestate	Chemical Engineering Journal 496 (2024) 154201 https://doi.org/10.1016/j.cej.2024.154201	13.4	Q1
7	Tawfik A. ; Alhajeri N.S.; Nasr M.	Synergistic interaction of biochar, Phragmites australis, and rhizosphere	Journal of Water Process Engineering 66 (2024) 105964	6.3	Q1

		microorganisms for enhanced 1,4-dioxane biodegradation	https://doi.org/10.1016/j.jwpe.2024.105964		
8	Hafez R.M.; Tawfik A. ; Hassan G.K.; Zahran M.K.; Younes A.A.; Ziembńska-Buczyńska A.; Gamoń F.; Nasr M.	Synergism of floated paperboard sludge cake /sewage sludge for maximizing biomethane yield and biochar recovery from digestate: A step towards circular economy	Chemosphere 362(2024)142639 https://doi.org/10.1016/j.chemosphere.2024.142639	Q1	
9	Samy M.; Tawfik A. ; Osman A.I.; Abodlal R.S.; El-Dissouky A.; Khalil T.E.; El-Helow E.; Alalm M.G.	Novel Approach to Photocatalytic Removal of Linezolid by Advanced Nano-Biochar/Bismuth Oxychloride Hybrid	ACS Omega 2024,9,30963–30974 https://doi.org/10.1021/acsomega.4c04007	3.7	Q1
10	Alhajeri N.S.; Tawfik A. ; Elsamadony M.; Al-Fadhli F.M.; Meng F.	Synergistic algal/bacterial interaction in membrane bioreactor for detoxification of 1,2-dichloroethane-rich petroleum wastewater	Journal of Hazardous Materials 470 (2024) 134125 https://doi.org/10.1016/j.jhazmat.2024.134125	12.2	Q1
11	Alhajeri N.S.; Tawfik A. ; Al-Fadhli F.M.; Nasr M.	Enhancing hydrogen production and biochar recovery from algal biomass: A novel techno-economic synergism with gelatinous digestate	Journal of Water Process Engineering 61 (2024) 105270 https://doi.org/10.1016/j.jwpe.2024.105270	6.3	Q1
12	Hasanan K.; Badr O.A.; El-Meihy R.; Nasr M.; Tawfik A.	Biochar-enhanced anaerobic mixed culture for biodegradation of 1,2-dichloroethane: Microbial community, mechanisms, and techno-economics	Chemosphere 354 (2024) 141666 https://doi.org/10.1016/j.chemosphere.2024.141666	Q1	
13	Hassan R.; Kriaa K.; Wahaballa A.M.; Elsayed M.; Mahmoud M.; Nasr M.; Tawfik A.	Performance assessment of up-flow anaerobic multi-staged reactor followed by auto-aerated immobilized biomass unit for treating polyester wastewater, with biogas production	Applied Water Science (2024) 14:74 https://doi.org/10.1007/s13201-024-02129-y	5.7	Q1
14	Alhajeri N.S.; Tawfik A. ; Nasr M.; Osman A.I.	Artificial intelligence-enabled optimization of Fe/Zn@biochar photocatalyst for 2,6-dichlorophenol removal from petrochemical wastewater: A techno-economic perspective	Chemosphere 352 (2024) 141476 https://doi.org/10.1016/j.chemosphere.2024.141476	Q1	
15	Wu X.; Wang C.; Wang D.; Tawfik A. ; Xu R.; Yu Z.; Meng F.	Achieving simultaneous removal of carbon and nitrogen by an integrated process of anaerobic membrane bioreactor and flow-through	Engineering Microbiology 4 (2024) 100136 https://doi.org/10.1016/j.engmic.2023.100136	Q1	

		biofilm reactor			
16	Gao T.; Xia L.; Zhang H.; Tawfik A. ; Meng F.	Fe0-dependent carbon dioxide reduction to methane via diverse electron transfer pathway in methanogenic community	Cell Reports Sustainability 1, 100019, February 23, 2024 https://doi.org/10.1016/j.crsus.2024.100019		
17	Alhajeri N.S.; Tawfik A.	Integrating biochar and microbial community for detoxification of wastewater industry containing analgesics	Journal of Water Process Engineering 58 (2024) 104767 https://doi.org/10.1016/j.jwpe.2023.104767	6.3	Q1
18	Tawfik A. ; Nasr M.; Ni S.-Q.	Paper mill sludge rich enzymes and microbial community promotes the hydrogenesis of black liquor containing furfural	International journal of hydrogen energy 52 (2024) 58-73 https://doi.org/10.1016/j.ijhydene.2023.01.242	8.1	Q1
19	Al-Fadhli F.M.; Alhajeri N.S.; Osman A.I.; Tawfik A.	Enhancing hydrogen production from oily sludge: A novel approach using household waste digestate to overcome mono-ethylene glycol inhibition	International Journal of Hydrogen Energy https://doi.org/10.1016/j.ijhydene.2024.05.078	8.1	Q1
20	Khan M.S.; Ansari K.B.; Fatima A.; Al Mesfer M.K.; Danish M.; Tawfik A. ; Maheshwari U.	Development in desalination and wastewater treatment: state of the art challenges, role of solar energy, and recommendations	AQUA — Water Infrastructure, Ecosystems and Society Vol 73 No 1, 73 doi: 10.2166/aqua.2024.227 http://creativecommons.org/licenses/by-nc-nd/4.0/	2.1	Q2
21	Wu X.; Yu Z.; Yuan S.; Tawfik A. ; Meng F.	An ecological explanation for carbon source-associated denitrification performance in wastewater treatment plants	Water Research 247 (2023) 120762 https://doi.org/10.1016/j.watres.2023.120762	11.5	Q1
22	Samy M.; Gar Alalm M.; Abodlal R.S.; El-Dissouky A.; Khalil M.N.; El-Helow E.R.; E. Khalil T.; Tawfik A.	A novel Corchorus olitorius-derived biochar/Bi12O17Cl2 photocatalyst for decontamination of antibiotic wastewater containing tetracycline under natural visible light	Scientific Reports (2023) 13:13190 https://doi.org/10.1038/s41598-023-38715-4	3.8	Q1
23	Omara H.; Elsayed S.M.; Nassar K.A.; Diab R.; Tawfik A.	Hydrodynamic and morphologic investigating of the discrepancy in flow performance between inclined rectangular and oblong piers	Ocean Engineering 288 (2023) 116132 https://doi.org/10.1016/j.oceaneng.2023.116132	4.6	Q1

24	Eraky M.; Nasr M.; Elsayed M.; Ai P.; Tawfik A.	Synergistic interaction of tween 20 and magnesium@ functionalized graphene oxide nano- composite for dual productivity of biohydrogen and biochar from onion peel waste	Renewable Energy 216 (2023) 119082 https://doi.org/10.1016/j.renene.2023.119082	9.0	Q1
25	Mostafa A.; Elsamadony M.; Khalil T.E.; Elhusseiny A.F.; Tawfik A. ; Fujii M.; El-dissouky A.; Pant D.	Bioelectrochemical system for enhancing anaerobic digestion of pharmaceutical-containing domestic wastewater	Chemosphere339 (2023)139766 https://doi.org/10.1016/j.chemosphere.2023.139766		Q1
26	Tawfik A. ; Eraky M.; Osman A.I.; Ai P.; Zhou Z.; Meng F.; Rooney D.W.	Bioenergy production from chicken manure: a review	Environmental Chemistry Letters (2023) 21:2707–2727 https://doi.org/10.1007/s10311-023-01618-x	15.0	Q1
27	Alhajeri N.S.; Eraky M.; Qyyum M.A.; Tawfik A.	Eco-friendly fermentation module for maximization of hydrogen harvesting from fatty restaurant waste diluted with grey water	International journal of hydrogen energy 48 (2023) 26461e26474, https://doi.org/10.1016/j.ijhydene.2022.11.015	8.1	Q1
28	Omara H.; Saleh O.K.; Al-Mutiry M.; Masria A.; Tawfik A.	Assessment the local scour around vertical and inclined oblong piers under shallow flow condition	Ocean Engineering 281 (2023) 114835 https://doi.org/10.1016/j.oceaneng.2023.114835	4.6	Q1
29	Fu Y.; Xu R.; Yang B.; Wu Y.; Xia L.; Tawfik A. ; Meng F.	Mediation of Bacterial Interactions via a Novel Membrane-Based Segregator to Enhance Biological Nitrogen Removal	Applied and Environmental Microbiology, July 2023 Volume89 Issue7, 10.1128/aem.00709- 23	3.9	Q1
30	Li M.; Wang K.; Zheng W.; Maddela N.R.; Xiao Y.; Li Z.; Tawfik A. ; Chen Y.; Zhou Z.	Metagenomics and network analysis decipher profiles and co- occurrence patterns of bacterial taxa in soils amended with biogas slurry	Science of the Total Environment 877 (2023) 162911 http://dx.doi.org/10.1016/j.scitotenv.2023.162911	8.2	Q1
31	Yuan S.; Guo S.; Tan Y.; Li M.; Lu Y.; Xu R.; Tawfik A. ; Zhou Z.; Chen J.; Liu W.; Meng F.	Deciphering community assembly and succession in sequencing batch moving bed biofilm reactor: Differentiation between attached and suspended communities	Science of the Total Environment 873 (2023) 162448 http://dx.doi.org/10.1016/j.scitotenv.2023.162448	8.2	Q1
32	Samy M.; Gar Alalm M.; Khalil M.N.;	Treatment of hazardous landfill leachate	Journal of Environmental	8	Q1

	Ezeldean E.; El-Dissouky A.; Nasr M.; Tawfik A.	containing 1,4 dioxane by biochar-based photocatalysts in a solar photo-oxidation reactor	Management 332 (2023) 117402 https://doi.org/10.1016/j.jenvman.2023.117402		
33	Tawfik A. ; Eraky M.; Khalil M.N.; Osman A.I.; Rooney D.W.	Sulfonated graphene nanomaterials for membrane antifouling, pollutant removal, and production of chemicals from biomass: a review	Environmental Chemistry Letters (2023) 21:1093–1116 https://doi.org/10.1007/s10311-022-01538-2	15.0	Q1
34	Wang Z.; Zhang J.; Zhou J.; Ismail S.; Ahmad H.A.; Awad H.M.; Tawfik A. ; Ni S.-Q.	Dosage-Dependent Toxicity of Universal Solvent Dimethyl Sulfoxide to the Partial Nitrification Wastewater Treatment Process	ACS EST Water https://doi.org/10.1021/acsestwater.2c00607	4.9	Q1
35	Tawfik A. ; M.Azzam A.; El-Dissouky A.; Ibrahim A.Y.; Nasr M.	Synergistic effects of paper mill sludge and sulfonated graphene catalyst for maximizing bio-hydrogen harvesting from sugarcane bagasse de-polymerization	Journal of Environmental Management 326 (2023) 116724 https://doi.org/10.1016/j.jenvman.2022.116724	8	Q1
36	Omara H.; Ookawara S.; Nassar K.A.; Masria A.; Tawfik A.	Assessing local scour at rectangular bridge piers	Ocean Engineering 266 (2022) 112912 https://doi.org/10.1016/j.oceaneng.2022.112912	4.6	Q1
37	Tawfik A. ; Tan X.; Elsamadony M.; Qyyum M.A.; Azzam A.M.; Mubashir M.; Ng H.S.; Akhtar M.S.; Khoo K.S.	Graphene/hydroxyapatite nano-composite for enhancement of hydrogen productivity from delignified duckweed	Fuel 330 (2022) 125537 https://doi.org/10.1016/j.fuel.2022.125537	6.7	Q1
38	Wang Z.; Bu C.; Dou J.; Ismail S.; Ahmad S.; Qi D.; Wei H.; Chen X.; Lee T.; Tawfik A. ; Ni S.-Q.	Enrichment of DNRA bacteria: Shift of microbial community and its combination with anammox to promote TN removal	Journal of Environmental Chemical Engineering 10 (2022) 108867 https://doi.org/10.1016/j.jece.2022.108867	7.4	Q1
39	Tawfik A. ; Eraky M.; Alhajeri N.S.; Osman A.I.; Rooney D.W.	Cultivation of microalgae on liquid anaerobic digestate for depollution, biofuels and cosmetics: a review	Environmental Chemistry Letters (2022) 20:3631–3656 https://doi.org/10.1007/s10311-022-01481-2	15.0	Q1
40	Azzam A.M.; Shenashen M.A.; Tawfik A. ; Safwat N.A.; Mostafa B.B.; El-Safty S.A.	Antimicrobial activity of mesoporous organic functionalized hexagon Fe ₃ O ₄ nanosheets for wastewater treatment	Environmental Nanotechnology, Monitoring & Management 18 (2022) 100739		Q1

