



## Template for Evidence(s) UI GreenMetric Questionnaire

University : Al-Mustaqbal University College  
Country : Iraq  
Web Address : <https://uomus.edu.iq/en/default.aspx>

### [6] Education and Research (ED)

[6.7] Number of scholarly publications on sustainability published. (average annually for the past 3 years)

#### Description:

Number of sustainability published papers in 2020 = 39  
Number of sustainability published papers in 2021 = 71  
Number of sustainability published papers in 2022 = 248

Average annually for the past 3 years = 119.3

#### Evidence:

#### Publications on Sustainability During 2020 - 2022

Seq.	Title	Authors	Link	Related SDG	Year
1	The Association between Alfacalcidol (1-Alpha-hydroxyvitamin D3) and Oxidative Stress in Patients with Type II Diabetic Nephropathy	Ahmed Khalid Aldhalmi, Ali Jihad Hemid Al-Athari	<a href="https://www.sysrevpharm.org/abstract/the-association-between-alfacalcidol-1alpha-hydroxyvitamin-d3-and-oxidative-stress-in-patients-with-type-ii-diabetic-neph-66865.html">https://www.sysrevpharm.org/abstract/the-association-between-alfacalcidol-1alpha-hydroxyvitamin-d3-and-oxidative-stress-in-patients-with-type-ii-diabetic-neph-66865.html</a>	SDG3	2020
2	Activity of zinc oral dispersible tablet on marjory clinical type of recurrent aphthous stomatitis ulceration, a clinical trial human study	Ghadah Ali Al-Oudah, AmeerHamdi AL-Ameedee, Sinan Abdul-Sattar Shwailiya	<a href="https://www.journal.atmph-specialissues.org/abstract.php?article_id=8101">https://www.journal.atmph-specialissues.org/abstract.php?article_id=8101</a>	SDG3	2020



3	Knowledge of the mothers toward sanitation and hygiene in relation to childhood gastroenteritis in Babylon province	Sijal Fadhil Farhood Al Joborae, Fadhil Farhood Mekki Al Joborae, Sura Falah Abdul Hadi Al-Jubbawi, Ihab Raad Abbas Abid Ali	<a href="https://medicopublication.com/index.php/ijfmt/article/view/11805">https://medicopublication.com/index.php/ijfmt/article/view/11805</a>	SDG3	2020
4	Assessment of Serum Trace Elements Levels in Chronic Hemodialysis Patients	Wafaa H. Ajam	<a href="http://www.connectjournals.com/toc2.php?abstract=3244902H_5487A.pdf&amp;&amp;bookmark=CJ-033216&amp;&amp;issue_id=02&amp;&amp;yaer=2020">http://www.connectjournals.com/toc2.php?abstract=3244902H_5487A.pdf&amp;&amp;bookmark=CJ-033216&amp;&amp;issue_id=02&amp;&amp;yaer=2020</a>	SDG3	2020
5	Evaluate the CA125 for Discriminate Between Epithelial Ovarian Cancer (EOC) and Endometriosis, Ovarian Cyst Depending on PSA Fucosylation by using Nano-Lectin Immunoassay	Aamer M. Ali, Omar F. Abdul-Rasheed and Hala Abdul Qudir	<a href="http://www.connectjournals.com/toc2.php?abstract=3265802H_6305A.pdf&amp;&amp;bookmark=CJ-033216&amp;&amp;issue_id=02&amp;&amp;yaer=2020">http://www.connectjournals.com/toc2.php?abstract=3265802H_6305A.pdf&amp;&amp;bookmark=CJ-033216&amp;&amp;issue_id=02&amp;&amp;yaer=2020</a>	SDG3	2020
6	Major histocompatibility complex gene polymorphism in systemic lupus erythematosus patients	Zahraa Haleem Alqaim, Methak J. Al-Jboori, Mona N. Al-Terehi	<a href="http://medicopublication.com/index.php/ijfmt/article/view/11783">http://medicopublication.com/index.php/ijfmt/article/view/11783</a>	SDG3	2020
7	Effect of new synthesized compounds of 2-thiouracil sulfonamide derivatives against colon and liver carcinoma cells "in vitro study"	Saif M.Hassan, Ashwaq Najemaldeen Abbas AL-Jaf, Yasmeen Ali Hussien, Samir M.Awad, Maysaa Ali Abdulkhaleq Najah R.Hadi	<a href="http://www.ijpronline.com/ViewArticleDetail.aspx?ID=17454">http://www.ijpronline.com/ViewArticleDetail.aspx?ID=17454</a>	SDG3	2020



8	Helicobacter pylori and recent ischemic stroke: Is there a relationship?	Ahmed Khalid Aldhalmi, Laith Aldabbagh, Ammar Jabbar Hamad, Sadiq J. AL-Muhana, Hayder K. Hassoun, Mohammed Dhamin Alareedh, Ahmed Almudafer, Jaber Hatif Jaber	<a href="http://www.ijpronline.com/ViewArticleDetail.aspx?ID=17956">http://www.ijpronline.com/ViewArticleDetail.aspx?ID=17956</a>	SDG3	2020
9	Study role of interleukin 23 level, family histories and blood groups in psoriasis patients	Eman Wahab Kadhum, Basim Mohammed Hanon, Hasaneen Kudhair Abdull Abass	<a href="https://www.journal.atmph-specialissues.org/abstract.php?article_id=8357">https://www.journal.atmph-specialissues.org/abstract.php?article_id=8357</a>	SDG3	2020
10	Molecular detection of Coxiella burnetii and Borrelia burgdorferi in ticks infesting goats in North-Eastern states of India	Gautam Patra, Subhamoy Ghosh, Priyanka, M.A. Efimova, Ana Sahara, Ghaidaa Raheem Lateef Al-Awsi, Shamik Polley and Apurba Debbarma	<a href="https://www.tandfonline.com/doi/full/10.1080/01647954.2020.1805000">https://www.tandfonline.com/doi/full/10.1080/01647954.2020.1805000</a>	SDG3	2020
11	Epidemiological and immunological study of nasal polyposis among allergic patients in Babylon province: Cross-sectional study	Habeeb Shuhaib Ahmmed, Suaad Mohammed Rasheed, Rana Fadhil Obaid, Safaa Hussain Alturaih, and Rasha Fadhil Obaid	<a href="https://pubmed.ncbi.nlm.nih.gov/33341843/">https://pubmed.ncbi.nlm.nih.gov/33341843/</a>	SDG3	2020
12	Association between the level of Bradykinin and viral infection in patient suffering from respiratory infection, renal transplant, and renal failure	Laith A.I.K. Al-Kaif, Hayder A.A. Al-Asadi, Younis A.K. Al-Khafaji, Raheem T. Al Mammori, Hussein A. Mezher, Waleed M. Kazem, Mustafa W. Kazem, Hussein A. Majali, Ali H. Ali, Abbas Q. Obaid, Jasem M. Hussein, Bassam M. Atyaee, Rusul H. Edin	<a href="https://isindexing.com/isi/paper_details.php?id=29745">https://isindexing.com/isi/paper_details.php?id=29745</a>	SDG3	2020



13	Natural filtration unit for removal of heavy metals from water	Fatemah S. Abdurraheem, Zainab S. Al-Khafaji, Khalid S. Hashim, Magomed Muradov, Patryk Kot and Ali Abdulhussein Shubbar	<a href="https://iopscience.iop.org/article/10.1088/1757-899X/888/1/012034">https://iopscience.iop.org/article/10.1088/1757-899X/888/1/012034</a>	SDG3	2020
14	Intensive care admission rate due to Covid-2019	Mostafa Mohammadi, Mohammed Abdul Zahra Sasaa, Ali Fadihl Al-Emran, Majid Fakhir Alhamaidah, Ali B. Roomi, Hamza Sh. Abd-Alzahra, Maha Sahib A L. Kabbi, Sabah A L Hussaini, Nwar Al.Naqeeb,	<a href="http://www.ijpronline.com/ViewArticleDetail.aspx?ID=17787">http://www.ijpronline.com/ViewArticleDetail.aspx?ID=17787</a>	SDG3	2020
15	The incidence of postoperative sore throat after local application of different lidocaine forms & methods; a narrative review	Majid Alhamaidah, Hussein Alkhfaji, Hussein Ali Hussein, Sami Raheem Hasan, Mohammed Abdul Zahra Sasaa, Ali Zaidan Alomaran, Amjed Qasim Mohammed, Ali B. Roomi	<a href="http://www.ijpronline.com/ViewArticleDetail.aspx?ID=17788">http://www.ijpronline.com/ViewArticleDetail.aspx?ID=17788</a>	SDG3	2020
16	Primary women infertility and thyroid disorders	Madha Mohammed Saleh, Ola Abbas Khdhair, Amina Salman Ali	<a href="http://ijop.net/index.php/mlu/article/view/1144">http://ijop.net/index.php/mlu/article/view/1144</a>	SDG3	2020
17	Study some immunological parameters for Salmonella typhi patients in Hilla city	Marwa Fadhil Alsaffar, Zahraa Haleem, Mohammed Naser Hussian	<a href="https://jprsolutions.info/files/final-file-5e7ee9e2c9a953.25016510.pdf">https://jprsolutions.info/files/final-file-5e7ee9e2c9a953.25016510.pdf</a>	SDG3	2020



18	Evaluate the fPSA for discriminate between prostate cancer patients (PCa) and Benign Prostatic Hyperplasia (BPH) depending on psa fucosylation by using nano-lectin immunoassay	Aamer M. Ali, Omar F. Abdul-Rasheed, Ahmed Turki Obaid.	<a href="https://www.sysrevpharm.org/abstract/evaluate-the-fpsa-for-discriminate-between-prostate-cancer-patients-pca-and-benign-prostatic-hyperplasia-bph-depending-on-66475.html">https://www.sysrevpharm.org/abstract/evaluate-the-fpsa-for-discriminate-between-prostate-cancer-patients-pca-and-benign-prostatic-hyperplasia-bph-depending-on-66475.html</a>	SDG3	2020
19	Applications of high density concrete in preventing the impact of radiation on human health	Zainab S. Al-Khafaji and Mayadah W. Falah	<a href="https://www.jardcs.org/abstract.php?id=3573">https://www.jardcs.org/abstract.php?id=3573</a>	SDG3	2020
20	Phylogenetic analysis of giardia lamblia using small subunit ribosomal rna (Ssrna) gene and triose phosphates isomerase (TPI) gene isolated from Iraqi patients	Abdulkareem Khattar Shaalan Alhatemi , Sundus Nsaif AlHuchaimi, Majida Malik Meteab Alshammari, Alia Essa Bashbosh, Rasha Fadhl Obaid	<a href="https://www.semanticscholar.org/paper/Phylogenetic-analysis-of-Giardia-lamblia-using-gene-Alhatemi-Alhuchaimi/ac7db2e09a012336973512a6f16b18e5515cf7a4">https://www.semanticscholar.org/paper/Phylogenetic-analysis-of-Giardia-lamblia-using-gene-Alhatemi-Alhuchaimi/ac7db2e09a012336973512a6f16b18e5515cf7a4</a>	SDG3	2020
21	The association between mn-sod gene polymorphism and peripheral neuropathy in type2 diabetic patients of Babylon province-iraq	Asma'a H. Mohamed, Haider K. Zaidan, Ali H. Al-Saadi	<a href="http://medicopublication.com/index.php/ijfmt/article/view/115">http://medicopublication.com/index.php/ijfmt/article/view/115</a>	SDG3	2020
22	Unexpected adverse medical & surgical health conditions in neonates after elective cesarean sections within the context of the influence of local socidemographic factors in Babylon	Sijal Fadhil Farhood Al-Joborae, Ihab Raad Abbas Abid Ali; Fadhil Farhood Mekki Al-Joborae	<a href="https://ijop.net/index.php/mlu/article/view/449">https://ijop.net/index.php/mlu/article/view/449</a>	SDG3	2020



23	Molecular characterization and gene expression profiling of <i>Trichophyton rubrum</i> treated with a <i>Marasmius palmivorus</i> filtrate	Nadia N. H. Al-Masaoodi, Jawad K. Abood Al-Janabi, Ban Taha Mohammed	<a href="https://web.b.ebscohost.com/abstract?direct=true&amp;profile=ehost&amp;scope=site&amp;authype=crawler&amp;jrnl=09757619&amp;AN=144741267&amp;h=7r%2BUII5IEroHQEbDESCZuehIhezjDQPtxIUJ%2BWM%2BgPIkPcoBrvx%2FVkkB1kbV7d%2BpXXtw5T1tyAA4H%2FY3j%2FK5A%3D%3D&amp;crl=c&amp;resultNs=AdminWebAuth&amp;resultLocal=ErrorCrlNotAuth&amp;crlhashurl=login.aspx%3Fdirect%3Dtrue%26profile%3Dehost%26scope%3Dsite%26authype%3Dcrawler%26jrnl%3D09757619%26AN%3D144741267">https://web.b.ebscohost.com/abstract?direct=true&amp;profile=ehost&amp;scope=site&amp;authype=crawler&amp;jrnl=09757619&amp;AN=144741267&amp;h=7r%2BUII5IEroHQEbDESCZuehIhezjDQPtxIUJ%2BWM%2BgPIkPcoBrvx%2FVkkB1kbV7d%2BpXXtw5T1tyAA4H%2FY3j%2FK5A%3D%3D&amp;crl=c&amp;resultNs=AdminWebAuth&amp;resultLocal=ErrorCrlNotAuth&amp;crlhashurl=login.aspx%3Fdirect%3Dtrue%26profile%3Dehost%26scope%3Dsite%26authype%3Dcrawler%26jrnl%3D09757619%26AN%3D144741267</a>	SDG3	2020
24	Behavior of Salt transport and submarine groundwater discharge between an Estuary and the underlying coastal aquifer	Wissam Al-Taliby, Ashok Pandit, and Hadeel Dekhn	<a href="https://ascelibrary.org/doi/pdf/10.1061/9780784482964.007">https://ascelibrary.org/doi/pdf/10.1061/9780784482964.007</a>	SDG6, SDG13 & SDG15	2020
25	Ultrasonic-Electrocoagulation Method for Nitrate Removal from Water	Saeed Al-Marri, Saif Salah AlQuzweeni, Khalid S. Hashim, Rafid AlKhaddar, Patryk Kot, Rasha Salah AlKizwini, Salah L. Zubaidi, and Zainab S. Al-Khafaji	<a href="https://iopscience.iop.org/article/10.1088/1757-899X/888/1/012073">https://iopscience.iop.org/article/10.1088/1757-899X/888/1/012073</a>	SDG6	2020
26	Mixed Convection in a Double Lid-Driven Cavity Filled with Hybrid Nanofluid by Using Finite Volume Method	I.R. Ali ,Ammar I. Alsabery, N.A. Bakar and Rozaini Roslan	<a href="https://www.mdpi.com/2073-8994/12/12/1977">https://www.mdpi.com/2073-8994/12/12/1977</a>	SDG7	2020
27	Study on oil fouling in a double pipe heat exchanger with mitigation by a surfactant	Basim O. Hasan, Hasan Sh Majdi, and Mustafa M. Hathal	<a href="https://onlinelibrary.wiley.com/doi/abs/10.1002/htj.21738">https://onlinelibrary.wiley.com/doi/abs/10.1002/htj.21738</a>	SDG7	2020



28	Fracture Properties Evaluation of Cellulose Nanocrystals Cement Paste	Seyed Ali Ghahari, Lateef N. Assi, Ali Als Salman, and Kürşat E. Alyamaç	<a href="https://www.mdpi.com/1996-1944/13/11/2507">https://www.mdpi.com/1996-1944/13/11/2507</a>	SDG7	2020
29	The Rooms Air Conditioning by Cooling the Conventional Water Tank Using Hot Summer Air and Solar Energy	Hasan Shakir Majdi, Faez Abid Muslim Abd Ali, Laith Jafer Habeeb	<a href="https://www.iieta.org/journals/ijht/paper/10.18280/ijht.380224">https://www.iieta.org/journals/ijht/paper/10.18280/ijht.380224</a>	SDG7	2020
30	Effect of Electrode Material and Hydrodynamics on the Produced Current in Double Chamber Microbial Fuel Cells	Marwa S. Hamed, Hasan Sh. Majdi, and Basim O. Hasan	<a href="https://pubs.acs.org/doi/abs/10.1021/acso-mega.9b04451">https://pubs.acs.org/doi/abs/10.1021/acso-mega.9b04451</a>	SDG7	2020
31	Recent advances in solar thermal assisted air conditioning systems	Kamaruzzaman Sopian, M Alkhair, A M Abed, B Elhub, A M Elbreki, and Ali H A Al-Waeli	<a href="https://dl.acm.org/doi/10.1145/3410352.3410835">https://dl.acm.org/doi/10.1145/3410352.3410835</a>	SDG7	2020
32	Review: Using of Sustainable Materials to Develop the Buildings to be Green	Zahraa Ali Hammood	<a href="http://www.sersc.org/journals/index.php/IJAST/article/view/31555">http://www.sersc.org/journals/index.php/IJAST/article/view/31555</a>	SDG11	2020



33	Experimental data on compressive strength and ultrasonic pulse velocity properties of sustainable mortar made with high content of GGBFS and CKD combinations	Hasan Sh Majdi, Ali Abdulhussein Shubbar, Mohammed Salah Nasr, Zainab S. Al-Khafaji, Hassnen Jafer, Muhammad Abdulredha, Zainab AlMasoodi, Monower Sadique, and Khalid Hashim	<a href="https://www.sciencedirect.com/science/article/pii/S2352340920308556?via%3DiHub">https://www.sciencedirect.com/science/article/pii/S2352340920308556?via%3DiHub</a>	SDG11	2020
34	Review of availability of source materials for geopolymer/sustainable concrete	Lateef N. Assi, Kealy Carter, Edward Deaver, and Paul Ziehl	<a href="https://www.sciencedirect.com/science/article/abs/pii/S0959652620315249?via%3DiHub">https://www.sciencedirect.com/science/article/abs/pii/S0959652620315249?via%3DiHub</a>	SDG11	2020
35	Reduction of Environmental Pollution and Improving the (Mechanical, Physical and Chemical Characteristics) of Contaminated Clay Soil by Using of Recycled Oil	Abdullah Jabar Hussain and Zainab S. Al-Khafaji	<a href="https://www.jardcs.org/abstract.php?id=3688">https://www.jardcs.org/abstract.php?id=3688</a>	SDG12	2020
36	Tensile behavior of fiber reinforced cement mortar using wastes of electrical connections wires and galvanized binding wires	Maryam. H. Naser, Fatimah H. Naser, and Mohammed K. Dhahir	<a href="https://www.sciencedirect.com/science/article/abs/pii/S0950061820322492?via%3DiHub">https://www.sciencedirect.com/science/article/abs/pii/S0950061820322492?via%3DiHub</a>	SDG12	2020
37	Early properties of concrete with alkali-activated fly ash as partial cement replacement	Lateef N. Assi, Ali Majdi, Yasir Alhamadani, and Paul Ziehl	<a href="https://www.icevirtuallibrary.com/doi/abs/10.1680/jcoma.19.00092">https://www.icevirtuallibrary.com/doi/abs/10.1680/jcoma.19.00092</a>	SDG12	2020





38	The fields of applying the recycled and used oils by the internal combustion engines for purposes of protecting the environment against pollutions	Abdullah Jabar Hussain, and Zainab S. Al-Khafaji	<a href="https://www.jardcs.org/abstract.php?id=3580">https://www.jardcs.org/abstract.php?id=3580</a>	SDG12	2020
39	Properties of cement mortar incorporated high volume fraction of GGBFS and CKD from 1 day to 550 days	Ali Abdulhussein Shubbar, Hassnen Jafer, Muhammad Abdulredha, Zainab S. Al-Khafaji, Mohammed Salah Nasr, Zainab Al Masoodi, and Monower Sadique	<a href="https://www.sciencedirect.com/science/article/abs/pii/S2352710219323435?via%3Dihub">https://www.sciencedirect.com/science/article/abs/pii/S2352710219323435?via%3Dihub</a>	SDG13	2020
40	The Correlation between Selenium-Dependent Glutathione Peroxidase Activity and Oxidant/Antioxidant Balance in Sera of Diabetic Patients with Nephropathy	Abdulateef Altuhafi, Muhammed Altun, Mahmoud Hussein Hadwan	<a href="http://rbmb.net/article-1-606-en.html">http://rbmb.net/article-1-606-en.html</a>	SDG3	2021
41	Drug delivery of amoxicillin molecule as a suggested treatment for covid-19 implementing functionalized mesoporous SBA-15 with aminopropyl groups	Haneen F Alazzawi, Issam K Salih, and Talib M Albayati	<a href="https://pubmed.ncbi.nlm.nih.gov/33928831/">https://pubmed.ncbi.nlm.nih.gov/33928831/</a>	SDG3	2021
42	Impact of Arthrocentesis in Treatment of Temporomandibular Joint Problems	Imad K. Abbas al-Rifae, Zaid M. Akram, and Qaisar K. Oraibi	<a href="https://jddt.com/volume11issue1/">https://jddt.com/volume11issue1/</a>	SDG3	2021



43	Chemokine CXCL 14; a double-edged sword in cancer development	Arezoo Gowhari Shabgah, Zahraa Haleem Al-Qaim, Alexander Markov, Alexei Valerievich Yumashev, Fatemeh Ezzatifar, Majid Ahmadi, Seyed Mohammad Gheibihayat, Jamshid Gholizadeh Navashenaq	<a href="https://www.sciencedirect.com/science/article/pii/S1567576921003179?via%3Dihub">https://www.sciencedirect.com/science/article/pii/S1567576921003179?via%3Dihub</a>	SDG3	2021
44	Effect of Chlordiazepoxide Oral Tablet on Oral Recurrent Bruxism, A Clinical Trial Human Study	Ghadah Ali AL-Oudah, Ameer Hamdi AL-Ameedee, Ali Ameer AL-Ameedee	<a href="https://www.sysrevpharm.org/abstract/effect-of-chlordiazepoxide-oral-tablet-on-oral-recurrent-bruxism-a-clinical-trial-human-study-67817.html">https://www.sysrevpharm.org/abstract/effect-of-chlordiazepoxide-oral-tablet-on-oral-recurrent-bruxism-a-clinical-trial-human-study-67817.html</a>	SDG3	2021
45	Driving behaviour identification based on OBD speed and GPS data analysis	Hussein Ali Ameen, Abd Kadir Mahamad, Sharifah Saon, Mohd Anuaruddin Ahmadon, Shingo Yamaguchi	<a href="https://astesj.com/v06/i01/p60/">https://astesj.com/v06/i01/p60/</a>	SDG3&SDG11	2021
46	The Effect of an Educational Curriculum Based on Metacognitive Skills in Teaching Some Offensive Skills on the Specialized School of Basketball in Baghdad Governorate	Nadimabader mohammed, Mazin Hadi Kzar and Abeer Dakhil Hatem Al-Selmi	<a href="https://www.riped-online.com/abstract/the-effect-of-an-educational-curriculum-based-on-metacognitive-skills-in-teaching-some-offensive-skills-on-the-specializ-70075.html">https://www.riped-online.com/abstract/the-effect-of-an-educational-curriculum-based-on-metacognitive-skills-in-teaching-some-offensive-skills-on-the-specializ-70075.html</a>	SDG4	2021
47	Removal of 4-Nitrophenol from Aqueous Solution by Using Polyphenylsulfone-Based Blend Membranes: Characterization and Performance	Ali Amer Yahya, Khalid T Rashid, Maryam Y Ghadhban, Noor Edin Mousa, Hasan Shaker Majdi, Issam K Salih, Qusay F Alsalty	<a href="https://pubmed.ncbi.nlm.nih.gov/33673720/">https://pubmed.ncbi.nlm.nih.gov/33673720/</a>	SDG6	2021