			https://doi.org/10.1016/j.enmm.2022.100739		
41	Samy M.; Gar Alalm M.; Ezeldean E.; El-Dissouky A.; Badr N.B.E.; Al-Muhtaseb A.; Alhajeri N.S.; Osman A.I.; Tawfik A.	Solar-light-driven ZnO/biochar treatment of pesticides contaminated wastewater: A practical and computational study	Energy Sci Eng. 2022;10:4708–4725. wileyonlinelibrary.com/journal/ese3 DOI: 10.1002/ese3.1299	3.5	Q2
42	Tawfik A. ; Mohsen M.; Ismail S.; Alhajeri N.S.; Osman A.I.; Rooney D.W.	Methods to alleviate the inhibition of sludge anaerobic digestion by emerging contaminants: a review	Environmental Chemistry Letters (2022) 20:3811–3836 https://doi.org/10.1007/s10311-022-01465-2	15.0	Q1
43	Ismail S.; Elsamadony M.; Abdalla M.; Ni S.-Q.; Tawfik A.	Stimulating the Fermentation Process of Industrial Food Waste via Nonionic Surfactant/Graphene Nanosheet Combined Supplementation	ACS EST Eng https://doi.org/10.1021/acsestengg.2c00140	7.5	Q1
44	Tawfik A. ; Al-sayed A.; Hassan G.K.; Nasr M.; El-Shafai S.A.; Alhajeri N.S.; Khan M.S.; Akhtar M.S.; Ahmad Z.; Rojas P.; Sanz J.L.	Electron donor addition for stimulating the microbial degradation of 1,4 dioxane by sequential batch membrane bioreactor: A techno-economic approach	Chemosphere 306 (2022) 135580 https://doi.org/10.1016/j.chemosphere.2022.135580		Q1
45	Qyyum M.A.; Ihsanullah I.; Ahmad R.; Ismail S.; Khan A.; Nizami A.-S.; Tawfik A.	Biohydrogen production from real industrial wastewater: Potential bioreactors, challenges in commercialization and future directions	International journal of hydrogen energy 47 (2022) 37154–37170 https://doi.org/10.1016/j.ijhydene.2022.01.195	8.1	Q1
46	Tawfik A. ; Moanis R.; Qyyum M.A.; Kumari S.; Bux F.; Uzair Ayub H.M.; Khan M.S.; Bokhari A.; Mubashir M.; Khoo K.S.; Show P.L.	Sustainable fermentation approach for biogenic hydrogen productivity from delignified sugarcane bagasse	International journal of hydrogen energy 47 (2022) 37343–37358 https://doi.org/10.1016/j.ijhydene.2021.09.200	8.1	Q1
47	Ibrahim A.Y.; Tawfik A. ; El-Dissouky A.; S. Kassem T.; Alhajeri N.S.; Pant D.; Khalil T.E.	Sulphonated graphene catalyst incorporation with sludge enhanced the microbial activities for biomethanization of crude rice straw	Bioresource Technology 361 (2022) 127614 https://doi.org/10.1016/j.biortech.2022.127614	9.7	Q1
48	Eraky M.; Elsayed M.; Qyyum M.A.; Ai P.; Tawfik A.	A new cutting-edge review on the bioremediation of anaerobic digestate for	Environmental Research 213 (2022) 113708 https://doi.org/10.1016/j.envres.2022.113708	7.7	Q1

		environmental applications and cleaner bioenergy			
49	Tawfik A. ; Mostafa A.; Elsamadony M.; Pant D.; Fujii M.	Unraveling the metabolic shift in anaerobic digestion pathways associated with the alteration of onion skin waste concentration	Environmental Research 212 (2022) 113494 https://doi.org/10.1016/j.envres.2022.113494	7.7	Q1
50	Tawfik A. ; Ismail S.; Elsayed M.; Qyyum M.A.; Rehan M.	Sustainable microalgal biomass valorization to bioenergy: Key challenges and future perspectives	Chemosphere 296 (2022) 133812 https://doi.org/10.1016/j.chemosphere.2022.133812		Q1
51	Tawfik A. ; Alalm M.G.; Awad H.M.; Islam M.; Qyyum M.A.; Al-Muhtaseb A.H.; Osman A.I.; Lee M.	Solar photo-oxidation of recalcitrant industrial wastewater: a review	Environmental Chemistry Letters (2022) 20:1839–1862 https://doi.org/10.1007/s10311-022-01390-4	15.0	Q1
52	Tawfik A. ; Niaz H.; Qadeer K.; Qyyum M.A.; Liu J.J.; Lee M.	Valorization of algal cells for biomass and bioenergy production from wastewater: Sustainable strategies, challenges, and techno-economic limitations	Renewable and Sustainable Energy Reviews 157(2022)112024 https://doi.org/10.1016/j.rser.2021.112024	16.3	Q1
53	Qyyum M.A.; Ismail S.; Ni S.-Q.; Ihsanullah I.; Ahmad R.; Khan A.; Tawfik A. ; Nizami A.-S.; Lee M.	Harvesting biohydrogen from industrial wastewater: Production potential, pilot-scale bioreactors, commercialization status, techno-economics, and policy analysis	Journal of Cleaner Production 340(2022)130809 https://doi.org/10.1016/j.jclepro.2022.130809	9.8	Q1
54	Okubo T.; Tagawa T.; Takahashi M.; Iguchi A.; Oshiki M.; Araki N.; Kubota K.; Tawfik A. ; Uemura S.; Harada H.	Full-scale application of a down-flow hanging sponge reactor combined with a primary sedimentation basin for domestic sewage treatment	Bioprocess and Biosystems Engineering (2022) 45:701–709 https://doi.org/10.1007/s00449-022-02689-w	3.5	Q2
55	Ahmad H.A.; Ahmad S.; Cui Q.; Wang Z.; Wei H.; Chen X.; Ni S.-Q.; Ismail S.; Awad H.M.; Tawfik A.	The environmental distribution and removal of emerging pollutants, highlighting the importance of using microbes as a potential degrader: A review	Science of the Total Environment 809 (2022) 151926 http://dx.doi.org/10.1016/j.scitotenv.2021.151926	8.2	Q1
56	Tawfik A. ; Hasanani K.; Abdullah M.; Badr O.A.; Awad H.M.; Elsamadony M.; El-Dissouky A.; Qyyum M.A.; Nizami A.-S.	Graphene enhanced detoxification of wastewater rich 4-nitrophenol in multistage anaerobic reactor followed by baffled high-rate algal pond	Journal of Hazardous Materials 424(2022)127395 https://doi.org/10.1016/j.jhazmat.2021.127395	12.2	Q1

57	Azzam A.M.; Shenashen M.A.; Selim M.S.; Mostafa B.; Tawfik A. ; El- Safty S.A.	Vancomycin-Loaded Furriness Amino Magnetic Nanospheres for Rapid Detection of Gram-Positive Water Bacterial Contamination	Nanomaterials 2022, 12, 510. https://doi.org/10.3390/nano12030510 https://www.mdpi.com/journal/nanomaterials	4.4	Q1
58	Tawfik A. ; Bakr M.H.; Nasr M.; Haider J.; Mesfer M.K.A.; Lim H.; Qyyum M.A.; Lam S.S.	Economic and environmental sustainability for anaerobic biological treatment of wastewater from paper and cardboard manufacturing industry	Chemosphere 289 (2022)133166 https://doi.org/10.1016/j.chemosphere.2021.133166		Q1
59	Tawfik A. ; Hassan G.K.; Awad H.; Hassan M.; Rojas P.; Sanz J.L.; Elsamadony M.; Pant D.; Fujii M.	Strengthen “the sustainable farm” concept via efficacious conversion of farm wastes into methane	Bioresource Technology 341(2021)125838 https://doi.org/10.1016/j.biortech.2021.125838	9.7	Q1
60	Ali M.; Elreedy A.; Fujii M.; Tawfik A.	Co-metabolism based adaptation of anaerobes to phenolic saline wastewater in a two-phase reactor enables efficient treatment and bioenergy recovery	Energy Conversion and Management 247 (2021) 114722 https://doi.org/10.1016/j.enconman.2021.114722	9.9	Q1
61	Ayub H.M.U.; Qyyum M.A.; Qadeer K.; Binns M.; Tawfik A. ; Lee M.	Robustness enhancement of biomass steam gasification thermodynamic models for biohydrogen production: Introducing new correction factors	Journal of Cleaner Production 321(2021)128954 https://doi.org/10.1016/j.jclepro.2021.128954	9.8	Q1
62	Nasr M.; Tawfik A. ; Awad H.M.; Galal A.; El-Qelish M.; Abdul Qyyum M.; Mumtaz Ali Khan M.; Rehan M.; Nizami A.-S.; Lee M.	Dual production of hydrogen and biochar from industrial effluent containing phenolic compounds	Fuel 301(2021)121087 https://doi.org/10.1016/j.fuel.2021.121087	6.7	Q1
63	Tawfik A. ; Ni S.-Q.; Awad H.M.; Ismail S.; Tyagi V.K.; Khan M.S.; Qyyum M.A.; Lee M.	Recent Approaches for the Production of High Value- Added Biofuels from Gelatinous Wastewater	Energies 2021, 14, 4936. https://doi.org/10.3390/en14164936 https://www.mdpi.com/journal/energies	3.0	Q1
64	Tawfik A. ; Nasr M.; Galal A.; El-Qelish M.; Yu Z.; Hassan M.A.; Salah H.A.; Hasanin M.S.; Meng F.; Bokhari A.; Qyyum M.A.; Lee M.	Fermentation-based nanoparticle systems for sustainable conversion of black-liquor into biohydrogen	Journal of Cleaner Production 309(2021)127349 https://doi.org/10.1016/j.jclepro.2021.127349	9.8	Q1
65	Ismail S.; Elreedy A.; Fujii M.; Ni S.-Q.;	Fatigue of anammox consortia under long-term 1,4-dioxane exposure and	Journal of Hazardous Materials 414(2021)125533	12.2	Q1

	Tawfik A.; Elsamadony M.	recovery potential: N-kinetics and microbial dynamics	https://doi.org/10.1016/j.jhazmat.2021.125533		
66	Ismail S.; Elreedy A.; Elsamadony M.; Abdelrazek E.; Fujii M.; Ni S.-Q.; Tawfik A.	Response of anammox bacteria to short-term exposure of 1,4-dioxane: Bacterial activity and community dynamics	Separation and Purification Technology 266 (2021) 118539 https://doi.org/10.1016/j.seppur.2021.118539	8.2	Q1
67	Tyagi V.K.; Ali M.; Tawfik A. ; Maharjan N.; Kazmi A.A.; Okubo T.; Harada H.	Future perspectives of energy saving down-flow hanging sponge (DHS) technology for wastewater valorization—a review	Rev Environ Sci Biotechnol (2021) 20:389–418 https://doi.org/10.1007/s11157-021-09573-1	8.6	Q1
68	Khodary S.; Fath H.; Negm A.; Tawfik A.	Measuring the engineering properties of landfill leachate-contaminated soil in Egypt	Euro-Mediterranean Journal for Environmental Integration (2021) 6:23 https://doi.org/10.1007/s41207-020-00232-5	1.8	Q3
69	Elsamadony M.; Mostafa A.; Fujii M.; Tawfik A. ; Pant D.	Advances towards understanding long chain fatty acids-induced inhibition and overcoming strategies for efficient anaerobic digestion process	Water Research 190 (2021) 116732 https://doi.org/10.1016/j.watres.2020.116732	11.5	Q1
70	Meky N.; Elreedy A.; Ibrahim M.G.; Fujii M.; Tawfik A.	Intermittent versus sequential dark-photo fermentative hydrogen production as an alternative for bioenergy recovery from protein-rich effluents	Energy 217 (2021) 119326 https://doi.org/10.1016/j.energy.2020.119326	9	Q1
71	Bakr M.H.; Nasr M.; Ashmawy M.; Tawfik A.	Predictive performance of auto-aerated immobilized biomass reactor treating anaerobic effluent of card board wastewater enriched with bronopol(2-bromo-2-nitropropan-1,3-diol) via artificial neural network	Environmental Technology & Innovation 21 (2021) 101327 https://doi.org/10.1016/j.eti.2020.101327	6.7	Q1
72	Tawfik A. ; Hassan G.K.; Yu Z.; Salah H.A.; Hassan M.; Meng F.	Dynamic approach for mono- and di-fermentation of black liquor and livestock wastewater for 2-bio-(H ₂ &CH ₄) production	Biomass and Bioenergy 145(2021) 105947 https://doi.org/10.1016/j.biombioe.2020.105947	5.8	Q1

73	Tawfik A. ; Ali M.; Danial A.; Zhao S.; Meng F.; Nasr M.	2-biofuels (H ₂ and CH ₄) production from anaerobic digestion of biscuits wastewater: Experimental study and techno- economic analysis	Journal of Water Process Engineering 39(2021)101736 https://doi.org/10.1016/j.jwpe.2020.101736	6.3	Q1
74	Osama R.; Awad H.M.; Zha S.; Meng F.; Tawfik A.	Greenhouse gases emissions from duckweed pond system treating polyester resin wastewater containing 1,4-dioxane and heavy metals	Ecotoxicology and Environmental Safety 207(2021)111253 https://doi.org/10.1016/j.ecoenv.2020.111253	6.2	Q1
75	Arora A.S.; Nawaz A.; Qyyum M.A.; Ismail S.; Aslam M.; Tawfik A. ; Yun C.M.; Lee M.	Energy saving anammox technology-based nitrogen removal and bioenergy recovery from wastewater: Inhibition mechanisms, state-of-the-art control strategies, and prospects	Renewable and Sustainable Energy Reviews 135(2021)110126 https://doi.org/10.1016/j.rser.2020.110126	16.3	Q1
76	Ismail S.; Nasr M.; Abdelrazek E.; Awad H.M.; Zhaof S.; Meng F.; Tawfik A.	Techno-economic feasibility of energy- saving self-aerated sponge tower combined with up-flow anaerobic sludge blanket reactor for treatment of hazardous landfill leachate	Journal of Water Process Engineering Volume 37, October 2020, 101415 https://doi.org/10.1016/j.jwpe.2020.101415	6.3	Q1
77	Khodary S.M.; Elwakil A.Z.; Fujii M.; Tawfik A.	Effect of hazardous industrial solid waste landfill leachate on the geotechnical properties of clay	Arabian Journal of Geosciences (2020)13:706 https://doi.org/10.1007/s12517-020-05699-8	1.327	Q2
78	Abdullahi K.; Elreedy A.; Fujii M.; Ibrahim M.G.; Tawfik A.	Robustness of anaerobes exposed to cyanuric acid contaminated wastewater and achieving efficient removal via optimized co-digestion scheme	Journal of Advanced Research 24 (2020) 211–222 https://doi.org/10.1016/j.jare.2020.02.006	11.4	Q1
79	Osama R.; Awad H.M.; Ibrahim M.G.; Tawfik A.	Mechanistic and economic assessment of polyester wastewater treatment via baffled duckweed pond	Journal of Water Process Engineering Volume 35, June 2020, 101179 https://doi.org/10.1016/j.jwpe.2020.101179	6.3	Q1
80	Ayat Elnmer, Mosaad Khadr, Shinjiro Kanae, Ahmed Tawfik	Mapping daily and seasonally evapotranspiration using remote sensing techniques over the Nile delta	Agricultural Water Management Volume 213, 1 March 2019, Pages 682-692	5.9	Q1

			https://doi.org/10.1016/j.agwat.2018.11.009		
81	Ahmed Tawfik	Degradation pathways of 1,4-dioxane in biological and advanced oxidation processes	Desalination and Water Treatment 178 (2020) 360–386 doi:10.5004/dwt.2020.24970	1.0	Q3
82	H. Omara, G. M. Abdeelaal, K. Nadaoka & A. Tawfik	Developing empirical formulas for assessing the scour of vertical and inclined piers	Marine Georesources & Geotechnology Volume 38, 2020 - Issue 2 https://doi.org/10.1080/1064119X.2018.1559901	2.0	Q2
83	Walaa Assar; Mona G. Ibrahim; Wael Mahmod; Ayman Allam; Ahmed Tawfik ; and Chihiro Yoshimura	Effect of Water Shortage and Pollution of Irrigation Water on Water Reuse for Irrigation in the Nile Delta	J. Irrig. Drain Eng., 2020, 146(2): 05019013 DOI: 10.1061/(ASCE)IR.1943.4774.0001439	1.6	Q3
84	Naira Meky, Mona G. Ibrahim, Manabu Fujii, Ahmed Elreedy, Ahmed Tawfik	Integrated dark-photo fermentative hydrogen production from synthetic gelatinaceous wastewater via cost-effective hybrid reactor at ambient temperature	Energy Conversion and Management Volume 203, 1 January 2020, 112250 https://doi.org/10.1016/j.enconman.2019.112250	9.9	Q1
85	Khaled Elsharkawy, Mohamed Gar Alalm, Manabu Fujii, Hafez Afify, Ahmed Tawfik , Mohamed Elsamadony	Paperboard mill wastewater treatment via combined dark and LED mediated fermentation in the absence of external chemical addition	Bioresource Technology Volume 295, January 2020, 122312 https://doi.org/10.1016/j.biortech.2019.122312	9.7	Q1
86	Li D.; Yang X.; Zhou Z.; Jiang B.; Tawfik A. ; Zhao S.; Meng F.	Molecular traits of phenolic moieties in dissolved organic matter: Linkages with membrane fouling development	Environment International Volume 133, Part B, December 2019, 105202 https://doi.org/10.1016/j.envint.2019.105202	10.3	Q1
87	Ali M.; Elreedy A.; Ibrahim M.G.; Fujii M.; Nakatani K.; Tawfik A.	Regulating acidogenesis and methanogenesis for the separated bio generation of hydrogen and methane from saline-to-hypersaline industrial wastewater	Journal of Environmental Management Volume 250, 15 November 2019, 109546 https://doi.org/10.1016/j.jenvman.2019.109546	8.0	Q1
88	Ahmed Farghaly, Sophie Le Roux, Pascal Peu, Patrick	Effect of starvation period on microbial community	Environmental technology	2.2	Q2

	Dabert & Ahmed Tawfik	producing hydrogen from paperboard mill wastewater using anaerobic baffled reactor	2019, VOL. 40, NO. 18, 2389–2399 https://doi.org/10.1080/09593330.2018.1454512		
89	Soltan M.; Elsamadony M.; Mostafa A.; Awad H.; Tawfik A.	Nutrients balance for hydrogen potential upgrading from fruit and vegetable peels via fermentation process	Journal of Environmental Management Volume 242, 15 July 2019, Pages 384–393 https://doi.org/10.1016/j.jenvman.2019.04.066	8.0	Q1
90	Ahmed Tawfik Haitham El-Bery Mohamed Elsamadony Faizal Bux	Upgrading continuous H ₂ gas recovery from rice straw hydrolysate via fermentation process amended with magnetite nanoparticles	Int J Energy Res. 2019; 43:3516–3527. DOI: 10.1002/er.4495	4.3	Q2
91	H. Omara ·S. M. Elsayed ·G. M. Abdeelaal ·H. F. Abd-Elhamid · A. Tawfik	Hydromorphological Numerical Model of the Local Scour Process Around Bridge Piers	Arabian Journal for Science and Engineering https://doi.org/10.1007/s13369-018-3359-z	2.6	Q1
92	Ali M.; Elreedy A.; Ibrahim M.G.; Fujii M.; Tawfik A.	Hydrogen and methane bio-production and microbial community dynamics in a multi-phase anaerobic reactor treating saline industrial wastewater	Energy Conversion and Management Volume 186, 15 April 2019, Pages 1–14 https://doi.org/10.1016/j.enconman.2019.02.060	9.9	Q1
93	Okubo T.; Iguchi A.; Tanaka S.; Uchida S.; Tagawa T.; Oshiki M.; Araki N.; Tawfik A. ; Takahashi M.; Kubota K.; Harada H.; Uemura S.	Health Impact of Agricultural Drainage Water for Farmers in the West Nile Delta	International Journal of Environmental Research Volume 13, pages 319–325, (2019) https://doi.org/10.1007/s41742-019-00176-x	2.6	Q2
94	Mohamed Soltan1 & Mohamed Elsamadony & Alsayed Mostafa & Hanem Awad & Ahmed Tawfik	Harvesting zero waste from co-digested fruit and vegetable peels via integrated fermentation and pyrolysis processes	Environmental Science and Pollution Research (2019) 26:10429–10438 https://doi.org/10.1007/s11356-019-04647-8		Q1
95	Elreedy A.; Fujii M.; Koyama M.; Nakasaki K.; Tawfik A.	Enhanced fermentative hydrogen production from industrial wastewater using mixed culture bacteria incorporated with iron,	Water Research Volume 151, 15 March 2019, Pages 349–361 https://doi.org/10.1016/j.watres.2018.12.043	11.5	Q1

		nickel, and zinc-based nanoparticles			
96	Ahmed Elreedy, Manabu Fujii, Ahmed Tawfik	Psychrophilic hydrogen production from petrochemical wastewater via anaerobic sequencing batch reactor: techno-economic assessment and kinetic modelling	International journal of hydrogen energy 44 (2019) 5189-5202 https://doi.org/10.1016/j.ijhydene.2018.09.091	8.1	Q1
97	Ismail S.; Elsamadony M.; Elreedy A.; Fujii M.; Tawfik A.	Physico-chemical and microbial characterization of compartment-wise profiles in an anammox baffled reactor	Journal of Environmental Management Volume 232, 15 February 2019, Pages 875-886 https://doi.org/10.1016/j.jenvman.2018.11.134	8.0	Q1
98	Naira Meky, Manabu Fujii & Ahmed Tawfik	Treatment of hypersaline hazardous landfill leachate using a baffled constructed wetland system: effect of granular packing media and vegetation	Environmental Technology 2019, VOL. 40, NO. 4, 518-528 https://doi.org/10.1080/09593330.2017.1397764	2.2	Q2
99	Sherif Ismail, Mohamed Elsamadony, Manabu Fujii, Ahmed Tawfik	Evaluation and optimization of anammox baffled reactor (AnBR) by artificial neural network modeling and economic analysis	Bioresource Technology Volume 271, January 2019, Pages 500-506 https://doi.org/10.1016/j.biortech.2018.09.004	9.7	Q1
100	Ayat Elnmer , Mosaad Khadr, Ayman Allam, Shinjiro Kanae and Ahmed Tawfik	Assessment of Irrigation Water Performance in the Nile Delta Using Remotely Sensed Data	Water 2018, 10, 1375; doi:10.3390/w10101375	3.0	Q1
101	Alaa Wazeri, Mohamed Elsamadony, Sophie Le Roux , Pascal Peu, Ahmed Tawfik	Potentials of using mixed culture bacteria incorporated with sodium bicarbonate for hydrogen production from water hyacinth	Bioresource Technology Volume 263, September 2018, Pages 365-374 https://doi.org/10.1016/j.biortech.2018.05.021	9.7	Q1
102	Karim Nassar, Wael Elham Mahmod, Ahmed Tawfik , Osami Rageh, Abdelazim Negm, Hassan Fath	Developing empirical formulas for assessing the hydrodynamic behaviour of serrated and slotted seawalls	Ocean Engineering Volume 159, 1 July 2018, Pages 388-409 https://doi.org/10.1016/j.oceaneng.2018.04.048	4.6	Q1
103	Mohamed Mahmoud , Sherif Ismail, Ahmed Tawfik	Post-treatment of anaerobic effluent containing 1,4-dioxane and heavy metals	Process Safety and Environmental Protection Volume 117, July 2018, Pages 22-32	6.9	Q1

		via auto-aerated down-flow hanging luffa (ADHL) system	https://doi.org/10.1016/j.psep.2018.04.008		
104	Mohamed Elsamadony, Ahmed Tawfik	Maximization of hydrogen fermentative process from delignified water hyacinth using sodium chlorite	Energy Conversion and Management Volume 157, 1 February 2018, Pages 257-265 https://doi.org/10.1016/j.enconman.2017.12.013	9.9	Q1
105	Safia M. Khodary & Abdelazim M. Negm & Ahmed Tawfik	Geotechnical properties of the soils contaminated with oils, landfill leachate, and fertilizers	Arabian Journal of Geosciences (2018) 11:13 https://doi.org/10.1007/s12517-017-3372-7	1.327	Q2
106	Naira Meky, Manabu Fujii, Chihiro Yoshimura, Ahmed Tawfik	Feasibility of using non-vegetated baffled submerged constructed wetland system for removal of heavy metals, COD and nutrients from hyper-saline hazardous landfill leachate	Desalination and Water Treatment 98 (2017) 254–265 doi: 10.5004/dwt.2017.21738	1.0	Q3
107	Mohamed Mahmoud, Ahmed Elreedy, Peu Pascal, Le Roux Sophie, Ahmed Tawfik	Hythane (H ₂ and CH ₄) production from unsaturated polyester resin wastewater contaminated by 1,4-dioxane and heavy metals via up-flow anaerobic self-separation gases reactor	Energy Conversion and Management Volume 152, 15 November 2017, Pages 342-353 https://doi.org/10.1016/j.enconman.2017.09.060	9.9	Q1
108	Doaa Bassuney and Ahmed Tawfik	Baffled duckweed pond system for treatment of agricultural drainage water containing pharmaceuticals	International journal of phytoremediation 2017, VOL. 19, NO. 8, 774–780 https://doi.org/10.1080/15226514.2017.1284756	3.4	Q2
109	ManalAli,Ahmed Farghaly,SophieLeRoux, PascalPeu, Patrick Dabert and Ahmed Tawfik	Potential of using non-inoculated self-aerated Immobilized biomass reactor for post-treatment of up-flow anaerobic staged reactor treating high strength industrial wastewater	J Chem Technol Biotechnol 2017; 92: 1065–1075 DOI 10.1002/jctb.5082	2.8	Q2
110	Mohamed Gar Alalm • Ahmed Tawfik • Shinichi Ookawara	Investigation of optimum conditions and costs estimation for degradation of phenol by solar photo-Fenton process	Appl Water Sci (2017) 7:375–382 DOI 10.1007/s13201-014-0252-0	5.7	Q1
111	Ahmed Tawfik , Dina Zaki3, Magdy Zahran	Decolorizing of reactive dyes wastewater	Environmental Engineering and Management	0.9	Q3

		via down-flow hanging sponge (DHS) system	Journal, January 2017, Vol.16, No. 1, 39-46 http://omicron.ch.tu-ias.ro/EEMJ/		
112	Manal Alia, Amal Danial, Ahmed Tawfik	Self-dark fermentation of lipids rich wastewater for 2-biofuels (H ₂ and Et-OH) production	Process Safety and Environmental Protection 109 (2017) 257–267 http://dx.doi.org/10.1016/j.psep.2017.04.007	6.9	Q1
113	Ahmed Farghaly, Mohamed Elsamadony, Shinichi Ookawara, Ahmed Tawfik	Bioethanol production from paperboard mill sludge using acid-catalyzed bio-derived choline acetate ionic liquid pretreatment followed by fermentation process	Energy Conversion and Management Volume 145, 1 August 2017, Pages 255-264 https://doi.org/10.1016/j.enconman.2017.05.004	9.9	Q1
114	Ahmed Elreedy, Eman Ibrahim, Nazly Hassan, Ali El-Dissouky, Manabu Fujii, Chihiro Yoshimura, Ahmed Tawfik	Nickel-graphene nanocomposite as a novel supplement for enhancement of biohydrogen production from industrial wastewater containing mono-ethylene glycol	Energy Conversion and Management Volume 140, 15 May 2017, Pages 133-144 https://doi.org/10.1016/j.enconman.2017.02.080	9.9	Q1
115	Alsayed Mostafa, Mohamed Elsamadony, Ali El-Dissouky, Amel Elhusseiny, Ahmed Tawfik	Biological H ₂ potential harvested from complex gelatinaceous wastewater via attached versus suspended growth culture anaerobes	Bioresource Technology Volume 231, May 2017, Pages 9-18 https://doi.org/10.1016/j.biortech.2017.01.062	9.7	Q1
116	Ahmed Elreedy, Manabu Fujii, Ahmed Tawfik	Factors affecting on hythane bio-generation via anaerobic digestion of mono-ethylene glycol contaminated wastewater: Inoculum-to-substrate ratio, nitrogen-to-phosphorus ratio and pH	Bioresource Technology Volume 223, January 2017, Pages 10-19 https://doi.org/10.1016/j.biortech.2016.10.026	9.7	Q1
117	Mohamed Soltan, Mohamed Elsamadony, Ahmed Tawfik	Biological hydrogen promotion via integrated fermentation of complex agro-industrial wastes	Applied Energy Volume 185, Part 1, 1 January 2017, Pages 929-938 https://doi.org/10.1016/j.apenergy.2016.10.002	10.1	Q1
118	A. Farghaly • A.M.Enitan • S. Kumari • F. Bux • A. Tawfik	Polyhydroxyalkanoates production from fermented paperboard mill wastewater using acetate-enriched bacteria	Clean Technol Environ Policy (2017) 19:935–947 DOI 10.1007/s10098-016-1286-9	4.2	Q1
119	Ahmed Farghaly & Ahmed Tawfik	Simultaneous Hydrogen and Methane Production	Appl Biochem Biotechnol, Volume	3.1	Q2