48	Classification Maps for TDS Concentrations in the GIS Along Euphrates River, Iraq	Ali Chabuk, Zahraa Ali Hammood, Nadhir Al-Ansari, Salwan Ali Abed, and Jan Laue	<a href="https://link.springer.com/article/10.1007/s11270-021-05236-7">https://link.springer.com/article/10.1007/s11270-021-05236-7</a>	SDG6	2021
49	Systematic Review on Medicinal Plants Used for the Treatment of Giardia Infection	Sultan Alnomasy, Ghaidaa Raheem Lateef Al-Awsi, Yosra Raziani, Aishah E. Albalawi, Abdullah D. Alanazi, Massumeh Niazi, and Hossein Mahmoudvand	<a href="https://www.sciencedirect.com/science/article/pii/S1319562X21004472?via%3Dihub">https://www.sciencedirect.com/science/article/pii/S1319562X21004472?via%3Dihub</a>	SDG6	2021
50	Dye Removal from Textile Wastewater using Solar-Powered Electrocoagulation Reactor	Sabrean Farhan Jawad, Nahlah Salman Saddam, Qasim J. Adaami, Mohanad M. Kareem, M Abdulredha, Hayfaa A. Mubarak, Patry Kot, Michaela Gkantou6, Ahmed AlKhayyat	<a href="https://www.proquest.com/docview/2513019784?pq-origsite=gscholar&amp;fromopenview=true">https://www.proquest.com/docview/2513019784?pq-origsite=gscholar&amp;fromopenview=true</a>	SDG6	2021
51	Activated carbon derived from Azolla filiculoides fern: a high-adsorption-capacity adsorbent for residual ampicillin in pharmaceutical wastewater	Tariq J. Al-Musawi, Nezamaddin Mengelizadeh, Mahmoud Taghavi, Samaneh Mohebi & Davoud Balarak	<a href="https://link.springer.com/article/10.1007%2Fs13399-021-01962-4">https://link.springer.com/article/10.1007%2Fs13399-021-01962-4</a>	SDG6 & SDG8	2021
52	Grid-independent pv-wind-diesel generator hybrid renewable energy system for a medium population: A case study	Zaidoon W. J. AL-Shammari , M. M. Azizan, and A. S. F. Rahman	<a href="https://jestec.taylors.edu.my/V16Issue1.htm">https://jestec.taylors.edu.my/V16Issue1.htm</a>	SDG7	2021



53	Impact of renewable energy sources integration with power grid systems through several methodology's	Omar A. AlKawak and Ali R. Ramul	<a href="https://ijnaa.semnan.ac.ir/article_5377.htm">https://ijnaa.semnan.ac.ir/article_5377.htm</a> 1	SDG7	2021
54	Influence of the polymer molecular weights on the electrical properties of Poly(vinyl alcohol) – Poly(ethylene glycols)/Graphene oxide nanocomposites	Shurooq S.Al-AbbasaRusul A.Ghazib Athmar K.Al-shammaria Nisreen R.AldulaimiaAli R.Abdulridhaa Sameer H.Al-Nesrawya Ehssan Al-Bermanya	<a href="https://www.sciencedirect.com/science/article/pii/S2214785320402822">https://www.sciencedirect.com/science/article/pii/S2214785320402822</a>	SDG7	2021
55	The effect of temperature on electrical energy production in double chamber microbial fuel cell using different electrode materials	Marwa S.Hamed, Hasan S.Majdi, and Basim O.Hasan	<a href="https://www.sciencedirect.com/science/article/pii/S2214785320405358">https://www.sciencedirect.com/science/article/pii/S2214785320405358</a>	SDG7	2021
56	Green Micro-grid Based on PV/WT Hybrid System for Remote and Rural Population in Iraq: A Case Study	Zaidoon W. J. Al-Shammari, Safaa Kother, Ihsan Ahmed Taha, H. Enawi Hayder, M. Almkhtar Hussam, Ali Hadi, M. M. Azizan, A. S. F. Rahman	<a href="https://link.springer.com/chapter/10.1007%2F978-981-16-0866-7_96">https://link.springer.com/chapter/10.1007%2F978-981-16-0866-7_96</a>	SDG7	2021
57	Feasibility of PV–Wind–Diesel Hybrid Renewable Energy Power System for off-Grid Rural Electrification in Iraq: A Case Study	Zaidoon W. J. AL-Shammari, M. M. Azizan, A. S. F. Rahman	<a href="https://jestec.taylors.edu.my/V16Issue3.htm">https://jestec.taylors.edu.my/V16Issue3.htm</a>	SDG7 & SDG11	2021



58	Cyber physical systems: A smart city perspective	Firoz Khan, R. Lakshmana Kumar, Seifedine Kadry, Yunyoung Nam, Maytham N. Meqdad	<a href="http://ijece.iaescore.com/index.php/IJECE/article/view/24591">http://ijece.iaescore.com/index.php/IJECE/article/view/24591</a>	SDG7, SDG11	2021
59	A Secure and Lightweight Three-Factor Remote User Authentication Protocol for Future IoT Applications	Bahaa Hussein Taher, Huiyu Liu, Firas Abedi, Hongwei Lu, Ali A. Yassin, and Alzahraa J. Mohammed	<a href="https://www.hindawi.com/journals/js/2021/8871204/">https://www.hindawi.com/journals/js/2021/8871204/</a>	SDG7, SDG11 &SDG12	2021
60	Econometric Analysis of Oil Revenue Effect on Foreign Reserves of the Iraqi Economy 2003-2018	Haidar Ali Mohammed Al Dulaimi, Asam Mohamed aljebory, Husam Abas Ali, and Mustafa Habeeb obaid Al Imari,	<a href="https://www.abacademies.org/articles/econometric-analysis-of-oil-revenue-effect-on-foreign-reserves-of-the-iraqi-economy-20032018-11635.html">https://www.abacademies.org/articles/econometric-analysis-of-oil-revenue-effect-on-foreign-reserves-of-the-iraqi-economy-20032018-11635.html</a>	SDG8	2021
61	The role of Knowledge Machinery in Supporting Financial and Accounting Transparency in the Economic Unit	Atared saad jebur AL-Mashhadi and Muiead A. K. Al-Fadhel	<a href="https://archives.palarch.nl/index.php/jae/article/view/6330">https://archives.palarch.nl/index.php/jae/article/view/6330</a>	SDG8 & SDG10	2021
62	Noise Level in Textile Industries: Case Study Al-Hillah Textile Factory-Company for Textile Industries, Al-Hillah-Babylon-Iraq	Ali Chabuk, Zahraa Ali Hammood, Salwan Ali Abed, Majid M.A. Kadhim, Khalid Hashim, Nadhir Al-Ansari and Jan Laue	<a href="https://iopscience.iop.org/article/10.1088/1755-1315/790/1/012048">https://iopscience.iop.org/article/10.1088/1755-1315/790/1/012048</a>	SDG9	2021



63	Comparison between Artificial Neural Network and Rigorous Mathematical Model in Simulation of Industrial Heavy Naphtha Reforming Process	Ali Al-Shathr, Zaidoon M. Shakor, Hasan Sh. Majdi, Adnan A. AbdulRazak, and Talib M. Albayati	<a href="https://www.mdpi.com/2073-4344/11/9/1034">https://www.mdpi.com/2073-4344/11/9/1034</a>	SDG9	2021
64	Green synthesis of zinc nanoparticles using Lavandula angustifolia Vera. Extract by microwave method and its prophylactic effects on Toxoplasma gondii infection	MassumehSaadatmand, Ghaidaa Raheem LateefAl-Awsi, Abdullah Dalanazi, AsgharSepahvand, Mojtaba Shakibaie, Saeedeh Shojaee, Rasool Mohammadi, and Hossein Mahmoudvand	<a href="https://www.sciencedirect.com/science/article/pii/S1319562X21005817">https://www.sciencedirect.com/science/article/pii/S1319562X21005817</a>	SDG3 & SDG9	2021
65	Bayesian Regularized Neural Network Model Development for Predicting Daily Rainfall from Sea Level Pressure Data: Investigation on Solving Complex Hydrology Problem	Lu Ye, Saadya Fahad Jabbar, Musaddak M. Abdul Zahra, and Mou Leong Tan	<a href="https://www.hindawi.com/journals/complexity/2021/6631564/">https://www.hindawi.com/journals/complexity/2021/6631564/</a>	SDG13	2021
66	Desalination of Agricultural Wastewater by Solar Adsorption System A Numerical Study	Jehan F AlRubaiea, Farkad A Latteiff, Jasim M Mahdi, Mohammed A Atiya, Hasan Sh Majdi	<a href="https://ejournal.undip.ac.id/index.php/ijred/article/view/38798">https://ejournal.undip.ac.id/index.php/ijred/article/view/38798</a>	SDG6	2021
67	Comparative between different Natural Sources of Activated Carbon for the Removal Reactive Green Dye from Aqueous Solution	Aseel M. Aljeboree, Ennas Abdul Hussein, Asraa H. Aljbory, Sadiq J. Baqir, Ameera Hassan Hamed, Azal Shakir Waheeb	<a href="https://www.neuroquantology.com/article.php?id=2678">https://www.neuroquantology.com/article.php?id=2678</a>	SDG13	2021



68	Diagnosis of bacterial blood stream infections in coronavirus disease 2019 (COVID-19) using 16S rRNA sequencing method	Hassan Jabbar S., Hassan Fuad Ghazi, Zaidan Ali	<a href="https://biomedicineonline.org/index.php/home/article/view/802">https://biomedicineonline.org/index.php/home/article/view/802</a>	SDG2, SDG3	2021
69	A Mini-Review of Enhancing Ultrafiltration Membranes (UF) for Wastewater Treatment: Performance and Stability	Eman Sh. Awad, Tamara M. Sabirova, Natalia A. Tretyakova, Qusay F. Alsahy, Alberto Figoli and Issam K. Salih	<a href="https://www.mdpi.com/2305-7084/5/3/34">https://www.mdpi.com/2305-7084/5/3/34</a>	SDG6	2021
70	Towards Net Zero Carbon Economy: Improving the Sustainability of Existing Industrial Infrastructures in the UK	Ali Shubbar , Mohammed Nasr, Mayadah Fala, and Zainab Al-Khafaji	<a href="https://www.mdpi.com/1996-1073/14/18/5896">https://www.mdpi.com/1996-1073/14/18/5896</a>	SDG7, SDG8, SDG9& SDG13	2021
71	The combined effect of CKD and silica fume on the mechanical and durability performance of cement mortar	Mayadah W. Falah, Alaa Adnan Hafedh, Safa A. Hussein, Zainab S. Al-Khafaji, Ali A. Shubbar, Mohammed Salah Nasr	<a href="https://www.scientific.net/KEM.895.59">https://www.scientific.net/KEM.895.59</a>	SDG13	2021
72	Agro-based carbon for lead removal from Solutions	Salam M. Naser, Sarah A. Ali, Rasha S. Alkizwini, Mohammad Alshamali, Saif S. Alqzweeni, Mawada Abdellatif, Joseph Amoako-Attah and Ahmed AlKhayyat	<a href="https://iopscience.iop.org/article/10.1088/1757-899X/1058/1/012019/meta">https://iopscience.iop.org/article/10.1088/1757-899X/1058/1/012019/meta</a>	SDG13	2021



73	Effect of Bio-Fertilization on the Growth and Some Fruit Qualitative characters of Three Strawberry Fragaria Ananassa Duch Varieties	Ali Hussein Demin Al-Khafaji	<a href="http://dx.doi.org/10.51470/PLANTARCHIVES.2021.v21.S1.228">http://dx.doi.org/10.51470/PLANTARCHIVES.2021.v21.S1.228</a>	SDG2 & SDG15	2021
74	Investigation of heat transfer enhancement in a triple tube latent heat storage system using circular fins with inline and staggered arrangement	Xinguo Sun, Hayder I. Mohammed, Mohammadreza Ebrahimmataj Tiji, Jasim M. Mahdi, Hasan Sh. Majdi, Zixiong Wang, Pouyan Talebizadehsardari and Wahiba Yaici	<a href="https://www.mdpi.com/2079-4991/11/10/2647">https://www.mdpi.com/2079-4991/11/10/2647</a>	SDG7	2021
75	Activated carbon derived from Azolla filiculoides fern: a high-adsorption-capacity adsorbent for residual ampicillin in pharmaceutical wastewater	Tariq J. Al-Musawi, Nezamaddin Mengelizadeh, Mahmoud Taghavi, Samaneh Mohebi & Davoud Balarak	<a href="https://link.springer.com/article/10.1007/s13399-021-01962-4">https://link.springer.com/article/10.1007/s13399-021-01962-4</a>	SDG6, SDG13	2021
76	Enhancement of Energy Transfer Efficiency for Photovoltaic (PV) Systems by Cooling the Panel Surfaces	Hasan Shakir Majdi, Mahmoud A. Mashkour, Laith Jaafer Habeeb and Ahmad H. Sabry	<a href="http://journals.uran.ua/eejet/article/view/238700">http://journals.uran.ua/eejet/article/view/238700</a>	SDG7	2021
77	Analysis of fault diagnosis of DC motors by power consumption pattern recognition	Hasan Shakir Majdi, Sameera Sadey Shijer, Abduljabbar Owaied Hanfesh, Laith Jaafer Habeeb and Ahmad H. Sabry	<a href="https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3961642">https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3961642</a>	SDG12	2021





78	Evaluation and improvement pedestrians characteristics for selection section of urban area	Abdulkareem Naji Abbood, and Safa A. Hussein	<a href="http://pen.ius.edu.ba/index.php/pen/article/view/2357">http://pen.ius.edu.ba/index.php/pen/article/view/2357</a>	SDG11	2021
79	Effective removal of Sirius yellow K-CF dye by adsorption process onto chitosan-polyacrylamide composite loaded with ZnO nanoparticles	Narjes Sadat Mazari Moghaddam, Tariq J. Al-Musawi, Fatemeh Sadat Arghavan and Negin Nasseh	<a href="https://www.tandfonline.com/doi/full/10.1080/03067319.2021.1998470">https://www.tandfonline.com/doi/full/10.1080/03067319.2021.1998470</a>	SDG6	2021
80	Preparation of CuFe <sub>2</sub> O <sub>4</sub> /montmorillonite nanocomposite and explaining its performance in the sonophotocatalytic degradation process for ciprofloxacin	Tariq J. Al-Musawi, Nezamaddin Mengelizadeh Kuppusamy Sathishkumar, and Samaneh Mohebi Davoud	<a href="https://www.sciencedirect.com/science/article/abs/pii/S2215038221001722?via%3DiHub">https://www.sciencedirect.com/science/article/abs/pii/S2215038221001722?via%3DiHub</a>	SDG6	2021
81	Natural Convection In Sinusoidal-Corrugated Enclosure Utilizing Silver/Water Nanofluid With Different Shapes Of Concentric Inner Cylinders	Emad D. Aboud, Qusay Rasheed Al-Amir, Hameed K. Hamzah, Ammar Abdulkadhim, Mustafa M. Gabir, Salwan Obaid Waheed Khafaji, and Farooq H. Ali	<a href="http://thermalfluidscentral.org/journals/index.php/Heat_Mass_Transfer/article/view/1209">http://thermalfluidscentral.org/journals/index.php/Heat_Mass_Transfer/article/view/1209</a>	SDG6	2021
82	Engineered electrocoagulation reactor for the removal of E. coli from wastewaters	Eman A. Al-Imara, Rand L. Al-Jaryan, Sabrean F. Jawad, Mohanad M. Kareem and Hayfaa A. Mubarak	<a href="https://iopscience.iop.org/article/10.1088/1755-1315/877/1/012048/meta">https://iopscience.iop.org/article/10.1088/1755-1315/877/1/012048/meta</a>	SDG6	2021



83	Fluoride removal using electrocoagulation technique	Hind M. Ewadh, Mustafa J. Al Imari, Sabrean F. Jawad and Hayfaa A. Mubarak	<a href="https://iopscience.iop.org/article/10.1088/1755-1315/877/1/012047/meta">https://iopscience.iop.org/article/10.1088/1755-1315/877/1/012047/meta</a>	SDG6	2021
84	The utilization of lignocellular bio-mass as green building thermal insulation material	Muhammad Abdulredha, Sadiq J. Baqir and Sarah M. Ali	<a href="https://iopscience.iop.org/article/10.1088/1755-1315/877/1/012052">https://iopscience.iop.org/article/10.1088/1755-1315/877/1/012052</a>	SDG11	2021
85	Thermal behavior of water base-fluid in the presence of graphene nanosheets and carbon nanotubes: A molecular dynamics simulation	Danhong Li Mustafa Z. Mahmoud Wanich Suksatan Maria Kuznetsova Azher M. Abed Maboud Hekmatifar Davood Toghraie and Roozbeh Sabetvand	<a href="https://www.sciencedirect.com/science/article/pii/S2214157X21008327?via%3Dihub">https://www.sciencedirect.com/science/article/pii/S2214157X21008327?via%3Dihub</a>	SDG6	2021
86	Degradation of Anti-Inflammatory Drugs in Synthetic Wastewater by Solar Photocatalysis	Marwan Al-Jemeli, Mahmoud Abbas Mahmoud, Hasan Sh. Majdi, Mohammad Fadhil Abid ,Hiba M. Abdullah and Adnan A. AbdulRazak	<a href="https://www.mdpi.com/2073-4344/11/11/1330">https://www.mdpi.com/2073-4344/11/11/1330</a>	SDG6	2021
87	Elimination of phenol from refineries effluents using electrocoagulation method	M Abdulredha, Amal H. Khalil, Sarah A. Ali, Ibijoke Idowu and J. Amoako-Attah	<a href="https://iopscience.iop.org/article/10.1088/1755-1315/877/1/012053">https://iopscience.iop.org/article/10.1088/1755-1315/877/1/012053</a>	SDG6	2021



88	Removal of COD from Petroleum Refinery Wastewater Using Electrocoagulation Method	Amal H. Khalil, Mohammed A. Naji and Salam M. Naser	<a href="https://iopscience.iop.org/article/10.1088/1755-1315/877/1/012046">https://iopscience.iop.org/article/10.1088/1755-1315/877/1/012046</a>	SDG6	2021
89	Environmental Emission Analysis of Biodiesel with Al <sub>2</sub> O <sub>3</sub> Nanometal Additives as Fuel in a Diesel Engine	Mohammad Ibrahim Al Mishlah Alghamdi, Ilhami Colak, Musaddak Maher Abdul Zahra, and T. Bothichandar	<a href="https://www.hindawi.com/journals/jnm/2021/2544098/">https://www.hindawi.com/journals/jnm/2021/2544098/</a>	SDG7, SDG13	2021
90	Design of Cooling System for an Automotive using Exhaust Gasses of Turbocharged Diesel Engine	Qusay Rasheed Al-Amir, Mohamed F. Al-Dawody and Azher muhson Abd	<a href="https://link.springer.com/article/10.1007/s40032-021-00787-4">https://link.springer.com/article/10.1007/s40032-021-00787-4</a>	SDG7	2021
91	Investigating the performance of Iraqi EFL researchers in writing quantitative and qualitative researches	Rusul Assim Abood, and Assim Abood Zbar Alalwany	<a href="http://www.jlls.org/index.php/jlls/article/view/3474">http://www.jlls.org/index.php/jlls/article/view/3474</a>	SDG4	2021
92	Electrochemical remediation of wastewater contaminated by phenol	Muhammed A. Shallal, Saif S. Radhi, Ghusoon J. Shabaa, M. Abdulredha, Mohanad M. Kareem and Hayfaa A. Mubarak	<a href="https://iopscience.iop.org/article/10.1088/1755-1315/877/1/012051">https://iopscience.iop.org/article/10.1088/1755-1315/877/1/012051</a>	SDG6	2021



93	Denitrification of water using a low-cost adsorbent	Wisam A. Jawad, Sadiq J. Baqir, Saif S. Alquzweeni, Abdalrahman Alajmi, Rasha S. Alkizwini, Patryk Kot and Ahmed H. AlKhayyat	<a href="https://iopscience.iop.org/article/10.1088/1757-899X/1058/1/012021">https://iopscience.iop.org/article/10.1088/1757-899X/1058/1/012021</a>	SDG6, SDG13	2021
94	The effect of the true multiple of offences in the penalty: (comparative study)	Sagad Thamer Kazem Al-Khafaji	<a href="https://rigeo.org/submit-a-manuscript/index.php/submission/article/view/2466">https://rigeo.org/submit-a-manuscript/index.php/submission/article/view/2466</a>	SDG16	2021
95	Macro Environment Effect On E-Learning Readiness In Middle East Countries: A Conceptual Model	S. K. J. Al-Wassiti, I. Mohamed, W. J. A. Al-Nidawi	<a href="https://jestec.taylors.edu.my/Special%20Issue%20ACSAT%202021.htm">https://jestec.taylors.edu.my/Special%20Issue%20ACSAT%202021.htm</a>	SDG4	2021
96	Applying of No-fines concretes as a porous concrete in different construction application	Qosai Sahib Radi Marshdi, Safa A. Hussien, Basim M. Mareai, Zainab S. Al-Khafaji, and Ali. A. Shubbar	<a href="http://pen.ius.edu.ba/index.php/pen/article/view/2476">http://pen.ius.edu.ba/index.php/pen/article/view/2476</a>	SDG9, SDG11	2021
97	A Newly Developed Empirical Predictive Model for the Dispersed Phase (DP) Holdup in Rotating Disc Contactors	Ayham M. I. Al-Rahawi, Wallaa A. Noori, Amer A. Abdulrahman, Hasan Sh. Majdi, Issam K. Salih, Qusay F. Alsahy and Farouq S. Mjalli	<a href="https://www.mdpi.com/2305-7084/5/4/79">https://www.mdpi.com/2305-7084/5/4/79</a>	SDG12	2021



98	Geochemical And Mineralogical Assessment Of Secondary Gypsum In Al-Najaf, Iraq And Employment As Raw Material For Cement Industry	Mohanad R.A. Al-Owaidi, Mohammed L. Hussein, Ruaa Issa Muslim	<a href="https://gsm.org.my/content.php?id=54&amp;pid=702001-101910">https://gsm.org.my/content.php?id=54&amp;pid=702001-101910</a>	SDG9	2021
99	Production of Ultra-High-Performance Concrete with Low Energy Consumption and Carbon Footprint Using Supplementary Cementitious Materials Instead of Silica Fume: A Review	Mays A. Hamad, Mohammed Nasr, Ali Shubbar, Zainab Al-Khafaji, Zainab Al Masoodi, Osamah Al-Hashimi, Patryk Kot, Rafid Alkhaddar and Khalid Hashim	<a href="https://www.mdpi.com/1996-1073/14/24/8291">https://www.mdpi.com/1996-1073/14/24/8291</a>	SDG7, SDG13	2021
100	Synthesis of Ag decorated TiO <sub>2</sub> nanoneedles for photocatalytic degradation of methylene blue dye	Noor J Ridha, Firas K Mohamad Alosfur, Hiba Basim Abbas Kadhim and Luma M Ahmed	<a href="https://iopscience.iop.org/article/10.1088/2053-1591/ac4408">https://iopscience.iop.org/article/10.1088/2053-1591/ac4408</a>	SDG6	2021
101	Toward a Cloud based Disease Diagnosis System Using Sequential Quadratic Programming Approach	Ali Hussein Shamman Al-Safi, Zaid Ibrahim Rasool Hani, Ahmed A Hadi, Musaddak M. Abdul Zahra and Wael Jabbar Abed Al-Nidawi	<a href="https://www.webology.org/abstract.php?id=734">https://www.webology.org/abstract.php?id=734</a>	SDG3	2021
102	Classification of EEG Signal by Using Optimized Quantum Neural Network	Dalael Saad Abdul-Zahra, Ali Talib Jawad, Hassan Muwafaq Ghani, Ali Najim Abdullah	<a href="http://section.iaesonline.com/index.php/IJEEI/article/view/3486">http://section.iaesonline.com/index.php/IJEEI/article/view/3486</a>	SDG7	2021



103	The Glutathione S-Transferasee (GSTT and GSTM) Genotyping and Alcohol Level in Drunks	Mona N. Al-Terehi, Usama S. Altimari, Abed J. Kadhim and Aamal M. Kadhum	<a href="https://www.myresearchjournals.com/index.php/IJPQA/article/view/8055">https://www.myresearchjournals.com/index.php/IJPQA/article/view/8055</a>	SDG3	2021
104	Study the effects of smoking on selected oral biomarkers levels in chronic periodontitis cases in Al-Hilla city	Hanan Selman Hessian, Zainab Muhi Hameed, and Doaa Adil Abood	<a href="https://www.sysrevpharm.org/abstract/study-the-effects-of-smoking-on-selected-oral-biomarkers-levels-in-chronic-periodontitis-cases-in-alhilla-city-65452.html">https://www.sysrevpharm.org/abstract/study-the-effects-of-smoking-on-selected-oral-biomarkers-levels-in-chronic-periodontitis-cases-in-alhilla-city-65452.html</a>	SDG3	2021
105	The Role of Foreign Direct Investment in Achieving Sustainable Development in Iraq: An Analytical Study for The Period of 2010-2018	Haider Kadhim Mahdi, Abdulmahdi Raheem Hamza, and Yousif Mousa Sabti	<a href="https://acspublisher.com/journals/index.php/sajssh/article/view/1241">https://acspublisher.com/journals/index.php/sajssh/article/view/1241</a>	SDG8	2021
106	Geo-Engineering Study of Selected Soils for Cement Industry in Al-Kifil District, Babylon, Central Iraq	Muhsen O. Kalaf, Mohammed L. Hussien and Bilal M.A. Issa	<a href="https://igj-iraq.org/igj/index.php/igj/article/view/689">https://igj-iraq.org/igj/index.php/igj/article/view/689</a>	SDG9	2021
107	Degradation of humic acid using a solar light-photocatalytic process with a FeNi <sub>3</sub> /SiO <sub>2</sub> /TiO <sub>2</sub> magnetic nanocomposite as the catalyst	Akbari F , Khodadadi M , Al-Musawi TJ , Varouqa IF , and Naghizadeh A	<a href="http://bsid.bums.ac.ir/dspace/handle/bums/9899">http://bsid.bums.ac.ir/dspace/handle/bums/9899</a>	SDG6	2021