		Through Multi-Phase Anaerobic Digestion of Paperboard Mill Wastewater Under Different Operating Conditions	181, pages 142–156, (2017) DOI 10.1007/s12010-016-2204-7		
120	Alsayed Mostafa, Ali El-Dissouky, Amal Fawzy, Ahmed Farghaly, Pascal Peu, Patrick Dabert, Sophie Le Roux, Ahmed Tawfik	Magnetite/graphene oxide nano-composite for enhancement of hydrogen production from gelatinaceous wastewater	Bioresource Technology Volume 216, September 2016, Pages 520-528 https://doi.org/10.1016/j.biortech.2016.05.072	9.7	Q1
121	Ahmed Elreedy, Ahmed Tawfik , Abimbola Enitan, Sheena Kumari, Faizal Bux	Pathways of 3-biofuels (hydrogen, ethanol and methane) production from petrochemical industry wastewater via anaerobic packed bed baffled reactor inoculated with mixed culture bacteria	Energy Conversion and Management Volume 122, 15 August 2016, Pages 119-130 https://doi.org/10.1016/j.enconman.2016.05.067	9.9	Q1
122	Sherif Ismail, Ahmed Tawfik	Performance of passive aerated immobilized biomass reactor coupled with Fenton process for treatment of landfill leachate	International Biodeterioration & Biodegradation Volume 111, July 2016, Pages 22-30 https://doi.org/10.1016/j.ibiod.2016.04.010	4.1	Q1
123	Mohamed Gar Alalm, Ahmed Tawfik , Shinichi Ookawara	Enhancement of photocatalytic activity of TiO ₂ by immobilization on activated carbon for degradation of pharmaceuticals	Journal of Environmental Chemical Engineering Volume 4, Issue 2, June 2016, Pages 1929-1937	7.4	Q1
124	Ayman Allam & Ahmed Tawfik & Chihiro Yoshimura & Amr Fleifle	Multi-objective models of waste load allocation toward a sustainable reuse of drainage water in irrigation	Environ Sci Pollut Res (2016) 23:11823–11834 DOI 10.1007/s11356-016-6331-z		Q1
125	A. Allam; A. Tawfik ; and C. Yoshimura	Phytoremediation of Drainage Water Containing Mono Ethylene Glycol Using a Duckweed (Lemna gibba) Pond System	J. Environ. Eng., 2016, 142(5): 04016014 DOI: 10.1061/(ASCE)EE.1943-7870.0001070.	1.6	Q3
126	A. Allam, A. Tawfik , C. Yoshimura, A. Fleifle	Simulation-based optimization framework for reuse of agricultural drainage water in irrigation	Journal of Environmental Management Volume 172, 1 May 2016, Pages 82-96 https://doi.org/10.1016/j.jenvman.2016.02.022	8.0	Q1

127	Sherif Ismail and Ahmed Tawfik	Treatment of hazardous landfill leachate using Fenton process followed by a combined (UASB/DHS) system	Water Science & Technology 73.7 2016 doi: 10.2166/wst.2015.655	2.5	Q2
128	Ahmed Farghaly & Ahmed Tawfik & Amal Danial	Inoculation of paperboard mill sludge versus mixed culture bacteria for hydrogen production from paperboard mill wastewater	Environ Sci Pollut Res (2016) 23:3834–3846 DOI 10.1007/s11356-015-5652-7		Q1
129	Mohamed Gar Alalm , Shinichi Ookawara, Daisuke Fukushi , Akira Sato, Ahmed Tawfik	Improved WO ₃ photocatalytic efficiency using ZrO ₂ and Ru for the degradation of carbofuran and ampicillin	Journal of Hazardous Materials Volume 302, 25 January 2016, Pages 225-231 https://doi.org/10.1016/j.jhazmat.2015.10.002	12.2	Q1
130	Mohamed Gar Alalm, Ahmed Tawfik , Shinichi Ookawara	Solar photocatalytic degradation of phenol by TiO ₂ /AC prepared by temperature impregnation method	Desalination and Water Treatment 57 (2016) 835–844 doi: 10.1080/19443994.2014.969319	1.0	Q3
131	A. Allam, A. Tawfik , A. El-Saadi, A. Negm	Potentials of using duckweed (Lemna gibba) for treatment of drainage water for reuse in irrigation purposes	Desalination and Water Treatment 57 (2016) 459–467 doi: 10.1080/19443994.2014.966760	1.0	Q3
132	A. Tawfik , M. El-Qelish & A. Salem	Efficient Anaerobic Co-Digestion of Municipal Food Waste and Kitchen Wastewater for Bio-Hydrogen Production	International Journal of Green Energy (2015) 12, 1301–1308 https://doi.org/10.1080/15435075.2014.909357	3.1	Q2
133	Mohamed Gar Alalm, Ahmed Tawfik , Shinichi Ookawara	Comparison of solar TiO ₂ photocatalysis and solar photo-Fenton for treatment of pesticides industry wastewater: Operational conditions, kinetics, and costs	Journal of Water Process Engineering Volume 8, December 2015, Pages 55-63 https://doi.org/10.1016/j.jwpe.2015.09.007	6.3	Q1
134	Ayman Allam, Amr Fleifle, Ahmed Tawfik , Chihiro Yoshimura, Aiman El-Saadi	A simulation-based suitability index of the quality and quantity of agricultural drainage water for reuse in irrigation	Science of The Total Environment Volume 536, 1 December 2015, Pages 79-90 https://doi.org/10.1016/j.scitotenv.2015.07.029	8.2	Q1
135	M. Elsamadony, A. Tawfik	Potential of biohydrogen production from organic fraction of municipal solid	Bioresource Technology	9.7	Q1

		waste (OFMSW) using pilot-scale dry anaerobic reactor	Volume 196, November 2015, Pages 9-16 https://doi.org/10.1016/j.biortech.2015.07.048		
136	Ahmed Elreedy, Ahmed Tawfik , Kengo Kubota, Yusuke Shimada, Hideki Harada	Hythane (H ₂ + CH ₄) production from petrochemical wastewater containing mono-ethylene glycol via stepped anaerobic baffled reactor	International Biodeterioration & Biodegradation Volume 105, November 2015, Pages 252-261 https://doi.org/10.1016/j.ibiod.2015.09.015	4.1	Q1
137	Ahmed M. Azzam, Ahmed Tawfik	Removal of heavy metals using bacterial bio flocculants of Bacillus sp. and Pseudomonas sp	Journal of environmental engineering and landscape management, 2015 Volume 23(04): 288–294 http://dx.doi.org/10.3846/16486897.2015.1068781		Q3
138	M. Elsamadony, A. Tawfik	Dry anaerobic co-digestion of organic fraction of municipal waste with paperboard mill sludge and gelatin solid waste for enhancement of hydrogen production	Bioresource Technology Volume 191, September 2015, Pages 157-165 https://doi.org/10.1016/j.biortech.2015.05.017	9.7	Q1
139	A. Tawfik & T. El-Zamel & A. Herrawy & G. El-Taweel	Fate of parasites and pathogenic bacteria in an anaerobic hybrid reactor followed by downflow hanging sponge system treating domestic wastewater	Environ Sci Pollut Res (2015) 22:12235–12245 DOI 10.1007/s11356-015-4508-5		Q1
140	Ahmed Farghaly Ahmed Tawfik Mona Gamal Eldin Ibrahim	Surfactant-supplemented mixed bacterial cultures to produce hydrogen from paperboard mill wastewater	Eng. Life Sci. 2015, 00, 1–8 DOI: 10.1002/elsc.201400099	3.9	Q2
141	M. Elsamadony, A. Tawfik , M. Suzuki	Surfactant-enhanced biohydrogen production from organic fraction of municipal solid waste (OFMSW) via dry anaerobic digestion	Applied Energy Volume 149, 1 July 2015, Pages 272-282 https://doi.org/10.1016/j.apenergy.2015.03.127	10.1	Q1
142	M. Elsamadony, A. Tawfik , A. Danial and M. Suzuki	Optimization of hydrogen production from organic fraction of municipal solid waste (OFMSW) dry anaerobic digestion with analysis of microbial	Int. J. Energy Res. 2015; 39:929–940 DOI: 10.1002/er.3297	4.3	Q2

		community			
143	Mahmoud Nasr, Ahmed Tawfik , Masaaki Suzuki, Shinichi Ookawara	Mathematical modeling of bio-hydrogen production from starch wastewater via up-flow anaerobic staged reactor	Desalination and Water Treatment 54 (2015) 50–58 doi: 10.1080/19443994.2 014.883196	1.0	Q3
144	Mohamed Gar Alalm, Ahmed Tawfik , Shinichi Ookawara	Combined Solar advanced oxidation and PAC adsorption for removal of pesticides from industrial wastewater	J. Mater. Environ. Sci. 6 (3) (2015) 800- 809 ISSN : 2028-2508		Q3
145	Mahmoud Nasr, Ahmed Tawfik , Shinichi Ookawara, Masaaki Suzuki, Sheena Kumari, Faizal Bux	Continuous biohydrogen production from starch wastewater via sequential dark-photo fermentation with emphasize on maghemite nanoparticles	Journal of Industrial and Engineering Chemistry Volume 21, 25 January 2015, Pages 500-506 https://doi.org/10.1 016/j.jiec.2014.03.01 1	5.9	Q1
146	Mohamed Gar Alalm, Ahmed Tawfik , Shinichi Ookawara	Degradation of four pharmaceuticals by solar photo-Fenton process: Kinetics and costs estimation	Journal of Environmental Chemical Engineering Volume 3, Issue 1, March 2015, Pages 46-51 https://doi.org/10.1 016/j.jece.2014.12.0 09	7.4	Q1
147	Amr Fleifle, Ahmed Tawfik , Oliver Saavedra, Mohamed Elzeir	Assessment of the performance of a down- flow hanging sponge system for treatment of agricultural drainage water	Desalination and Water Treatment 52 (2014) 6369–6376 doi: 10.1080/19443994.2 013.822179	1.0	Q3
148	A. Tawfik , D.F. Zaki, M.K. Zahran	Degradation of reactive dyes wastewater supplemented with cationic polymer (Organo Pol.) in a down flow hanging sponge (DHS) system	Journal of Industrial and Engineering Chemistry Volume 20, Issue 4, 25 July 2014, Pages 2059-2065 https://doi.org/10.1 016/j.jiec.2013.09.03 1	5.9	Q1
149	Ahmed Tawfik , Haitham El-Bery, Sheena Kumari, Faizal Bux	Use of mixed culture bacteria for photofermentive hydrogen of dark fermentation effluent	Bioresource Technology Volume 168, September 2014, Pages 119-126 https://doi.org/10.1 016/j.biortech.2014. 03.065	9.7	Q1
150	Ahmed Tawfik , Mohamed El-Qelish	Key factors affecting on bio-hydrogen production from co-digestion of	Bioresource Technology	9.7	Q1

		organic fraction of municipal solid waste and kitchen wastewater	Volume 168, September 2014, Pages 106-111 https://doi.org/10.1016/j.biortech.2014.02.127		
151	Ahmed Tawfik , and Ahmed Hassan Salem	Optimization of hydrogen production from pretreated rice straw waste in a mesophilic up-flow anaerobic staged reactor	Int. J. Energy Res. 2014; 38:1155–1161 DOI: 10.1002/er.3128	4.3	Q2
152	Amr Fleifle & Oliver Saavedra & Chihiro Yoshimura & Mohamed Elzeir & Ahmed Tawfik	Optimization of integrated water quality management for agricultural efficiency and environmental conservation	Environ Sci Pollut Res (2014) 21:8095–8111 DOI 10.1007/s11356-014-2712-3		Q1
153	Ahmed Tawfik , Dina Zaki and Magdy Zahran	Use of sequential UASB/DHS processes for the decolorization of reactive dyes wastewater	Sustain. Environ. Res., 24(2), 129-138 (2014)	4.6	Q1
154	Haitham El-Bery, Ahmed Tawfik , Sheena Kumari & Faizal Bux	Effect of thermal pre-treatment on inoculum sludge to enhance bio-hydrogen production from alkali hydrolysed rice straw in a mesophilic anaerobic baffled reactor	Environmental Technology, 2013 Vol.34,Nos.13–14,1965–1972, http://dx.doi.org/10.1080/09593330.2013.824013	2.2	Q2
155	Amr Fleifle, Ahmed Tawfik , Oliver Saavedra, Chihiro Yoshimura, Mohamed Elzeir	Modeling and profile analysis of a down-flow hanging sponge system treating agricultural drainage water	Separation and Purification Technology Volume 116, 15 September 2013, Pages 87-94 https://doi.org/10.1016/j.seppur.2013.05.025	8.2	Q1
156	Amr E. Fleifle; Oliver C. Saavedra Valeriano; Hossan M. Nagy; Farouk A. Elfetiany; Ahmed Tawfik ; and Mohamed Elzeir	Simulation-Optimization Model for Intermediate Reuse of Agriculture Drainage Water in Egypt	J. Environ. Eng., 2013, 139(3): 391-401 DOI: 10.1061/(ASCE)EE.1943-7870.0000605.	1.6	Q3
157	A. Tawfik , A. Salem, M. El-Qelish, A.A. Fahmi, M.E. Moustafa	Factors affecting hydrogen production from rice straw wastes in a mesophilic up-flow anaerobic staged reactor	Renewable Energy Volume 50, February 2013, Pages 402-407 https://doi.org/10.1016/j.renene.2012.06.038	9.0	Q1
158	Nasr M.; Tawfik A. ; Ookawara S.; Suzuki M.	Biological Hydrogen Production from Starch Wastewater Using a Novel	BioResources 8(4):4951-4968	1.747	Q3

		Up-flow Anaerobic Staged Reactor	DOI: 10.15376/biores.8.4. 4951-4968		
159	Amr Fleifle, Ahmed Tawfik , Oliver C. Saavedra and Mohamed Elzeir	Treatment of agricultural drainage water via downflow hanging sponge system for reuse in agriculture	Water Science & Technology: Water Supply 13.2 2013 https://doi.org/10.2166/ws.2013.034	1.9	Q2
160	A. Tawfik , M. El-Qelish	Continuous hydrogen production from co-digestion of municipal food waste and kitchen wastewater in mesophilic anaerobic baffled reactor	Bioresource Technology Volume 114, June 2012, Pages 270-274 https://doi.org/10.1016/j.biortech.2012.02.016	9.7	Q1
161	A. Tawfik , A. Salem	The effect of organic loading rate on bio-hydrogen production from pre-treated rice straw waste via mesophilic up-flow anaerobic reactor	Bioresource Technology Volume 107, March 2012, Pages 186-190 https://doi.org/10.1016/j.biortech.2011.11.086	9.7	Q1
162	A. Tawfik & H. El-Kamah	Treatment of fruit-juice industry wastewater in a two stage anaerobic hybrid (AH) reactor system followed by a sequencing batch reactor (SBR)	Environmental Technology Vol. 33, No. 4, February 2012, 429–436 http://dx.doi.org/10.1080/09593330.2011.579178	2.2	Q2
163	Ahmed Tawfik , Nagwa Badr, Enas Abu Taleb, Waleed El-Senousy	Sewage treatment in an up-flow anaerobic sponge reactor followed by moving bed biofilm reactor based on polyurethane carrier material	Desalination and Water Treatment 37 (2012) 350–358 doi: 10/5004/dwt.2012.2330	1.0	Q3
164	Ahmed Tawfik , Omnya ElBatrawy	Anaerobic biodegradation of personal care products (PCPs) wastewater in an up-flow anaerobic sludge blanket (UASB) reactor	Desalination and Water Treatment 41 (2012) 232–239 doi: 10.1080/19443994.2012.664719	1.0	Q3
165	A. Tawfik , A. Salem, M. El-Qelish	Two stage anaerobic baffled reactors for bio-hydrogen production from municipal food waste	Bioresource Technology Volume 102, Issue 18, September 2011, Pages 8723-8726 https://doi.org/10.1016/j.biortech.2011.03.028	9.7	Q1
166	Ahmed Tawfik • Rifaat Abdel Wahab •	Effect of hydraulic retention time on the performance	Bioprocess Biosyst Eng (2011) 34:767–776	3.5	Q2

	Azza Al-Asmer • Fatma Matary	of down-flow hanging sponge system treating grey wastewater	DOI 10.1007/s00449-011-0528-9		
167	Hala El-Kamah, Mohamed Mahmoud, Ahmed Tawfik	Performance of down-flow hanging sponge (DHS) reactor coupled with up-flow anaerobic sludge blanket (UASB) reactor for treatment of onion dehydration wastewater	Bioresource Technology Volume 102, Issue 14, July 2011, Pages 7029-7035 https://doi.org/10.1016/j.biortech.2011.04.017	9.7	Q1
168	Mohamed Mahmoud, Ahmed Tawfik , Fatma El-Gohary	Use of down-flow hanging sponge (DHS) reactor as a promising post-treatment system for municipal wastewater	Chemical Engineering Journal Volume 168, Issue 2, 1 April 2011, Pages 535-543 https://doi.org/10.1016/j.cej.2011.01.019	13.4	Q1
169	A. Tawfik • A. Ohashi • H. Harada	Effect of sponge volume on the performance of down-flow hanging sponge system treating UASB reactor effluent	Bioprocess Biosyst Eng (2010) 33:779–785 DOI 10.1007/s00449-009-0399-5	3.5	Q2
170	Hala El-Kamah, Ahmed Tawfik , Mohamed Mahmoud, Hisham Abdel-Halim	Treatment of high strength wastewater from fruit juice industry using integrated anaerobic/aerobic system	Desalination 253 (2010) 158–163 doi:10.1016/j.desal.2009.11.013	8.4	Q1
171	Mohamed Mahmoud; Ahmed Tawfik ; and Fatma El-Gohary	Simultaneous Organic and Nutrient Removal in a Naturally Ventilated Biotower Treating Presettled Municipal Wastewater	J. Environ. Eng., 2010, 136(3): 301-307 DOI: 10.1061/ASCEEE.1943-7870.0000148	1.6	Q3
172	F. El-Gohary, A. Tawfik , U. Mahmoud	Comparative study between chemical coagulation/precipitation (C/P) versus coagulation/dissolved air flotation (C/DAF) for pre-treatment of personal care products (PCPs) wastewater	Desalination 252 (2010) 106–112 doi:10.1016/j.desal.2009.10.016	8.4	Q1
173	A. Tawfik Æ F. El-Gohary Æ H. Temmink	Treatment of domestic wastewater in an up-flow anaerobic sludge blanket reactor followed by moving bed biofilm reactor	Bioprocess Biosyst Eng (2010) 33:267–276 DOI 10.1007/s00449-009-0321-1	3.5	
174	A. Tawfik , A. Klapwijk	Polyurethane rotating disc system for post-treatment of anaerobically pre-treated sewage	Journal of Environmental Management 91 (2010) 1183–1192 doi:10.1016/j.jenvman.2010.01.010	8.0	Q1

175	F. El-Gohary, A. Tawfik	Decolorization and COD reduction of disperse and reactive dyes wastewater using chemical-coagulation followed by sequential batch reactor (SBR) process	Desalination 249 (2009) 1159–1164 doi:10.1016/j.desal.2009.05.010	8.4	Q1
176	F. El-Gohary, A. Tawfik , M. Badawy, M.A. El-Khateeb	Potentials of anaerobic treatment for catalytically oxidized olive mill wastewater (OMW)	Bioresource Technology 100 (2009) 2147–2154 doi:10.1016/j.biortech.2008.10.051	9.7	Q1
177	M. Mahmoud, A. Tawfik , F. Samhan, F. El-Gohary	Sewage treatment using an integrated system consisting of anaerobic hybrid reactor (AHR) and downflow hanging sponge (DHS)	Desalination and Water Treatment 4 (2009) 168–176 https://doi.org/10.5004/dwt.2009.372	1.0	Q3
178	A. Tawfik , F. El-Gohary, A. Ohashi and H. Harada	Optimization of the performance of an integrated anaerobic–aerobic system for domestic wastewater treatment	Water Science & Technology—WST 58.1 2008 https://doi.org/10.2166/wst.2008.320	2.5	Q2
179	A. Tawfik , M. Sobhey, M. Badawy	Treatment of a combined dairy and domestic wastewater in an up-flow anaerobic sludge blanket (UASB) reactor followed by activated sludge (AS system)	Desalination 227 (2008) 167–177 doi:10.1016/j.desal.2007.06.023	8.4	Q1
180	A. Tawfik , H. Temmink, G. Zeeman and B. Klapwijk	Sewage treatment in a rotating biological contactor (RBC) system	Water, Air, and Soil Pollution (2006) 175: 275–289 DOI: 10.1007/s11270-006-9138-6	3.8	Q2
181	A. Tawfik , A. Ohashi, H. Harada	Sewage treatment in a combined up-flow anaerobic sludge blanket (UASB)–down-flow hanging sponge (DHS) system	Biochemical Engineering Journal 29 (2006) 210–219 doi:10.1016/j.bej.2005.11.018	3.7	Q2
182	A. Tawfik , F. El-Gohary, A. Ohashi, H. Harada	The influence of physical–chemical and biological factors on the removal of faecal coliform through down-flow hanging sponge (DHS) system treating UASB reactor effluent	Water research 40 (2006) 1877–1883 doi:10.1016/j.watres.2006.02.038	11.5	Q1

183	A. Tawfik , A. Klapwijk, F. El-Gohary, G. Lettinga	Potentials of using a rotating biological contactor (RBC) for post-treatment of anaerobically pre-treated domestic wastewater	Biochemical Engineering Journal 25 (2005) 89–98 doi:10.1016/j.bej.2005.03.013	3.7	Q2
184	K. Kujawa-Roeleveld, T. Fernandes, Y. Wiryawan, A. Tawfik , M. Visser and G. Zeeman	Performance of UASB septic tank for treatment of concentrated black water within DESAR concept	Water Science & Technology Vol 52 No 1-2 pp 307–313 https://doi.org/10.2166/wst.2005.0532	2.5	Q2
185	Ahmed Tawfik , Bram Klapwijk, Joost Van Buuren, Fatma El-Gohary, Gatze Lettinga	Physico-chemical factors affecting the E: coli removal in a rotating biological contactor (RBC) treating UASB effluent	Water Research 38 (2004) 1081–1088 doi:10.1016/S0043-1354(03)00345-2	11.5	Q1
186	Tawfik, A. , G. Zeeman, Klapwijk, A., W. Sanders, El-Gohary, F. And Lettinga, G	“Treatment of domestic sewage in a combined UASB/RBC system. Process optimization for irrigation purposes”	Water Sci Technol (2003) 48 (1): 131–138. https://doi.org/10.2166/wst.2003.0034	2.5	Q2
187	Ahmed Tawfik , Bram Klapwijk, Fatma El-Gohary, and Gatze Lettinga	“Treatment of anaerobically pre-treated domestic sewage by a rotating biological contactor”	Water Research Volume 36, Issue 1, January 2002, Pages 147-155 https://doi.org/10.1016/S0043-1354(01)00185-3	11.5	Q1
188	Tawfik, A. , Klapwijk, A., El-Gohary, F. and Lettinga, G”	Treatment of anaerobically treated domestic wastewater using rotating biological contactor“	Water Sci Technol (2002) 45 (10): 371–376. https://doi.org/10.2166/wst.2002.0371	2.5	Q2
189	H M El-Kamah, S A Badr, A Tawfek	“Treatment and reuse of domestic wastewater for irrigation and aquaculture purposes”	Biomedical and Environmental Sciences 04/1999; 12(1):20-33 https://pubmed.ncbi.nlm.nih.gov/10442218/	3	Q2

7. LIST OF PUBLISHED BOOK CHAPTERS

No.	Authors	Book/chapter name	Publisher/Date of publication
1.	Ahmed Tawfik , Nawaf S. Alhajeri, Fahad M. Al-Fadhli, Mohamed Elsamadony	"Municipal wastewater treatment "/ Membrane Aerated Biofilm Reactors	Elsevier in press/2025
2.	Nawaf S. Alhajeri, Ahmed Tawfik , Mohamed Elsamadony, Fahad M. Al-Fadhli	"Municipal wastewater treatment"/ Moving Bed Biofilm Reactors	Elsevier in press/2025

3.	Kaoutar Aboudi; Ankur Rajpal; Vinay Kumar Tyagi ; Ahmed Tawfik	"Landfill Leachate Management"/ Aerobic treatment of landfill leachate	IWA Publishing, DOI: https://doi.org/10.2166/9781789063318 , 2023
4	Ahmed Tawfik ; Vinay Kumar Tyagi	"Landfill Leachate Management"/ Anaerobic treatment of landfill leachate	IWA Publishing, DOI: https://doi.org/10.2166/9781789063318 , 2023
5	Ahmed Tawfik ; Vinay Kumar Tyagi	"Landfill Leachate Management"/ Treatment of landfill leachate containing emerging micropollutants	IWA Publishing, DOI: https://doi.org/10.2166/9781789063318 , 2023
6	Ahmed Tawfik , Vinay Kumar Tyagi, Dominique Patureau	"Anaerobic Digestate Management"/ Fate of Emerging Contaminants in Anaerobic Digestate	IWA Publishing, 2022, DOI: 10.2166/9781789062755_0327
7	Ahmed Tawfik	"Anaerobic Digestate Management"/ Valorization of anaerobic digestate from microalgal treatment	IWA Publishing, 2022, DOI: 10.2166/9781789062755_0111
8	Pallavi Gahlot, Kaoutar Aboudi, Ahmed Tawfik, Vinay Kumar Tyagi	Anaerobic Digestate Management" Biochar-augmented anaerobic digestate treatment	IWA. Publishing, 2022, DOI: 10.2166/9781789062755_0265
9	Mahdy Elsayed, Ahmed Tawfik , Abdelfatah Abomohra	"Waste-to-Energy"/ Energy Recovery from Fat, Oil and Grease (FOG).	Springer 2022, DOI: 10.1007/978-3-030-91570-4_10
10	Pallavi Gahlot, Kaoutar Aboudi, Banafsha Ahmed, Ahmed Tawfik , Abid Ali Khan, Anwar Khursheed, Vinay Kumar Tyagi	"Clean Energy and Resources Recovery Biomass Waste Based Biorefineries"/ Direct interspecies electron transfer (DIET) via conductive materials in anaerobic digestion of organic wastes	Elsevier publisher, Volume 1, 2021, Pages 227-252, https://doi.org/10.1016/B978-0-323-85223-4.00024-5
11	Ahmed Tawfik and Vinay Kumar Tyagi	"Clean Energy and Resources Recovery Biomass Waste Based Biorefineries"/ Self-sustainability of anaerobic digestion for conversion of water hyacinth into value-added biofuels	Elsevier publisher, Volume 1, 2021, Pages 133-144, https://doi.org/10.1016/B978-0-323-85223-4.00012-9
12	Ahmed Tawfik and Vinay Kumar Tyagi	Clean Energy and Resources Recovery Biomass Waste Based Biorefineries/ Production of high value added amino acids and biofuels (H ₂ and CH ₄) from gelatinous industry wastewater via anaerobic biodegradation process	Elsevier publisher, Volume 1, 2021, Pages 145-154, https://doi.org/10.1016/B978-0-323-85223-4.00017-8
13	Raja Zubair Qadri, Muntzir Ali, Ankur Rajpal, Absar Ahmad Kazmi, Ahmed Tawfik , Vinay Kumar Tyagi	"Clean Energy and Resource Recovery Wastewater Treatment Plants as Biorefineries"/ Anaerobic wastewater treatment for energy recovery	Elsevier publisher, Volume 2, 2022, Pages 95-104; DOI: 10.1016/B978-0-323-90178-9.00030-5