108	Polymerase chain reaction technique for molecular detection of HPV16 infections among women with cervical cancer in Dhi-Qar Province	Abduladheem TurkiJalil, Ali Hussein Demin Al-Khafaji, AleksandrKarevskiy, Saja Hussain Dilfy, and Zaman K.Hanan	<a href="https://www.sciencedirect.com/science/article/pii/S2214785321037871?via%3Dihub">https://www.sciencedirect.com/science/article/pii/S2214785321037871?via%3Dihub</a>	SDG3	2021
109	Sleep-Disordered Breathing in Children an Overview of Otolaryngological Risk Factors	Forat H Alsultany and Abdulhusein Mizhir Almaamuri	<a href="https://www.clinicalschizophrenia.net/abstract/sleepdisordered-breathing-in-children-an-overview-of-otolaryngological-risk-factors-80930.html">https://www.clinicalschizophrenia.net/abstract/sleepdisordered-breathing-in-children-an-overview-of-otolaryngological-risk-factors-80930.html</a>	SDG3	2021
110	A study of some nutrient supplement impacts on the health of bodybuilding	Ameer M.Hadi, Lubna Abdulazeem, Mazin H.Kzar, and Essam ShawkyKhattab	<a href="https://doi.org/10.1016/j.matpr.2021.05.212">https://doi.org/10.1016/j.matpr.2021.05.212</a>	SDG 3	2021
111	Groundwater Hydrogeochemical and Quality Appraisal for Agriculture Irrigation in Greenbelt Area, Iraq	Awad, E.Sh. Imran, N.S. Albayati, M.M. Snegirev, V. Sabirova, T.M. Tretyakova, N.A. Alsalhy, Q.F. Al-furaiji, M.H. Salih, I.K.and Majdi, H.Sh.	<a href="https://www.mdpi.com/2076-3298/9/4/43">https://www.mdpi.com/2076-3298/9/4/43</a>	SDG 2	2022
112	Practice of intercropping and its impact on legume productivity in Egypt	Abbas, M.M. Hajray, A.O. Al-Azzawi, W.K. Alkhafaje, W.K. Alkadir, O.K.A. Al-Zubaidei, S.A. Ahjel, S. Alhakeem, A.A.N. Salami, H.T.A. Hamad, D.A. Falih, K.T. and Baaj, O.	<a href="https://cjes.guilan.ac.ir/article_5759.html">https://cjes.guilan.ac.ir/article_5759.html</a>	SDG 2	2022



113	Remediation of mine polluted soil with nano-enhanced materials: Development of extreme learning machine approaches	Ji, M. AL-Huqail, A.A. Majdi, A. Liu, H. Ali, I. and Marzouki, R.	<a href="https://pubmed.ncbi.nlm.nih.gov/35931267/">https://pubmed.ncbi.nlm.nih.gov/35931267/</a>	SDG2	2022
114	Evaluation of food processing with the management of food, water, and energy nexus in Baghdad, Iraq	Yasin, G. Brontowiyono, W. Oplencia, M.J.C. Sharma, S. Shalaby, M.N. Al-Thamir, M. Jalil, A.T. Jabbar, A.H. and Iswanto, A.H.	<a href="https://www.scielo.br/j/cta/a/8hJqNzM3hBPg8n6prch7kcm/abstract/?lang=en">https://www.scielo.br/j/cta/a/8hJqNzM3hBPg8n6prch7kcm/abstract/?lang=en</a>	SDG2	2022
115	Analysis of Agriculture and Food Supply Chain through Blockchain and IoT with Light Weight Cluster Head	Adow, A.H. Shrivastava, M.K. Mahdi, H.F. Zahra, M.M.A. Verma, D. Doohan, N.V. and Jalali, A.	<a href="https://www.hindawi.com/journals/cin/2022/1296993/">https://www.hindawi.com/journals/cin/2022/1296993/</a>	SDG2	2022
116	Effects of Internet of things (IoT) on performance of agricultural in China: A case study	Fu, H. Li, H. Ramayah, T. Fu, A. Jabbar, A.H. and Abed, A.M.	<a href="https://www.tandfonline.com/doi/abs/10.1080/15567036.2022.2100012">https://www.tandfonline.com/doi/abs/10.1080/15567036.2022.2100012</a>	SDG2	2022
117	Sustainability assessment of food industry with the approach of water, energy and food nexus	Tseng, C.-J. Chetthamrongchai, P. Mahmudiono, T. Sharma, S.K. Al-Awsi, G.R.L. Abed, S.A. Mohammed, F. Oplencia, M.J.C. and Rudiansyah, M.	<a href="https://www.scielo.br/j/cta/a/QvD8DzxQBFy8p8pbfrpC4Wn/">https://www.scielo.br/j/cta/a/QvD8DzxQBFy8p8pbfrpC4Wn/</a>	SDG2	2022





118	Effects of water shortage on food legume crops	Batayneh, K.A. Razzaq, M.G.A. Ghazuan, T. Jabr, H.S. Hameed, N.M. Zabibah, R.S. Obaid, F.N. Obaid, A.J. Thijail, H.A. Ahjel, S. Safaa, G.and Maabreh, H.G.	<a href="https://cjes.guilan.ac.ir/article_5776.html">https://cjes.guilan.ac.ir/article_5776.html</a>	SDG2	2022
119	Prediction of COVID-19 manipulation by selective ACE inhibitory compounds of Potentilla reptant root: In silico study and ADMET profile	Xu, Y. Al-Mualm, M. Terefe, E.M. Shamsutdinova, M.I. Opuencia, M.J.C. Alsaikhan, F. Turki Jalil, A. Hammid, A.T. Enayati, A. Mirzaei, H. Khori, V. Jabbari, A. Salehi, A. Soltani, A. and Mohamed, A.	<a href="https://pubmed.ncbi.nlm.nih.gov/35502159/">https://pubmed.ncbi.nlm.nih.gov/35502159/</a>	SDG3	2022
120	Serum level estimation of some biomarkers in diabetic and non-diabetic COVID-19 infected patients	Khan, M.U.F. Ali, B.R. Mohammed, H.Q. Al-Shammari, H.M.T. Jalil, A.T. Hindi, N.K.K. Suksatan, W. Saeed, B.Q. Obaid, R.F. Saleh, M.M.and Kadhim, M.M.	<a href="https://pubmed.ncbi.nlm.nih.gov/35136705/">https://pubmed.ncbi.nlm.nih.gov/35136705/</a>	SDG3	2022
121	Exposure to ambient air pollution and osteoarthritis; an animal study	Fitriyah, A. Nikolenko, D.A. Abdelbasset, W.K. Maashi, M.S. Jalil, A.T. Yasin, G. Abdulkadhm, M.M. Samieva, G.U. Lafta, H.A. Abed, A.M. Amaral, L.S. and Mustafa, Y.F.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S0045653522011912#!">https://www.sciencedirect.com/science/article/abs/pii/S0045653522011912#!</a>	SDG3	2022
122	Optical-based biosensor for detection of oncomarker CA 125, recent progress and current status	Valerievich Yumashev, A. Rudiansyah, M. Chupradit, S. Kadhim, M.M. Turki Jalil, A. Abdelbasset, W.K. Suksatan, W. Mireya Romero Parra, R. Fakri Mustafa, Y. Abdullaev, B. and Bidares, R.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S0003269722002068">https://www.sciencedirect.com/science/article/abs/pii/S0003269722002068</a>	SDG3	2022



123	Challenges in the implementation of bioremediation processes in petroleum-contaminated soils: A review	Jabbar, N.M. Alardhi, S.M. Mohammed, A.K. Salih, I.K. and Albayati, T.M.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S221515322200054X">https://www.sciencedirect.com/science/article/abs/pii/S221515322200054X</a>	SDG3	2022
124	Recent advances on applications of immunosensing systems based on nanomaterials for CA15-3 breast cancer biomarker detection	Oktaviyanti, I.K. Ali, D.S. Awadh, S.A. Opulencia, M.J.C. Yusupov, S. Dias, R. Alsaikhan, F. Mohammed, M.M. Sharma, H. Mustafa, Y.F. and Saleh, M.M.	<a href="https://pubmed.ncbi.nlm.nih.gov/35641643/">https://pubmed.ncbi.nlm.nih.gov/35641643/</a>	SDG3	2022
125	Folate-Targeted Curcumin-Loaded Niosomes for Site-Specific Delivery in Breast Cancer Treatment: In Silico and In Vitro Study	Honarvari, B. Karimifard, S. Akhtari, N. Mehrarya, M. Moghaddam, Z.S. Ansari, M.J. Jalil, A.T. Matencio, A. Trotta, F. Yeganeh, F.E. Farasati Far, B. Arki, M.K. Naimi-Jamal, M.R. Noorbazargan, H. Lalami, Z.A. and Chiani, M.	<a href="https://www.mdpi.com/1420-3049/27/14/4634">https://www.mdpi.com/1420-3049/27/14/4634</a>	SDG3	2022
126	Evaluation of Antibacterial Activity of Calcium Phosphates Based Bone Cements for Biomedical Applications	Alshemary, A.Z. Sarsik, B. Salman, N.A. Şahin, S.M. Şahin, M.M. and Muhammed, Y.	<a href="https://avesis.hacettepe.edu.tr/yayin/04cbc375-48cd-4724-9624-4672b6317b20/evaluation-of-antibacterial-activity-of-calcium-phosphates-based-bone-cements-for-biomedical-applications">https://avesis.hacettepe.edu.tr/yayin/04cbc375-48cd-4724-9624-4672b6317b20/evaluation-of-antibacterial-activity-of-calcium-phosphates-based-bone-cements-for-biomedical-applications</a>	SDG3	2022
127	Individual genetic variability mainly of Proinflammatory cytokines, cytokine receptors, and toll-like receptors dictates pathophysiology of COVID-19 disease	Vakil, M.K. Mansoori, Y. Al-Awsi, G.R.L. Hosseinipour, A. Ahsant, S. Ahmadi, S. Ekrahi, M. Montaseri, Z. Pezeshki, B. Mohaghegh, P. Sohrabpour, M. Bahmanyar, M. Daraei, A. Dadkhah Jouybari, T. Tavassoli, A. and Ghasemian, A.	<a href="https://onlinelibrary.wiley.com/doi/full/10.1002/jmv.27849">https://onlinelibrary.wiley.com/doi/full/10.1002/jmv.27849</a>	SDG3	2022



128	Fabrication of HKUST-1/ZnO/SA nanocomposite for Doxycycline and Naproxen adsorption from contaminated water	Xing, L. Haddao, K.M. Emami, N. Nalchifard, F. Hussain, W. jasem, H. Dawood, A.H. Toghraie, D. and Hekmatifar, M.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S2352554122001619">https://www.sciencedirect.com/science/article/abs/pii/S2352554122001619</a>	SDG3	2022
129	Statistical assessment for performance of Al-Mussaib drinking water treatment plant at the year 2020	Nasir, M.J. Abdulhasan, M.J. Ridha, S.Z.A. Hashim, K.S. and Jasim, H.M.	<a href="https://iwaponline.com/wpt/article/17/3/808/87291/Statistical-assessment-for-performance-of-AI">https://iwaponline.com/wpt/article/17/3/808/87291/Statistical-assessment-for-performance-of-AI</a>	SDG3	2022
130	An Effective Framework for Enhancing Performance of Internet of Things using Ant Colony Meta-Heuristic and Machine Learning Algorithms	Abed, A.S. Hassan, H.F. Aldulaimi, M.H. Zahra, M.M.A. and Jaleel, R.A.	<a href="https://ieeexplore.ieee.org/abstract/document/9823808">https://ieeexplore.ieee.org/abstract/document/9823808</a>	SDG3	2022
131	Identification and Classification of Prostate Cancer Identification and Classification Based on Improved Convolution Neural Network	Tyagi, S. Tyagi, N. Choudhury, A. Gupta, G. Zahra, M.M.A. and Rahin, S.A.	<a href="https://www.hindawi.com/journals/bmri/2022/9112587/">https://www.hindawi.com/journals/bmri/2022/9112587/</a>	SDG3	2022
132	Drug delivery and anticancer activity of biosynthesised mesoporous Fe <sub>2</sub> O <sub>3</sub> nanoparticles	Abolhasani Zadeh, F. Abdalkareem Jasim, S. Atakhanova, N.E. Majdi, H.S. Abed Jawad, M. Khudair Hasan, M. Borhani, F. and Khatami, M.	<a href="https://ietresearch.onlinelibrary.wiley.com/doi/full/10.1049/nbt2.12080">https://ietresearch.onlinelibrary.wiley.com/doi/full/10.1049/nbt2.12080</a>	SDG3	2022