		and water reclamation	
14	Ahmed Tawfik and Mohamed Elsamadony	Clean Energy and Resource Recovery, Wastewater Treatment Plants as Biorefineries/ Algal treatment of wastewater for resources recovery	Elsevier publisher, Volume 2, 2022, Pages 255-264, https://doi.org/10.1016/B978-0-323-90178-9.00021-4
15	Ahmed Tawfik and Mohamed Elsamadony	Clean Energy and Resource Recovery Wastewater Treatment Plants as Biorefineries/ Values added products recovery from sludge	Elsevier publisher, Volume 2, 2022, Pages 373-380, https://doi.org/10.1016/B978-0-323-90178-9.00006-8
16	Ahmed Tawfik and Mohamed Elsamadony	Post Treatments of Anaerobically Treated Effluents / Post treatment of anaerobically pretreated landfill	IWA publishing, Chapter 12, Doi: https://doi.org/10.2166/9781780409740_0243 Published: June 2019
17	Ahmed Tawfik and Mohamed Elsamadony	Post Treatments of Anaerobically Treated Effluents/Completely autotrophic nitrogen removal over nitrite (CANON) process for polishing of anaerobic effluent containing ammonia	IWA publishing, Chapter 19 Doi: https://doi.org/10.2166/9781780409740_0409 Published: June 2019
18	Ahmed Tawfik and Mohamed Elsamadony	WATER MANAGEMENT: social and technological perspective/ Anaerobic degradation of lipids- rich wastewater	CRC Press Taylor and Francis group. International Standard Book Number-13: 978-1- 1380-6724-0 (Hardback), International Standard Book Number-13: 978-1- 315-15877-8 (eBook)
19	Ahmed Tawfik and Ahmed Elreedy	WATER MANAGEMENT: social and technological perspective/ Hythane (H ₂ &CH ₄) production from petrochemical wastewater via anaerobic digestion process	CRC Press Taylor and Francis group. International Standard Book Number-13: 978-1- 1380-6724-0 (Hardback), International Standard Book Number-13: 978-1- 315-15877-8 (eBook)
20	Ahmed Tawfik and Mohamed Elsamadony	Optimization and Applicability of Bioprocesses/"Development of dry anaerobic technologies of bio-waste and unlock the barriers for valorization"	Springer publisher; 2017 ISBN 978-981-10-6862-1
21	Hossam Abdelsalam Elsayed and Ahmed Tawfik	Unconventional Water Resources and Agriculture in Egypt/ Innovative Aerobic Technology for Wastewater Treatment for Reuse in Agriculture"	Springer International Publishing AG 2017, DOI 10.1007/978-981-10-6862-1_47,
22	Ahmed Tawfik	Polyurethane/ "Polyurethane trickling filter in combination with anaerobic hybrid reactor for treatment of tomato industry wastewater"	INTECH , Open ACCESS PUBLISHER; (ISBN 979- 953-307-642-2) DOI: 10.5772/47982. 2012.

8. LIST OF PUBLISHED PAPERS IN INTERNATIONAL CONFERENCES

No.	Authors	Title of Published Research	Name of Conference	Date of Conference	Place of Conference
1	Ahmed Tawfik	Algal/bacterial membrane bioreactor for bioremediation of chemical industrial wastewater containing 1,4 dioxane	16th international conference on sustainable energy & environmental protection seep 2024	9 -12th September 2024	Vienna, Austria
2	Meky N.; Fujii M.; Ibrahim M.G.; Tawfik A.	Biological hydrogen gas production from gelatinaceous wastewater via stand-alone circular dark/photo baffled fermenter.	Technologies and Materials for Renewable Energy, Environment and Sustainability (TMREES18)	19–21 September 2018, Energy Procedia 157 (2019) 670–675. DOI: 10.1016/j.egypro.2018.11.232	Athens, Greece
3	Rania Osama Mohamed, Mona Gamal Eldin Ibrahim, Manabi Fujiia, Ahmed Tawfik	Potentials of duckweed (Lemna gibba) for treatment of 1,4-dioxane containing wastewater using duckweed multi-ponds system	Technologies and Materials for Renewable Energy, Environment and Sustainability (TMREES18)	19–21 September 2018, Energy Procedia 157:676-682 DOI: 10.1016/j.egypro.2018.11.233	Athens, Greece
4	Wazeri A.; Elsamadony M.; Tawfik A.	Carbon emissions reduction by catalyzing H ₂ gas harvested from water hyacinth fermentation process using metallic salts	CUE2018-Applied Energy Symposium and Forum 2018: Low carbon cities and urban energy systems	5–7 June 2018 Energy Procedia 152 (2018) 1254–1259	Shanghai, China
5	Allam A.; Tawfik A. ; Negm A.; Yoshimura C.; Fleifle A.	Treatment of Drainage Water Containing Pharmaceuticals Using Duckweed (Lemna gibba)	The International Conference on Technologies and Materials for Renewable Energy, Environment and SustainabilityTMREE S15	April, 17 to 20, 2015 Energy Procedia 74 (2015) 973 – 980	Beirut - Lebanon
6	Elsamadony M. ; Tawfik A. ; Danial A.; Suzuki M.	Use of Carica Papaya Enzymes for Enhancement of H ₂ Production and Degradation of Glucose, Protein, and Lipids	The 7th International Conference on Applied Energy – ICAE2015	28-31 March 2015, Energy Procedia 75 (2015) 975 – 980	Abu Dhabi, UAE
7	Farghaly A.; Tawfik A. ; Eldin M.G.	Continuous Biological Treatment of Paperboard Mill	The International Conference on Technologies and	April, 17 to 20, 2015 Energy Procedia	Beirut - Lebanon

		Wastewater along with Hydrogen Production	Materials for Renewable Energy, Environment and Sustainability TMREES15	74 (2015) 926 – 932	
8	Elreedy A.; Tawfik A.	Effect of Hydraulic Retention Time on Hydrogen Production from the Dark Fermentation of Petrochemical Effluents Contaminated with Ethylene Glycol	International Conference on Technologies and Materials for Renewable Energy, Environment and Sustainability, TMREES15	April, 17 to 20, 2015 Energy Procedia 74 (2015) 1071 – 1078	Beirut - Lebanon
9	Ahmed Tawfik and Mohamed El-samadony	Energy production from high strength wastewater industry.	International Conference on Technologies and Materials for Renewable Energy, Environment and Sustainability, TMREES15	15-18th April, 2016. http://10time.s.com/tmrees	Lebanon

9. PUBLISHED AND SUBMITTED PATENTS

NO.	Authors	Title	Date of patent	Patent place
1.	Ahmed Tawfik and Mohamed Mahmoud	Removal of 1,4-dioxane (C ₄ H ₈ O ₂) from polyester wastewater using auto-aerated down-flow hanging Luffa sponge system	12 Jan. 2022, Patent No. 30606	Academy of Scientific Research and Technology, Egypt
2.	Ahmed Tawfik and Mohamed El-samadony	Up-flow intermittent-stirred tank reactor for dry anaerobic digestion of organic fractions of solid waste (UISTR)"	17 Sept. 2018 Patent No. 28928	Academy of Scientific Research and Technology, Egypt
3.	Ahmed Tawfik and Hanem Awad	Circular anaerobic baffled device supplemented with magnesium nanoparticles deposited on functionalized Graphene oxide surface (Mg-NP@FGO) for removal of 2,4-dichlorophenol from industrial wastewater	Filing no.: 2020/1928, Date: 2.12.2020 Accepted	Academy of Scientific Research and Technology, Egypt
4.	Ahmed Tawfik and Hanem Awad	Anaerobic device impregnated with nanoparticles for biodegradation of 1,2-dichloro-4-nitrobenzene in wastewater industry	Filing no.: 2020/1861, Date: 23.11.2020	Academy of Scientific Research and Technology, Egypt

10. INVITED SPEAKER FOR INTERNATIONAL CONFERENCES AND WORKSHOPS

1. Gulf forum for development and sustainable projects management. **Kuwait, Radisson Blu hotel, 4-5 Feb. 2025**
2. "Sustainable technologies for safely converted of wastes (Liquid & Solids) into renewable resources for further use" International conference on sustainable development in Civil

- Engineering (ICSDC) 2017, 23rd -25th November, Department of Civil Engineering, **MUET, Jamshoro, Pakistan**
3. "Low cost technology for domestic wastewater treatment in rural Egypt" Workshop on innovations in sewage treatment technology for agricultural reuse in arid regions, **Radisson Blu-Alexandria , 26th Jan. 2012.**
 4. "Application of down-flow hanging sponge system for treatment of domestic wastewater for reuse in irrigation purposes" **AlZahraa Hall, 2016, Hilton Green plaza. Alexandria**
 5. "Mitigation of Kotshiner Drainage Pollution and Sustainable Solutions" Workshop for Kotshiner Drainage Canal, Risks and Solutions, 28th June, 2016, **Academy of Scientific Research and Technology (ASRT), Egypt**
 6. "Innovative technology for drainage water treatment" **Academy of Scientific Research and Technology (ASRT), Cairo, Egypt, June, 2016**
 7. "Water crisis in Egypt and sustainable solutions" Symposium for Promotion of science and technology cooperation between Africa and Japan and Symposium for Innovate Network for Pan-African Surveillance of NTD and Infectious Diseases Program **14th -15 JANUARY 2016 at Weston Hotel, Nairobi, Kenya**
 8. "Innovation of sewage treatment technology for agriculture reuse in arid region. The 3rd international symposium for the promotion of science and technology "innovation cooperation between Africa and Japan" Life innovation and **Green Innovation" July 13, 2016, Tokyo, Japan.**
 9. "Industrial wastewater treatment technologies" AlZahraa Hall, 2015, **Hilton Green plaza. Cintech Workshop, Alexandria, Egypt**
 10. "Industrial waste and Sewage Treatment" 1st Partnership Symposium between Egypt-Japan University and Industry (2015) Sunday 14.06.2015 – **El-Zahraa Hall – Hilton Green Plaza – Smouha – Alexandria, Egypt**
 11. "Solid Waste Management and Valorisation within the Frame Work of Borg - Alarab Ecocity" IAC 2014, **March 3-5, Fermont hotel, Cairo, Egypt.**
 12. "Water treatment challenges in Nile delta" JSPS-Mega Delta Project, **Vietnam, Sept, 2014**
 13. "Energy production from organic fraction of municipal solid waste" **AlZahraa Hall, 2012, Hilton Green plaza. 2014, Cintech Workshop, Egypt**
 14. " Innovative low cost technology for domestic wastewater treatment for reuse in irrigation purposes" the 12th Tunisian-Japanese symposium on society , science & technology (TJASSST), November 15-18, 2013; **Hammamet, Tunisia, <https://tjassst2015.wordpress.com/about-tjassst/>**
 15. "Energy production from waste materials" **Bibliotheca, Alexandria, 24 March, 2013**
 16. "Water, Wastewater, Solid waste management" Seminar for Transfer, new Borg- Alrab City to ECOCITY, 9th April, 2013.
 17. "A novel dark fermentation reactor for Hydrogen production from pre-treated rice straw and co-digestion of Municipal food waste and kitchen waste water". 2nd International Workshop on the Renewable Efficient Energy Technology College of Engineering and Technology, **Arab Academy for Science and Technology and Maritime Transport, May 7-9, 2012**
 18. " Cost effective low cost technologies for sewage treatment "Radisson **Blu, Alexandria, 2012, 1st workshop for innovative technology for sewage treatment in arid regions**
 19. "A novel technology for wastewater treatment" Case studies, Arab Academy for Science and Technology and **Maritime Transport, 22 Nov. 2012, Alexandria**
 20. "Energy Production from Pre-Treated Rice Straw Via Anaerobic Dark Fermentation Reactor" Seminar "Rice Straw To Business"; 12 December 2011, **Meeting Hall Amonasro, Marriott Hotel Zamalek, Cairo**
 21. "Bio hydrogen Production from Co-Digestion Of Municipal Food Waste And Kitchen Wastewater Via Thermophilic Anaerobic Digester" **Cairo University, Conference Hall, 13 December, 2011**