133	Clinical application of mesenchymal stem cell in regenerative medicine: a narrative review	Margiana, R. Markov, A. Zekiy, A.O. Hamza, M.U. Al-Dabbagh, K.A. Al-Zubaidi, S.H. Hameed, N.M. Ahmad, I. Sivaraman, R. Kzar, H.H. Al-Gazally, M.E. Mustafa, Y.F. and Siahmansouri, H.	<a href="https://stemcellres.biomedcentral.com/articles/10.1186/s13287-022-03054-0">https://stemcellres.biomedcentral.com/articles/10.1186/s13287-022-03054-0</a>	SDG3	2022
134	Find new channel for overcoming chemoresistance in cancers: Role of stem cells-derived exosomal microRNAs	Hussein, G.M. Mohammed, S.M. Faris, M. Mohammed, A. Kadhim, M.J. Awadh, S.A. Ajam, W.H. and Jalil, A.T.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S0141813022016968">https://www.sciencedirect.com/science/article/abs/pii/S0141813022016968</a>	SDG3	2022
135	Galangin mitigates DOX-induced cognitive impairment in rats: Implication of NOX-1/Nrf-2/HMGB1/TLR4 and TNF- $\alpha$ /MAPKs/RIPK/MLKL/BDNF	Abd El-Aal, S.A. Abd Elrahman, M. Reda, A.M. Afify, H. Ragab, G.M. El-Gazar, A.A. and Ibrahim, S.S.A.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S0161813X22001206">https://www.sciencedirect.com/science/article/abs/pii/S0161813X22001206</a>	SDG3	2022
136	An approach to pedestrian walking behaviour classification in wireless communication and network failure contexts	Kareem, Z.H. Zaidan, A.A. Ahmed, M.A. Zaidan, B.B. Albahri, O.S. Alamoodi, A.H. Malik, R.Q. Albahri, A.S. Ameen, H.A. Garfan, S. Mohammed, A. Zaidan, R.A. and Ramli, K.N.	<a href="https://link.springer.com/article/10.1007/s40747-021-00542-3">https://link.springer.com/article/10.1007/s40747-021-00542-3</a>	SDG3	2022
137	Modeling Motorcyclists' Aggressive Driving Behavior Using Computational and Statistical Analysis of Real-Time Driving Data to Improve Road Safety and Reduce Accidents	Abdulwahid, S.N. Mahmoud, M.A. Ibrahim, N. Zaidan, B.B. and Ameen, H.A.	<a href="https://www.mdpi.com/1660-4601/19/13/7704">https://www.mdpi.com/1660-4601/19/13/7704</a>	SDG3	2022



138	Coronavirus disease 2019 (COVID-19) update: From metabolic reprogramming to immunometabolism	Rudiansyah, M. Jasim, S.A. Mohammad pour, Z.G. Athar, S.S. Jeda, A.S. doewes, R.I. Jalil, A.T. Bokov, D.O. Mustafa, Y.F. Noroozbeygi, M. Karampoor, S. and Mirzaei, R.	<a href="https://onlinelibrary.wiley.com/doi/full/10.1002/jmv.27929">https://onlinelibrary.wiley.com/doi/full/10.1002/jmv.27929</a>	SDG3	2022
139	Apigenin alleviates resistance to doxorubicin in breast cancer cells by acting on the JAK/STAT signaling pathway	Maashi, M.S. Al-Mualm, M. Al-Awsi, G.R.L. Opulencia, M.J.C. Al-Gazally, M.E. Abdullaev, B. Abdelbasset, W.K. Ansari, M.J. Jalil, A.T. Alsaikhan, F. Shalaby, M.N. and Mustafa, Y.F.	<a href="https://pubmed.ncbi.nlm.nih.gov/35804214/">https://pubmed.ncbi.nlm.nih.gov/35804214/</a>	SDG3	2022
140	Study of the participation of Lipoprotein Lipase gene polymorphism in coronary artery disease	Asal, G.M.H. Al-Janabi, L.M. and Hussein, N.Y.	<a href="http://www.echemcom.com/issue_19237_20476.html">http://www.echemcom.com/issue_19237_20476.html</a>	SDG3	2022
141	Intimate partner violence against pregnant women during the COVID-19 pandemic: a systematic review and meta-analysis	Huldani, H. Kamal Abdelbasset, W. Abdalkareem Jasim, S. Suksatan, W. Turki Jalil, A. Thangavelu, L. Fakri Mustafa, Y. and Karami, M.	<a href="https://pubmed.ncbi.nlm.nih.gov/35791678/">https://pubmed.ncbi.nlm.nih.gov/35791678/</a>	SDG3	2022
142	Electrochemical monitoring sensors of water pollution systems	Zhang, Z. Liu, H. Wang, Z. Majdi, A. Wang, G. Salameh, A.A. Abdulkreem AL-Huqail, A. and Ali, H.E.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S0278691522003945">https://www.sciencedirect.com/science/article/abs/pii/S0278691522003945</a>	SDG3	2022



143	Detection of the patient with COVID-19 relying on ML technology and FAST algorithms to extract the features	Sahy, S.A. Mahdi, S.H. Gheni, H.M. and Al-Barazanchi, I.	<a href="https://beei.org/index.php/EEI/article/view/4355">https://beei.org/index.php/EEI/article/view/4355</a>	SDG3	2022
144	Role of Acute Myeloid Leukemia (AML)-Derived exosomes in tumor progression and survival	Amin, A.H. Sharifi, L.M.A. Kakhharov, A.J. Opulencia, M.J.C. Alsaikhan, F. Bokov, D.O. Majdi, H.S. Jawad, M.A. Hammid, A.T. Shalaby, M.N. Mustafa, Y.F. and Siahmansouri, H.	<a href="https://pubmed.ncbi.nlm.nih.gov/35486974/">https://pubmed.ncbi.nlm.nih.gov/35486974/</a>	SDG3	2022
145	The Management of Myocardial Injury Related to SARS-CoV-2 Pneumonia	Akkaif, M.A. Bitar, A.N. Al-Kaif, L.A.I.K. Daud, N.A.A. Sha'aban, A. Noor, D.A.M. Abd Aziz, F. Cesaro, A. SK Abdul Kader, M.A. Abdul Wahab, M.J. Khaw, C.S. and Ibrahim, B.	<a href="https://www.mdpi.com/2308-3425/9/9/307">https://www.mdpi.com/2308-3425/9/9/307</a>	SDG3	2022
146	An Effective Heart Disease Detection and Severity Level Classification Model Using Machine Learning and Hyperparameter Optimization Methods	Abdellatif, A. Abdellatef, H. Kanesan, J. Chow, C.-O. Chuah, J.H. and Gheni, H.M.	<a href="https://ieeexplore.ieee.org/document/9831786">https://ieeexplore.ieee.org/document/9831786</a>	SDG3	2022
147	Smartphone-Based Techniques Using Carbon Dot Nanomaterials for Food Safety Analysis	Solanki, R. Patra, I. Kumar, T.C.H.A. Kumar, N.B. Kandeel, M. Sivaraman, R. Turki Jalil, A. Yasin, G. Sharma, S. and Abdulameer Marhoon, H.	<a href="https://www.tandfonline.com/doi/abs/10.1080/10408347.2022.2099733">https://www.tandfonline.com/doi/abs/10.1080/10408347.2022.2099733</a>	SDG3	2022



148	A secure telemedicine electronic platform based on lightweight cryptographic approach	Salem, I.E. Abdulshaheed, H.R. and Gheni, H.M.	<a href="http://telkomnika.uad.ac.id/index.php/TELKOMNIKA/article/view/22662">http://telkomnika.uad.ac.id/index.php/TELKOMNIKA/article/view/22662</a>	SDG3	2022
149	Bioinformatic Analysis Divulged Novel Prognostic Circulating MicroRNAs and Their Potential Target Genes in Breast Cancer	Pourgholamali, B. Sohrabi, B. Salbi, M. Akbari, S. Rastan, I. Sayaf, M. Jalil, A.T. Kadhim, M.M. Sheervalilou, R. and Mehrzad, N.	<a href="https://pubmed.ncbi.nlm.nih.gov/36074234/">https://pubmed.ncbi.nlm.nih.gov/36074234/</a>	SDG3	2022
150	Improving the Heart Disease Detection and Patients' Survival Using Supervised Infinite Feature Selection and Improved Weighted Random Forest	Abdellatif, A. Abdellatef, H. Kanesan, J. Chow, C.-O. Chuah, J.H. and Gheni, H.M.	<a href="https://ieeexplore.ieee.org/document/9802107">https://ieeexplore.ieee.org/document/9802107</a>	SDG3	2022
151	Classification COVID-19 Based on Enhancement X-Ray Images and Low Complexity Model	Saad, A. Kamil, I.S. Alsayat, A. and Elaraby, A.	<a href="https://www.techscience.com/cmc/v72n1/46869">https://www.techscience.com/cmc/v72n1/46869</a>	SDG3	2022
152	Analysis of CT images of the COVID-19 patients	Jabbar, S.I. Majdi, H.S. Hakeem, S.I. Altaee, A.A. Mohammed, M.H. and Aladi, A.Q.	<a href="https://ieeexplore.ieee.org/document/9790201">https://ieeexplore.ieee.org/document/9790201</a>	SDG3	2022



153	The pathogenicity of COVID-19 and the role of pentraxin-3: An updated review study	Margiana, R. Sharma, S.K. Khan, B.I. Alameri, A.A. Opulencia, M.J.C. Hammid, A.T. Hamza, T.A. Babakulov, S.K. Abdelbasset, W.K. and Jawhar, Z.H.	<a href="https://pubmed.ncbi.nlm.nih.gov/36137396/">https://pubmed.ncbi.nlm.nih.gov/36137396/</a>	SDG3	2022
154	The emerging role of 27-hydroxycholesterol in cancer development and progression: An update	Abdalkareem Jasim, S. Kzar, H.H. Haider Hamad, M. Ahmad, I. Al-Gazally, M.E. Ziyadullaev, S. Sivaraman, R. Abed Jawad, M. Thaeer Hammid, A. Oudaha, K.H. Karampoor, S. and Mirzaei, R.	<a href="https://pubmed.ncbi.nlm.nih.gov/35978522/">https://pubmed.ncbi.nlm.nih.gov/35978522/</a>	SDG3	2022
155	Gastrointestinal Involvement in Long COVID and Potential Pathogenic Mechanisms	Jadali, Z. and Jalil, A.T.	<a href="http://mejdd.org/index.php/mejdd/article/view/2688">http://mejdd.org/index.php/mejdd/article/view/2688</a>	SDG3	2022
156	PSEBVC: Provably Secure ECC and Biometric Based Authentication Framework Using Smartphone for Vehicular Cloud Environment	Kumar, V. Mohammed Ali Al-Tameemi, A. Kumari, A. Ahmad, M. Falah, M.W. and Abd El-Latif, A.A.	<a href="https://ieeexplore.ieee.org/document/9847132">https://ieeexplore.ieee.org/document/9847132</a>	SDG3	2022
157	The metaheuristic optimization of the mechanical properties of sustainable energies using artificial neural networks and genetic algorithm: A case study by eggshell fine waste	Wang, Y. AL-Huqail, A.A. Salimimoghadam, S. Jasim Mohammed, K. Jan, A. Ali, H.E. Amine Khadimallah, M. and Assilzadeh, H.	<a href="https://onlinelibrary.wiley.com/doi/abs/10.1002/er.8255">https://onlinelibrary.wiley.com/doi/abs/10.1002/er.8255</a>	SDG3	2022





158	Leukocyte telomere length and obesity in children and adolescents: A systematic review and meta-analysis	Kahrizi, M.S. Patra, I. Jalil, A.T. Achmad, H. Alesaeidi, S. Al-Gazally, M.E. and Alesaeidi, S.	<a href="https://www.frontiersin.org/articles/10.3389/fgene.2022.861101/full">https://www.frontiersin.org/articles/10.3389/fgene.2022.861101/full</a>	SDG3	2022
159	Risk assessment of organophosphorus pesticide residues in drinking water resources: Statistical and Monte-Carlo approach	Wang, G. Li, J. Xue, N. Abdulkreem AL-Huqail, A. Majdi, H.S. Darvishmoghaddam, E. Assilzadeh, H. Khadimallah, M.A. and Ali, H.E.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S0045653522021257">https://www.sciencedirect.com/science/article/abs/pii/S0045653522021257</a>	SDG3	2022
160	Aptamer Based Nanoprobes for Detection of Foodborne Virus in Food and Environment Samples: Recent Progress and Challenges	Long, W. Patra, I. Rahi Alhachami, F. Akhrarovich Sherbekov, U. Majdi, A. and Abed, S.A.	<a href="https://www.tandfonline.com/doi/abs/10.1080/10408347.2022.2114785">https://www.tandfonline.com/doi/abs/10.1080/10408347.2022.2114785</a>	SDG3	2022
161	Contributions and therapeutic potential of tumor-derived microRNAs containing exosomes to cancer progression	Al-Hetty, H.R.A.K. Abdulameer, S.J. Alghazali, M.W. Aljaberi, M. Saleh, M.M. Suleiman, A.A. and Jalil, A.T.	<a href="https://www.sciencedirect.com/science/article/pii/S2452014422001807">https://www.sciencedirect.com/science/article/pii/S2452014422001807</a>	SDG3	2022
162	Alendronate reinforced polycaprolactone-gelatin-graphene oxide: A promising nanofibrous scaffolds with controlled drug release	Budi, H.S. Davidyants, A. Rudiansyah, M. Ansari, M.J. Suksatan, W. Sultan, M.Q. Jalil, A.T. and Kazemnejadi, M.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S235249282200959X">https://www.sciencedirect.com/science/article/abs/pii/S235249282200959X</a>	SDG3	2022



163	Effect of a diet based on Iranian traditional medicine on inflammatory markers and clinical outcomes in COVID-19 patients: A double-blind, randomized, controlled trial	Hajibeygi, R. Mirghazanfari, S.M. Pahlavani, N. Jalil, A.T. Alshahrani, S.H. Rizaev, J.A. Hadi, S. Hadi, V. and Yekta, N.H.	<a href="https://pubmed.ncbi.nlm.nih.gov/36035633/">https://pubmed.ncbi.nlm.nih.gov/36035633/</a>	SDG3	2022
164	A Machine Learning-Based Semantic Pattern Matching Model for Remote Sensing Data Registration	Jaber, M.M. Ali, M.H. Abd, S.K. Jassim, M.M. Alkhayyat, A. Alreda, B.A. Alkhuwaylidee, A.R. and Alyousif, S.	<a href="https://link.springer.com/article/10.1007/s12524-022-01604-w">https://link.springer.com/article/10.1007/s12524-022-01604-w</a>	SDG3	2022
165	Optical and Electrochemical Aptasensors Developed for the Detection of Alpha-Fetoprotein	Tran Ngoc Huy, D. Iswanto, A.H. Catalan Oplencia, M.J. Al-Saikhan, F. Timoshin, A. Abed, A.M. Ahmad, I. Blinova, S.A. Hammid, A.T. Mustafa, Y.F. and Van Tuan, P.	<a href="https://www.tandfonline.com/doi/abs/10.1080/10408347.2022.2099221">https://www.tandfonline.com/doi/abs/10.1080/10408347.2022.2099221</a>	SDG3	2022
166	Genetic Identification of Bacteria Producing Antibacterial Agent Isolation from Soil and Study of their Effectiveness as Antioxidants	Jassim, Y.A. Khudhair, M.K. and Radhi, S.H.	<a href="http://agribiop.com/category/annals-of-agri-bio-research/vol-271-june-2022/">http://agribiop.com/category/annals-of-agri-bio-research/vol-271-june-2022/</a>	SDG3	2022
167	Pistacia atlantica as an effective remedy for diabetes: a randomised, double-blind, placebo-controlled trial	Raziani, Y. Qadir, S.H. Hermis, A.H. Nazari, A. Othman, B.S. and Raziani, S.	<a href="https://search.informit.org/doi/abs/10.3316/informit.631353930549167">https://search.informit.org/doi/abs/10.3316/informit.631353930549167</a>	SDG3	2022



168	Antimicrobial Susceptibility Pattern of Some Pathogenic Bacteria Isolated from Dental Caries	Jassam, R.A.K.M. Aboob, A.J. Abed, A.S. and Abood, E.S.	<a href="https://ejchem.journals.ekb.eg/article_203956.html">https://ejchem.journals.ekb.eg/article_203956.html</a>	SDG3	2022
169	Real-Time Traffic Violation System Vehicles to Cloud Data Exchange Based Driver Behaviour	Abdul-Rahaim, L.A. Ghani, H.M. and Ameen, H.A.	<a href="https://ieeexplore.ieee.org/document/9800028">https://ieeexplore.ieee.org/document/9800028</a>	SDG3	2022
170	A novel method for Indoor Air Quality Control of Smart Homes using a Machine learning model	Majdi, A. Alrubaie, A.J. Al-Wardy, A.H. Baili, J. and Panchal, H.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S0965997822001569">https://www.sciencedirect.com/science/article/abs/pii/S0965997822001569</a>	SDG3	2022
171	Religious beliefs and work conscience of Muslim nurses in Iraq during the COVID-19 pandemic	Huy, D.T.N. Khalil, N.R. Le, K. Mahdi, A.B. and Djuraeva, L.	<a href="https://hts.org.za/index.php/hts/article/view/7566">https://hts.org.za/index.php/hts/article/view/7566</a>	SDG3	2022
172	Computational Investigations of Traditional Chinese Medicinal Compounds against the Omicron Variant of SARS-CoV-2 to Rescue the Host Immune System	Naman, Z.T. Kadhim, S. Al-Isawi, Z.J.K. Butch, C.J. and Muhseen, Z.T.	<a href="https://www.mdpi.com/1424-8247/15/6/741">https://www.mdpi.com/1424-8247/15/6/741</a>	SDG3	2022



173	A review on femoropopliteal arterial deformation during daily lives and nickel-titanium stent properties	Kareem, A.K. Gabir, M.M. Ali, I.R. Ismail, A.E. Taib, I. Darlis, N. and Almoayed, O.M.	<a href="https://www.tandfonline.com/doi/abs/10.1080/03091902.2022.2041749?journalCode=ijmt20">https://www.tandfonline.com/doi/abs/10.1080/03091902.2022.2041749?journalCode=ijmt20</a>	SDG3	2022
174	The impact of genetic variations in sofosbuvir metabolizing enzymes and innate immunity mediators on treatment outcome in HCV-infected patients	Ibrahim, M.K. AbdElrahman, M. Bader El Din, N.G. Tawfik, S. Abd-Elsalam, S. Omran, D. Barakat, A.Z. Farouk, S. Elbatae, H. and El Awady, M.K.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S0882401021005854">https://www.sciencedirect.com/science/article/abs/pii/S0882401021005854</a>	SDG3	2022
175	Opportunities and obstacles for the melanoma immunotherapy using T cell and chimeric antigen receptor T (CAR-T) applications: a literature review	Bahmanyar, M. Vakil, M.K. Al-Awsi, G.R.L. Kouhpayeh, S.A. Mansoori, H. Mansoori, Y. Salahi, A. Nikfar, G. Tavassoli, A. Behmard, E. Moravej, A. and Ghasemian, A.	<a href="https://pubmed.ncbi.nlm.nih.gov/35715610/">https://pubmed.ncbi.nlm.nih.gov/35715610/</a>	SDG3	2022
176	In vivo antitumor activity study of targeted chlorambucil-loaded nanolipid carrier for breast cancer	Sahib, A.S. Wennas, O.N. Mahdi, B.W. and Al abood, R.M.	<a href="https://pharmacia.pensoft.net/article/85390/">https://pharmacia.pensoft.net/article/85390/</a>	SDG3	2022
177	CNN supported framework for automatic extraction and evaluation of dermoscopy images	Cheng, X. Kadry, S. Meqdad, M.N. and Crespo, R.G.	<a href="https://dl.acm.org/doi/abs/10.1007/s11227-022-04561-w">https://dl.acm.org/doi/abs/10.1007/s11227-022-04561-w</a>	SDG3	2022



178	Biosynthesis of silver nanoparticles using Lawsonia inermis and their biomedical application	Alhomaidi, E. Jasim, S.A. Amin, H.I.M. Lima Nobre, M.A. Khatami, M. Jalil, A.T. and Hussain Dilfy, S.	<a href="https://ietresearch.onlinelibrary.wiley.com/doi/full/10.1049/nbt2.12096">https://ietresearch.onlinelibrary.wiley.com/doi/full/10.1049/nbt2.12096</a>	SDG3	2022
179	Forty Micromole Hydroxychloroquine Enhanced Cytotoxic Effect of Doxorubicin Against Laryngeal Cancer Cell Line HEP-2	Owadh, H.K. Ghaleb, R.A. and Alzubaidi, F.A.	<a href="https://www.jrespharm.com/abstract.php?id=1056">https://www.jrespharm.com/abstract.php?id=1056</a>	SDG3	2022
180	Association of Tumor Necrosis Factor- $\alpha$ and Myeloperoxidase enzyme with Severe Asthma: A comparative study	Aldhalmi, A.K. Al-Athari, A.J.H. and Al-Hindy, H.A.-A.M.	<a href="https://pubmed.ncbi.nlm.nih.gov/36164624/">https://pubmed.ncbi.nlm.nih.gov/36164624/</a>	SDG3	2022
181	Synthesis of Bioactive Yttrium-Metal–Organic Framework as Efficient Nanocatalyst in Synthesis of Novel Pyrazolopyranopyrimidine Derivatives and Evaluation of Anticancer Activity	Saleh, R.O. Achmad, H. Daminov, B.T. Kzar, H.H. Mahdi, A.B. Hammid, A.T. Abid, M.K. Opulencia, M.J.C. Mustafa, Y.F. and Sharma, H.	<a href="https://www.frontiersin.org/articles/10.3389/fchem.2022.928047/full">https://www.frontiersin.org/articles/10.3389/fchem.2022.928047/full</a>	SDG3	2022
182	Detection Of Candida Spp. That Causes Vulvovaginitis In Women That Use Contraceptive Methods	Alsudani, A.A. and Al-Awsi, G.R.L.	<a href="https://pubmed.ncbi.nlm.nih.gov/36129079/">https://pubmed.ncbi.nlm.nih.gov/36129079/</a>	SDG3	2022



183	Effect of Training Sessions on Awareness, Disease Management, and Quality of Life in Patients with Type 2 Diabetes	Suardi Wekke, I. Heri Iswanto, A. Majeed, M.S. Awadh, S.A. Samal, A. Talib, H.A. Islam, Z. Fakri Mustafa, Y. Kzar, H.H. and Beheshtizadeh, N.	<a href="http://ijwph.ir/article-1-1142-en.html">http://ijwph.ir/article-1-1142-en.html</a>	SDG3	2022
184	Mitofusin-2 in cancer: Friend or foe?	Ramaiah, P. Patra, I. Abbas, A. Fadhil, A.A. Abohassan, M. Al-qaim, Z.H. Hameed, N.M. Al-Gazally, M.E. Kemil Almotlaq, S.S. Mustafa, Y.F. and Shiravand, Y.	<a href="https://pubmed.ncbi.nlm.nih.gov/36176224/">https://pubmed.ncbi.nlm.nih.gov/36176224/</a>	SDG3	2022
185	The diagnostic utility of microRNA 222-3p, microRNA 21-5p, and microRNA 122-5p for HCV-related hepatocellular carcinoma and its relation to direct-acting antiviral therapy	Khairy, A. Ibrahim, M.K. Abdelrahman, M. Fouad, R. Zayed, N. Ayman, Y. Abdellatef, Z. and Yosry, A.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S1687197922000284">https://www.sciencedirect.com/science/article/abs/pii/S1687197922000284</a>	SDG3	2022
186	Functions and therapeutic interventions of non-coding RNAs associated with TLR signaling pathway in atherosclerosis	Margiana, R. Alsaikhan, F. Al-Awsi, G.R.L. Patra, I. Sivaraman, R. Fadhil, A.A. AL-Baghdady, H.F.A. Qasim, M.T. Hameed, N.M. Mustafa, Y.F. and Hosseini-Fard, S.	<a href="https://pubmed.ncbi.nlm.nih.gov/36122884/">https://pubmed.ncbi.nlm.nih.gov/36122884/</a>	SDG3	2022
187	Study to molecular insight into the role of aluminum nitride nanotubes on to deliver of 5-Fluorouracil (5FU) drug in smart drug delivery	Al-Zuhairy, S.A.S. Kadhim, M.M. Hatem Shadhar, M. Jaber, N.A. Abdulkareem Almashhadani, H. Mahdi Rheima, A. Mousa, M.N. and Cao, Y.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S1387700322004257">https://www.sciencedirect.com/science/article/abs/pii/S1387700322004257</a>	SDG3	2022