11. ORAL PRESENTATIONS AT INTERNATIONAL CONFERENCES

1. Walaa assar, Ayman allam, **Ahmed tawfik** "Assessment and data assimilation of agriculture drainage water for reuse in irrigation purposes" Sustainable environment and urban-infrastructure international conference (ASET" 2018 multi conferences), 6-7 February 2018; <http://www.aset.hct.ac.ae/sustainable-environment-and-urban-infrastructure-international-conference/>
2. Ayat Elnemer, Mosaad khedr, **Ahmed Tawfik** "Using remote sensing techniques for estimating water stress index for central of Nile delta" 9th International conference on environmental science and development (ICESD), 7th to 9th Feb. 2018; <http://www.icesd.org/>
3. Manal Ali, Ahmed Elreedy, **Ahmed Tawfik** "Feasibility of using hypersaline lake sediment as inoculum for biogas production from anaerobic digestion of saline wastewater" 8th International Conference on Bioscience, Biochemistry and Bioinformatics, 18-20 January 2018, <http://www.icbbb.org/>
4. H Omara and **A Tawfik** "Numerical study of local scour around bridge piers" 9th International conference on environmental science and development (ICESD), 7th to 9th Feb. 2018; <http://www.icesd.org/>
5. Sherif Elbeshier and **Ahmed Tawfik** "Comprehensive and comparative study for Anammox process via rectangular and circular multistage anaerobic baffled reactors" International conference on advances in energy systems and environmental engineering (ASEE17), Poland, 2-5 July 2017.
6. Safia Khodary, Amr Elwakil , **Ahmed Tawfik** "Effect of High Density Polyethylene on Engineering properties of Clay" 214th International Conference on Science, Technology and Management (ICSTM) Mecca, Saudi Arabia 23rd-24th June, 2017.
7. M. Mahmoud and **A. Tawfik** "Treatment of high strength polyester wastewater containing dioxane in combination with grey water via integrated system". IWA, world water congress & exhibition; 9-14 October 2016 Brisbane, Australia
8. Manal. A. , k. Kubota, **A. Tawfik** . Co-fermentation of lipids rich wastewater for mitigation of LCFAs accumulation and hythane (H₂ and CH₄) production. 11th SDEWES Conference on Sustainable Development of Energy, Water and Environment Systems; September 4 - 9, 2016 in Lisbon, Portugal; <http://www.lisbon2016.sdewes.org/special.php>
9. Mohamed sultan and **Ahmed Tawfik**. Hydrogen production from co-fermentation of mix fruits peels and vegitable wastes with gelatinous solid waste. 11th SDEWES Conference on Sustainable Development of Energy, Water and Environment Systems; September 4 - 9, 2016 in Lisbon, Portugal. <http://www.lisbon2016.sdewes.org/special.php>
10. Naira Dawi and **Ahmed Tawfik**. Non-Vegetated Constructed Wetland with Graded Sand Bed System for Hazardous Landfill Leachate Treatment and Heavy Metals Removal. The Sixth Asian Conference on Sustainability, Energy and the Environment, june 9-12; 2016; Kobe, Japan, iafor The International Academic Forum, www.iafor.org
11. Ahmed Farghly and **Ahmed Tawfik**. Effect of using paperboard bacterial culture on fermentative hydrogen production from paperboard mill wastewater. The Sixth Asian Conference on Sustainability, Energy and the Environment, june 9-12; 2016; Kobe, Japan, iafor The International Academic Forum, www.iafor.org
12. Hideki Harada, Ahmed El-Gohary, **Ahmed Tawfik** " Innovation of sewage treatment technology for agriculture reuse in arid region. The 3rd international symposium for the promotion of science and technology " innovation cooperation between Africa and japan" Life innovation and Green Innovation" July 13, 2016, Tokyo, Japan.
13. **Ahmed Tawfik**; Development of cost effective and environmentally friendly bioremediation system for treatment of agricultural drainage water containing

pharmaceuticals; IWA, Diffusion pollution, Berlin , Germany 31th aug. – 3rd sept. 2015,
http://www.igb-berlin.de/events_details/events/id-17th-iwa-international-conference-on-diffuse-pollution-and-eutrophicationjoin-us-in-berlin-we-are-excited-to-announce-that-th.html

14. **Ahmed Tawfik**, Hosam Elsayed, and Hassan Dessouki; Hydrogen and methane production from starch wastewater in a mesophilic anaerobic baffled reactor", Seventeenth International Water Technology Conference IWTC, 5-7th November, 2013, Istanbul, Turkey, <http://www.rsc.org/events/detail/9833/17th-international-water-technology-conference-iwtc>
15. **Ahmed Tawfik**, Dina zaki, and Magdy Zahran; Combination of up-flow anaerobic sludge blanket and down-flow hanging sponge system for removal of color from reactive dyes wastewater; ", Seventeenth International Water Technology Conference IWTC, 5-7th November, 2013, Istanbul, Turkey, <http://www.rsc.org/events/detail/9833/17th-international-water-technology-conference-iwtc>
16. **Ahmed Tawfik**, Mohamed Harhash ,and Mamdouh Saad; Potentials of using sand immobilized on Zero Valent iron nanoparticles for water treatment, Seventeenth International Water Technology Conference IWTC, 5-7th November, 2013, Istanbul, Turkey, <http://www.rsc.org/events/detail/9833/17th-international-water-technology-conference-iwtc>
17. Mahmoud Nasr, **Ahmed Tawfik**, Shinichi Ookawara and Masaaki Suzuki; Hydrogen production from starch wastewater using anaerobic sludge immobilized on maghemite nanoparticle. Seventeenth International Water Technology Conference IWTC, 5-7th November, 2013, Istanbul, Turkey <http://www.rsc.org/events/detail/9833/17th-international-water-technology-conference-iwtc>
18. Mohamed Gar Alalm, **Ahmed Tawfik**; Fenton and solar photo-fenton oxidation of industrial wastewater containing pesticides" Seventeenth International Water Technology Conference IWTC, 5-7th November, 2013, Istanbul, Turkey
<http://www.rsc.org/events/detail/9833/17th-international-water-technology-conference-iwtc>
19. Mahmoud Nasr, **Ahmed Tawfik**, Shinichi Ookawara, and Masaaki Suzuki; Prediction of hydrogen production via dark fermentation process of starch wastewater using artificial neural network, Seventeenth International Water Technology Conference IWTC, 5-7th November, 2013, Istanbul, Turkey <http://www.rsc.org/events/detail/9833/17th-international-water-technology-conference-iwtc>
20. Mahmoud Nasr, **Ahmed Tawfik**, Shinichi Ookawara, Masaaki Suzuki. Simultaneous H₂ Production and Treatment of Starch Wastewater in a Combined Up-Flow Anaerobic Staged Reactor Followed by DownFlow Hanging Sponge System, 2012 International Conference on Environment, Chemistry and Biology IPCBEE vol.49 (2012) © (2012) IACSIT Press, Singapore DOI: 10.7763/PCBEE. 2012. V49. 10; 29th to 30th December 2012; Hong Kong, China, <http://www.ipcbee.com/vol49/010-ICECB2012-E019.pdf>
21. **A. Tawfik**; Fahmi.M.. Moustafa A. Salem and M. El-Qelish; Mesophilic anaerobic co-digestion of municipal food waste and kitchen wastewater for bio-hydrogen production; International IWA-Symposium on Anaerobic Digestion of Solid Waste and Energy Crops. 2011 Vienna, Austria, August 28th – September 1st.
<http://wasteportal.net/en/events/international-iwa-symposium-anaerobic-digestion-solid-waste-and-energy-crops>
22. **Tawfik .A**; A. Salem; M. El-Qelish; Aboubakr M. Abdullah ; E. Abou Taleb. Feasibility of biological hydrogen production from kitchen waste via anaerobic baffled reactor (ABR). International conference on energy, water and environment (ICEWE 2010), Amman, Jordan December, 12-15, 2010. <http://www.iasks.org/conferences/icewe2010>

23. **Tawfik A**; R. Abdel Wahaab; A. Al-Asmer; F. Matary; Removal of chemical and microbiological contaminants from Grey water using down-flow hanging sponge (DHS) system; 3rd specialized conference on decentralized water & wastewater international network, 10-13 Nov., 2009, Kathmandu, Nepal
24. **Tawfik, A.**; A. Ohashi and H. Harada; Reclaimed domestic wastewater as a sustainable unconventional water resource' The 3rd international conference on water resources and arid environments and the 1st Arab water forum, Riyadh, Saudi Arabia from 16-19 Nov. 2008. <http://www.icwrae-psipw.org/images/stories/2008/Water/53.pdf>
25. **Tawfik, A.**; F. Gohary; A. Ohashi and H. Harada' Optimization of the performance of an integrated anaerobic-aerobic system for domestic wastewater treatment" 8th IWA specialized Conference on Small Water and Wastewater Systems and 2nd specialized Conference on Decentralized Water and Wastewater; India; 6-9th Feb. 2008
26. Mohammed Esmail, Wael Elham Mahmud, and **Ahmed Tawfik** "Influence of Coastal Measures on Shoreline Dynamics Along Damietta Coast Using Geospatial Tools" 1st International Conference of Chemical, Energy and Environmental Engineering, ICCEE 2017, Hilton Green Plaza Hotel, Alexandria, 19-21 March 2017.
27. Safia M. Khodary, Amr Z. Elwakil, and **Ahmed Tawfik** "Evaluating the Engineering Characteristics of Contaminated Clay with Hazardous Landfill Leachate" 1st International Conference of Chemical, Energy and Environmental Engineering, ICCEE 2017, Hilton Green Plaza Hotel, Alexandria, 19-21 March 2017.
28. Sherif Ismail, **Ahmed Tawfik** "Anammox Process via Multistage Anaerobic Baffled Reactor inoculated with mixed culture bacteria" 1st International Conference of Chemical, Energy and Environmental Engineering, ICCEE 2017, Hilton Green Plaza Hotel, Alexandria, 19-21 March 2017.
29. Karim Nassar, Wael Elham Mahmud, and **Ahmed Tawfik** "Assessment of shoreline changes and erosion risk using geospatial tools and automatic computation: North Sinai Coast- case study" 1st International Conference of Chemical, Energy and Environmental Engineering, ICCEE 2017, Hilton Green Plaza Hotel, Alexandria, 19-21 March 2017.
30. **A. Tawfik**, A. Salem , M. El-Qlish. Hydrogen production from pre-treated rice straw waste. 2nd international conference on biotechnology applications in agriculture (ICBAA) , Benha university, Moshtohor and Hurghada, 8-12, April 2014, Egypt. <http://www.biotech-agric-conf.com/2nd/?view=featured>
31. **Ahmed Tawfik**, Ahmed Hassan, Mohamed El-Qlish, Haitham El-Bery1, Sheena Kumari, Faizal Bux, Mahmoud Nasr . Application of nanotechnology for hydrogen production from solid waste and wastewater. 2nd International Conference on Advanced Basic & Applied Sciences (ABAS) , 2-4 April 2014, , Sokhna, Egypt.
32. Haitham El-Bery, **Ahmed Tawfik**, Y. matsushita, Teijiro Ichimura. Potentials of hydrogen production from alkali hydrolyzed rice straw using anaerobic sludge immobilized on magnetite nanoparticles in a mesophilic anaerobic baffled reactor. Fifth international conference on nano-technology in construction, 23-25 march 2013, Cairo , Egypt , <http://www.nocnt.ru/en/news-noc-nt/383-conference-qnanotechnology-in-construction-nct-2013q-cairo>
33. **Tawfik A.**, Harhash . M. Saad M., Comparison between the efficiency of the classical sand filtration and zerovalent iron nanoparticles unit for water treatment. Fifth international conference on nano-technology in construction, 23-25 march 2013, Cairo , Egypt, <http://www.nocnt.ru/en/news-noc-nt/383-conference-qnanotechnology-in-construction-nct-2013q-cairo>
34. **Ahmed Tawfik**. Waste to energy with special emphasis on Egypt. 7th international conference for future of renewable energy in Arabian nations. Assuit university, 12-14 february 2013, Assuit, Egypt.

35. Mahmoud Nasr, **Ahmed Tawfik**, Shinichi Ookawara, Masaaki Suzuki, A novel integrated system for hydrogen and methane production from particulate starch wastewater industry. 7th international conference for future of renewable energy in Arabian nations. Assuit university, 12-14 february 2013, Assuit, Egypt.
36. Haitham El-Bery, **Ahmed Tawfik**, Y. Matsushita, Teijiro Ichimura. Assessment of the effect of pretreatment of sludge on biohydrogen production from pretreated rice straw using mesophilic anaerobic baffled reactors. 7th international conference for future of renewable energy in Arabian nations. Assuit university, 12-14 february 2013, Assuit, Egypt.
37. **Ahmed Tawfik**, D.F. Zaki, M.K. zahran. Cost effective treatment processes for decolourization of reactive dyes wastewater. 10th international conference on future horizon of environmental sustainable development in arab countries and facing the challenges , sharm el-sheikh, 21-24 December, 2013
38. **A. Tawfik**; M. El-Qelish A. Hassan. Increased biological hydrogen production with reduced organic loading in mesophilic anaerobic co-digestion of municipal solid waste (MSW) and kitchen wastewater (KW). 11th international conference on chemistry and its role in development" Mansoura and Sharm El-Sheikh, Egypt, 11-15 March, 2013
39. **A. Tawfik**; Salem A., and El-Qelish M. assessment of mesophilic anaerobic baffled reactor for hydrogen production from co-digestion of municipal food waste (MSW) and kitchen wastewater (KW). The 9th international conference role of engineering towards a better environment, RETBE'12, Helnan Palestine hotel , Alexandria, 22-24 December, 2012.
40. Mahmoud Nasr, **Ahmed Tawfik**, Shinichi Ookawara, Masaaki Suzuki. Novel up-flow anaerobic staged reactor for hydrogen production from starch wastewater. 9th International Conference on The Role Of Engineering Towards A Better Environment Environmental Road Map: From Dream to Reality, RETBE'12, Helnan Palestine hotel , Alexandria, 22-24 December, 2012.
41. **Ahmed Tawfik**, Potentials of Lemna Gibba in combination with moving bed biofilm reactors for treatment of agricultural drainage water. 4th international conference, (Environment, Industry and development) 30th march – 1st of April, 2009, Faculty of science, Demitta, Mansoura University, Egypt.
42. F. El-Gohary and **A. Tawfik**. Decolorization and COD reduction of textile wastewater using chemical-coagulation followed by activated sludge process. 3rd international conference for environment, 10-13 November 2008, Qena Luxor, Egypt.

12. GRANTS & INTERNATIONAL COLLABORATORS

NO.	Project	Funding /no.	Date	Collaborators
1	Sustainable technologies for remediation of landfill leachate containing polychlorinated biphenyls (PCBS).	Kuwait university, Project NO., FE03/24	2024-2025	EJUST-Egypt King Fahd University-SA
2	Bio-desalination for sustainable water and food security in Kuwait.	Kuwait university, Project NO., FE04/24	2025-2027	EJUST-Egypt King Fahd University-SA
3	Transforming organic waste into hydrogen and biofertilizers: a path to sustainable resource recovery.	Kuwait university, Project No.: FE02/24	2025-2028	EJUST-Egypt King Fahd University-SA
4	Interaction variability of anaerobes and their impact on biogas	Academy of Scientific	2022-2024	Sun Yat-sen University-China

	production performance of anaerobic digestion process.	Research and Technology (ASRT)-Egypt		
5	A novel approach for conversion of hazardous polyester wastewater containing 1,4 dioxane into biomass and bioenergy.	Science Technology Development Fund (STDF). ID: 41951	2020-2022	
6	Conversion of cyanuric acid rich wastewater into 3-byproducts (fertilizers, energy and biomass rich amino acids).	National Research Centre, Cairo, Egypt 1230202.	2019-2022	
7	A novel self-pretreatment process of mixture solid waste for enhancement of bio-hythane production for boosting energy recovery.	Academy of Scientific Research and Technology (ASRT)-Egypt	2020-2022	National Research Institute of Science and Technology for Environment and Agriculture, (IRSTEA); France
8	Innovative pilot scale for conversion of mixture household, vegetables, fruits market and restaurants waste into fertilizers, heat and electricity.	Academy of Scientific Research and Technology (ASRT)-Egypt	2019-2021	
9	Innovative technologies for conversion of petrochemical wastewater industry into affordable 3- biofuels (H ₂ , ethanol, CH ₄)”	Science Technology Development Fund (STDF), Project ID: 26271	2019-2021	
10	Sustainable and Innovative Full-Scale Technology (400 m ³ /d) for Domestic Wastewater Treatment In Rural Areas” (PI).	Academy of Scientific Research and Technology (ASRT)-Egypt	2016-2018	Tohoku University -Japan and AIO-Egypt
11	Innovation of Sewage Treatment Technology for Agricultural Reuse in Arid Region” JST, MEXT. The initiative for promotion STI cooperation between Japan (	JST, MEXT-Japan	2012-2017	Tohoku University, Kisarazu National College of Technology-Japan, EJUST-Egypt
12	Novel pilot-scale application for bio-hydrogen fermentation of starch wastewater industry and synthesize of new materials for chemical storage of hydrogen”.	US-Egypt / Since-Technology, Development Fund -STDF (ID: 3665),	2012-2016	Penn State University, USA
13	Enhancement effect of magnetic nanoparticles on bio-hydrogen production from organic wastes via pilot – scale anaerobic baffled reactor (ABR).	Academy of Scientific Research and Technology	2012-2015	Durban University, Institute of water and wastewater technology, South Africa
14	A novel up-flow anaerobic staged sludge bed reactor (UASSB) for bio-hydrogen production from paper mill industry wastewater”	Academy of Scientific Research and Technology	2012-2015	Institute of biotechnology, Safix, TUNISIA
15	Enhancement of hydrogen production from gelatin wastewater	Academy of Scientific	2014-2016	National Research Institute of Science

	via anaerobic consortium bacteria immobilized on the nanoparticles	Research and Technology		and Technology for Environment and Agriculture, (IRSTEA); France
16	Treatment of food industry wastewater	Private sector, Ocean company	2015-2016	
17	Treatment of lipids rich wastewater	Private sector, River company	2015-2016	
18	Biohydrogen production from kitchen waste and rice straw	Science-Technology, Development Fund -STDF (ID: 167)	2009-2012	
19	Ecocity Capacity Building in NBC	Finland Research Institute	2012-2014	VTT-Finland Research institute
20	Sustainable technologies for domestic wastewater treatment in rural areas and small communities for appropriate agricultural use.	National Research Centre	2008-2010	
21	Wastewater management, Al-Sadat industrial city	National Research Centre	2005-2007	
22	Novel catalytic technologies for the treatment of wastewater from agro-food industrial production in MED countries	EU Contract ICA3-CT2002-10034 CAT-MED:	2003-2006	Italy, France, Tunisia and Greece
23	Decentralized sanitation and reuse (anaerobic digestion of concentrated wastewater)	EU project (CORTIC)	2002-2003	Palestine, Jordan, the Netherlands, Greece, Spain
24	Purification and re-use of domestic wastewater using low-cost eco-biotechnological methods	European Commission (EC)-Avicenne Initiative	1998-2002	The Netherlands, Spain, Palestine, Jordan & Egypt

13. SUPERVISION OF PH-D AND MSC STUDENTS

No.	Name	Thesis title	Awarded Degree/ University	Enrollment Date	Awarded Degree Date
1	Nora Gamal Abdel-Hameed Alhamoud (221126347)	Simultaneous bioenergy productivity and treatment of petroleum refinery effluents	MSc Kuwait university, Faculty of Engineering	2023	Ongoing
2.	Ghadeer Yousef Farg Mohamed Hagi Ali Hagi (221126103)	Algal/Bacterial-Based Membrane Bioreactor for Treatment of Hazardous Wastewater from Petrochemical Industry	MSc Kuwait university, Faculty of Engineering	2023	Ongoing
3	Haitham Mohamed Ahmed Mohamed El-Bery	Continuous biohydrogen production from Pretreated rice straw via dark and photo-fermentation processes	MSc- Egypt-Japan University of Science and Technology	September 2011	September 3, 2013

4	Sherif Ahmed Elbashir Mohamed Nasr Eldin Ismail	Effect of pretreatment processes on the biological immobilized biomass pilot reactor for treatment of landfill leachate wastewater	MSc- Egypt Japan University of Science and Technology	September 2013	September 30, 2015
5	Manal Abdel Mohsen Mostafa Ali	Treatment of industrial wastewater containing lipids via integrated anaerobic/aerobic system	MSc-- Egypt-Japan University of Science and Technology	September 2014	September 26, 2016
6	Naira Hassan Dawi Meky	Baffled constructed wetland system for treatment of Hypersaline Hazardous landfill leachate Containing Heavy Metals	MSc- Egypt Japan University of Science and Technology	February 2015	February 27, 2017
7	Amr El-Sayed Abd Elfatah Fleifle	Integrated water quality management of agricultural drainage water for reuse and environmental conservation in Egypt	PhD- Egypt Japan University of Science and Technology	February 2010	February 27, 2013
8	Mahmoud Said Ahmed Nasr	A novel pilot scale application for bio-hydrogen fermentation of starch wastewater industry	PhD- Egypt Japan University of Science and Technology	September 2011	August 17, 2014
9	Mohamed Ibrahim Gar Alalm	Treatment of industrial wastewater containing Bio-Recalcitrant Pollutants by Solar PhotoOxidation	PhD- Egypt Japan University of Science and Technology	September 2012	September 30, 2015
10	Mohamed Mahmoud Abdelmgeed Elsamadony	Simultaneous Treatment and Hydrogen Production from Organic Fraction of Municipal Solid Waste Using Dry Anaerobic Digestion	PhD- Egypt Japan University of Science and Technology	February 2013	March 28, 2016
11	Ayman Khalifa Allam Elkhelaly	Valorization of Agriculture Drainage Water for Reuse in Irrigation Purposes	PhD- Egypt Japan University of Science and Technology	February 2013	March 28, 2016
12	Ahmed Mustafa Farghaly Abdel-Wahhab	Treatment of Paperboard mill wastewater via anaerobic digestion followed by bacterial synthesis of biodegradable polyhydroxyalkanoates	PhD- Egypt Japan University of Science and Technology	September 2013	September 26, 2016
13	Ahmed Mohammed Nazem El Sayed El Reedy	Simultaneous biofuels production and treatment of petrochemical wastewater via anaerobic digestion process	PhD- Egypt Japan University of Science and Technology	February 2014	February 27, 2017

14	Mohamed Ahmed Kamel	Enhancement of engineering properties of problematic soil using biopolymer	PhD-Egypt Japan University of Science and Technology	February 2013	March 28, 2016
15	Dina Foad Ahmed Zaki	A novel anaerobic/aerobic process for colour removal of some reactive dyes from textile wastewater using cationic and anionic polymers	PhD-Helwan University, Faculty of science	December 28, 2010	November 17, 2013
16	Foad Zaki Boghdady Abd-Elal	Innovative technologies for treatment of textile wastewater	MSc-Helwan University, Faculty of science	February 25, 2009	April 06, 2013
17	Fatema Adel Mohamed El-Matery	Treatment of grey water using down flow hanging sponge (DHS) system	PhD-Demitta University, Faculty of science	April 13, 2008	November 30, 2010
18	Aml El-Mitwalli Mohamed El-Mitwalli Kandil	Anaerobic treatment of food industry wastewater	MSc -Demita University, Faculty of science	December 2, 2008	July 27, 2011
19	Madeha Hamdy Hamed Mohamed Al-Sayed	The impact of some of the causes of stress on the production of vegetable Alalksenat	MSc -Demita University, Faculty of science	May 13, 2008	July 31, 2012
20	Hossam Abdel-Esalam Alsayed Mohamed	Removal of organic and inorganic chemical pollutants from starch wastewater via anaerobic baffled reactor	PhD-Banha University, Faculty of Science	November 19, 2009	April 7, 2013
21	Al-Sayed Mohamed Al-Sayed Mustafa	Biohydrogen production from wastewater using metals nanoparticles"	MSc-Alexandria University, Faculty of Science	April 27, 2014	January 24, 2017
22	Eman Ibrahim Abd-ElMaksoud	Preparation and characterization of Graphene -Like Nanosheets and study one of its applications"	MSc-Alexandria University, Faculty of Science	April 20, 2015	June 22, 2017
23	Radwa Mohamed Mones Hassan	Hydrogen production by the conversion of biodegradable organic wastes	MSc-Alexandria University, Faculty of Science	July 5, 2011	December 30, 2014
24	Mohamed Mahmoud Ali Mohamed	Municipal wastewater treatment via anaerobic hybrid reactor (AHR) followed by down-flow hanging sponge (DHS) system	MSc-Cairo University, Faculty of Science	February 28, 2007	August 9, 2009

25	Tarek Mohamed Mohamed Hamed El-Zamel	Innovative technology for wastewater treatment for reuse	MSc- Al-Azhar University, Faculty of Science	March, 2008	December 30, 2010
26	Mohamed Abd- Allah Mansour El-Qelish	Co-digestion of organic fraction of municipal solid waste and surfactant rich wastewater for hydrogen production	MSc- Cairo University, Faculty of Science	Februa ry 2, 2010	August 9, 2012
27	Ahmed Hassan Salem Hassan	Hydrogen production from food waste materials via anaerobic baffled reactor	MSc- Banha University, Faculty of Science	March, 2010	December 30, 2012
28	Rabeh Salem Masoud Abo- Dalal	Immobilization of photosynthetic bacteria on novel photocatalyst for hydrogen production from industrial wastewater	PhD- Alexandria University, Faculty of Science	April, 2019	November 30, 2023
29	Marwa Hamdy Abdel Raheem	Bio-energy production from paper mill processing wastewater	PhD- Helwan University, Faculty of Science	Jan., 2017	November 30, 2021
30	Eman Ezz-Eldin Al-Gheeny	Enhancement of photocatalytic degradation of multiple xenobiotics compounds using nano- particles"	MSc- Alexandria University, Faculty of Science	March, 2017	December 30, 2019
31	Aya Yousef Ibrahim Atia	Eco-friendly synthesis of graphene for agricultural waste valorization"	MSc- Alexandria University, Faculty of Science	Feb., 2019	March 30, 2022
32	Adel Abd El- mogoad Taqi	Innovative Approach to Agricultural Wastewater Purification: Adsorption Technology using Aquatic Plants for Contaminant Removal and Water Quality Enhancement	MSc-Qena University Faculty of Engineering Civil Engineering Department	March 2025	Ongoing
33	Rania Mohamed Hafiz Ibrahim	Utilization of Nanocomposites for Enhancement of the Anaerobic Digestion of Paperboard Industry Sludge Containing Some Organic Halogens.	Msc- organic chemistry department- Faculty of science- Helwan university	May 2020	Sept. 2023
34	Khaled Gadala Pashary Ali Ahmed	Bioremediation of industrial waste water containing antibiotics using a baffled constructed wetland system	MSc- Faculty of Engineering, South Valley University	2022	Ongoing
35	Mohammed Saad Abdel-Ghany Mahmoud	Treatment of polyester resin wastewater contaminated with 1-4 dioxan using	Ph-D-Faculty of Engineering, Aswan	Oct., 2021	March, 2024

		integrated anaerobic/aerobic system	University, Aswan, Egypt		
36	Mohamed Abas Mohamed Soltan	Hydrogen production from fruit and vegetables peels via fermentation process	Ph-D-Faculty of Engineering, Aswan University, Aswan, Egypt	Oct., 2021	Nov., 2024
37	Asmaa A. Attia	Production, modification and new prospects of biochar derived from biomass waste	Ph-D- Alexandria University, Faculty of Science	Aug. 2022	March, 2024
38	Eman Magdy Said Mohamed Alouda.	Biohydrogen production from some blue green algae: A transcriptional analysis of major genes involved in the biosynthesis pathway.	Ph-D Benha university Faculty of agriculture	Feb. 2021	Ongoing
39	Sohila Ali Abdelmohsen	Study of some micro- nanoplastic removal and management techniques from wastewater and sewage sludge	Ph-D-Al-Azhar University (Girls branch) faculty of science.	Oct. 2023	Ongoing
40	Khaled Sayed Hasanan Sayed	Biological treatment of petroleum refinery wastewater through anaerobic bioreactor and algal pond	MSc Benha university Faculty of agriculture	Sept. 2021	Oct. 2024

14. ASSOCIATION MEMBERSHIP

No.	Association	Application ID	Member application
1.	American chemical Society (ACS)	ND113	31474353 19 th Dec. 2017
2.	The international water association (IWA)	1611335	19 th Dec. 2017

15. COMMITTEES MEMBERSHIP AND CONVENOUR AT LEVEL OF DEPARTMENT OF ENVIRONMENTAL ACIENCE AND COLLEGE OF LIFE SCIENCES

- MSc program in environmental science
- Organising and scientific committee for college of life science conference
- Promotion committee
- Accreditation committee
- Scientific and journal selection committee
- Laboratory and budget committee
- Reviewers for outstanding journals papers, Ph-D and MSc thesis, national and international projects