188	The COVID-19 vaccine patent: a right without rationale	Althabhwai, N.M. and Kashef Al-Ghetaa, A.A.	<a href="https://mh.bmj.com/content/early/2022/05/06/medhum-2022-012386">https://mh.bmj.com/content/early/2022/05/06/medhum-2022-012386</a>	SDG3	2022
189	Tetracycline resistant genes in Escherichia coli isolated from enteric disease in companion birds	Gholami-Ahangaran, M. Haj-Salehi, M. Karimi-Dehkordi, M. Ansari, M.J. Mahdi, O.A. and Jawad, M.A.	<a href="https://pubmed.ncbi.nlm.nih.gov/35919845/">https://pubmed.ncbi.nlm.nih.gov/35919845/</a>	SDG3	2022
190	Bactericidal and in vitro osteogenic activity of nano sized cobalt-doped silicate hydroxyapatite	Alshemary, A.Z. Hussain, R. Dalgic, A.D. and Evis, Z.	<a href="https://www.sciencedirect.com/science/article/pii/S0272884222021319">https://www.sciencedirect.com/science/article/pii/S0272884222021319</a>	SDG3	2022
191	Assessing The Quality And Efficiency Of Education In Rural Schools Through The Models Of Integration And The Cooperation Of Educational Institutions: A Case Study Of Russia And Indonesia	Turwelis Komariah, A. Rykova, I. Shestakov, D. Hasan, M. Kurniady, D.A. Grebennikova, V. Shcherbatykh, L. Kosov, M. and Dudnik, O.	<a href="https://www.mdpi.com/2071-1050/14/14/8442">https://www.mdpi.com/2071-1050/14/14/8442</a>	SDG4	2022
192	The Effect Of Educational Curriculum According To Kolb's Theory On Developing Mental Imagery And Learning A Skill Of Volleyball Setting For Juniors	Al-Zubaidi, A.R.S. and Abdel-Khikani, S.A.-A.	<a href="https://dialnet.unirioja.es/servlet/articulo?codigo=8561570">https://dialnet.unirioja.es/servlet/articulo?codigo=8561570</a>	SDG4	2022



193	Efficient sonophotocatalytic degradation of acid blue 113 dye using a hybrid nanocomposite of CoFe <sub>2</sub> O <sub>4</sub> nanoparticles loaded on multi-walled carbon nanotubes	Al-Musawi, T.J. McKay, G. Rajiv, P. Mengelizadeh, N. and Balarak, D.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S1010603021004858">https://www.sciencedirect.com/science/article/abs/pii/S1010603021004858</a>	SDG6	2022
194	Groundwater level prediction using machine learning models: A comprehensive review	Tao, H. Hameed, M.M. Marhoon, H.A. Zounemat-Kermani, M. Heddami, S. Sungwon, K. Sulaiman, S.O. Tan, M.L. Sa'adi, Z. Mehr, A.D. Allawi, M.F. Abba, S.I. Zain, J.M. Falah, M.W. Jamei, M. Bokde, N.D. Bayatvarkeshi, M. Al-Mukhtar, M. Bhagat, S.K. Tiyyasha, T. Khedher, K.M. Al-Ansari, N. Shahid, S. and Yaseen, Z.M.	<a href="https://www.sciencedirect.com/science/article/pii/S092523122200282X">https://www.sciencedirect.com/science/article/pii/S092523122200282X</a>	SDG6	2022
195	Modification of Poly(vinylidene fluoride-co-hexafluoropropylene) Membranes with DES-Functionalized Carbon Nanospheres for Removal of Methyl Orange by Membrane Distillation	Aljumaily, M.M. Ali, N.S. Mahdi, A.E. Alayan, H.M. Alomar, M. Hameed, M.M. Ismael, B. Alsahy, Q.F. Alsaadi, M.A. Majdi, H.Sh. and Mohammed, Z.B.	<a href="https://www.mdpi.com/2073-4441/14/9/1396?type=check_update&amp;version=2">https://www.mdpi.com/2073-4441/14/9/1396?type=check_update&amp;version=2</a>	SDG6	2022
196	Synthesis of activated carbon from Lemna minor plant and magnetized with iron (III) oxide magnetic nanoparticles and its application in removal of Ciprofloxacin	Yilmaz, M. Al-Musawi, T.J. Saloot, M. Khatibi, A.D. Baniasadi, M. and Balarak, D.	<a href="https://link.springer.com/article/10.1007/s13399-021-02279-y">https://link.springer.com/article/10.1007/s13399-021-02279-y</a>	SDG6	2022
197	Preparation of multi-walled carbon nanotubes coated with CoFe <sub>2</sub> O <sub>4</sub> nanoparticles and their adsorption performance for Bisphenol A compound	Al-Musawi, T.J. Mengelizadeh, N. Ganji, F. Wang, C. and Balarak, D.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S0921883122000152">https://www.sciencedirect.com/science/article/abs/pii/S0921883122000152</a>	SDG6	2022





198	Adsorption of malachite green dye onto almond peel waste: a study focusing on application of the ANN approach for optimization of the effect of environmental parameters	Al-Musawi, T.J. Arghavan, S.M.A. Allahyari, E. Arghavan, F.S. Othmani, A. and Nasseh, N.	<a href="https://link.springer.com/article/10.1007/s13399-021-02174-6">https://link.springer.com/article/10.1007/s13399-021-02174-6</a>	SDG6	2022
199	Reviewing of Using Nanomaterials for Wastewater Treatment	Alalwan, H.A. Alminshid, A.H. Mohammed, M.M. Mohammed, M.F. and Shadhar, M.H.	<a href="https://jpoll.ut.ac.ir/article_87458.html">https://jpoll.ut.ac.ir/article_87458.html</a>	SDG6	2022
200	Facile sonochemical preparation of La <sub>2</sub> Cu <sub>2</sub> O <sub>5</sub> nanostructures, characterization, the evaluation of performance, mechanism, and kinetics of photocatalytic reactions for the removal of toxic pollutants	Milad Tabatabaeinejad, S. Ghanbari, M. Mohsen Najm, Z. Abdul-Fattah, M.N. Hameed, N.M. and Salavati-Niasari, M.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S0167732222012569">https://www.sciencedirect.com/science/article/abs/pii/S0167732222012569</a>	SDG6	2022
201	A New Model for Scheduling Operations in Modern Agricultural Processes	Noer, Z. Elveny, M. Jalil, A.T. Iswanto, A.H. Al-Janabi, S. Alkaim, A.F. Mullagulova, G. Nikolaeva, N. and Shichiyakh, R.A.	<a href="https://sciendo.com/article/10.2478/fcds-2022-0008">https://sciendo.com/article/10.2478/fcds-2022-0008</a>	SDG6	2022
202	Exterimental Investigation Of A Humidification-Dehumidification Desalination Unit Working Under Baghdad Conditions	Hussain, Z.F. Hamed, A.J. Khalifa, A.H.N. Hassan, M.F. and Najim, F.A.	<a href="http://www.thermalfuidscentral.org/journals/index.php/Heat_Mass_Transfer/article/view/1287">http://www.thermalfuidscentral.org/journals/index.php/Heat_Mass_Transfer/article/view/1287</a>	SDG6	2022



203	Adsorption of methyl violet dye onto a prepared bio-adsorbent from date seeds: isotherm, kinetics, and thermodynamic studies	Ali, N.S. Jabbar, N.M. Alardhi, S.M. Majdi, H.S. and Albayati, T.M.	<a href="https://pubmed.ncbi.nlm.nih.gov/36042747/">https://pubmed.ncbi.nlm.nih.gov/36042747/</a>	SDG6	2022
204	Novel Water-Soluble Poly(terephthalic-co-glycerol-g-fumaric acid) Copolymer Nanoparticles Harnessed as Pore Formers for Polyethersulfone Membrane Modification: Permeability–Selectivity Tradeoff Manipulation	Rashid, K.T. Alayan, H.M. Mahdi, A.E. Al-Baiati, M.N. Majdi, H.Sh. Salih, I.K. Ali, J.M. and Alsahy, Q.F.	<a href="https://www.mdpi.com/2073-4441/14/9/1507">https://www.mdpi.com/2073-4441/14/9/1507</a>	SDG6	2022
205	Start-up and operation of novel EN-MBBR system for sidestreams treatment and sensitivity analysis modeling using GPS-X simulation	Faris, A.M. Zwain, H.M. Hosseinzadeh, M. Majdi, H.S. and Siadatmousavi, S.M.	<a href="https://www.sciencedirect.com/science/article/pii/S1110016822002885">https://www.sciencedirect.com/science/article/pii/S1110016822002885</a>	SDG6	2022
206	Modeling and optimization of process parametric interaction during high-rate anaerobic digestion of recycled paper mill wastewater using the response surface methodology	Zwain, H.M. Barghash, H. Vakili, M. Majdi, H.Sh. and Dahlan, I.	<a href="https://iwaponline.com/jwrd/article/12/1/78/86274/Modeling-and-optimization-of-process-parametric">https://iwaponline.com/jwrd/article/12/1/78/86274/Modeling-and-optimization-of-process-parametric</a>	SDG6	2022
207	Methods of Chemical Synthesis in the Synthesis of Nanomaterial and Nanoparticles by the Chemical Deposition Method: A Review	Hachem, K. Ansari, M.J. Saleh, R.O. Kzar, H.H. Al-Gazally, M.E. Altimari, U.S. Hussein, S.A. Mohammed, H.T. Hammid, A.T. and Kianfar, E.	<a href="https://wjgnet.com/1007-9327/CitedArticlesInF6?id=10.1016%2Fj.jmrt.2021.03.048">https://wjgnet.com/1007-9327/CitedArticlesInF6?id=10.1016%2Fj.jmrt.2021.03.048</a>	SDG6	2022



208	Optimization of Graphene Oxide Mixed Matrix Membrane for AB-210 Dye Removal	Al-Sultan, A.A. Kadhim, R.J. Al-Emami, O.H. Alsahy, Q.F. and Majdi, H.S.	<a href="http://www.jeeng.net/Issue-9-2022,10564">http://www.jeeng.net/Issue-9-2022,10564</a>	SDG6	2022
209	Multi-strategy Slime Mould Algorithm for hydropower multi-reservoir systems optimization	Ahmadianfar, I. Noori, R.M. Togun, H. Falah, M.W. Homod, R.Z. Fu, M. Halder, B. Deo, R. and Yaseen, Z.M.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S0950705122005135">https://www.sciencedirect.com/science/article/abs/pii/S0950705122005135</a>	SDG6	2022
210	Fabrication of CuCo <sub>2</sub> S <sub>4</sub> yolk-shell spheres embedded with S-scheme V <sub>2</sub> O <sub>5</sub> -deposited on wrinkled g-C <sub>3</sub> N <sub>4</sub> for effective promotion of levofloxacin photodegradation	Yang, X. Hesami, M.D. Nazemipool, E. Bahadoran, A. Al-Bahrani, M. and Azizi, B.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S138358662201560X">https://www.sciencedirect.com/science/article/abs/pii/S138358662201560X</a>	SDG6	2022
211	Polymeric nanocomposite membranes for gas separation: Performance, applications, restrictions and future perspectives	Zhao, C. Hussain, W. Chlib Alkaaby, H.H. Al-Khafaji, R.M. Alghazali, T. Izzat, S.E. Shams, M.A. Abood, E.S. Yu, A.E. and Ehab, M.	<a href="https://www.sciencedirect.com/science/article/pii/S2214157X22005640">https://www.sciencedirect.com/science/article/pii/S2214157X22005640</a>	SDG6	2022
212	Utilizing Activated Carbon Developed from Banana Peels as Permeable Reactive Barrier in Copper Removal from Polluted Groundwater	Al Haider, S.A. Al Fatlawi, S. and Nasir, M.J.	<a href="http://www.jeeng.net/Issue-1-2022,10556">http://www.jeeng.net/Issue-1-2022,10556</a>	SDG6	2022



213	Molecular separation and computational simulation of contaminant removal from wastewater using zirconium UiO-66-(CO <sub>2</sub> H) <sub>2</sub> metal–organic framework	Lu, Y. Rakshagan, V. Shoukat, S. Mahmoud, M.Z. Pustokhina, I. Salah Al-Shati, A. Ibrahim Namazi, N. Alshehri, S. AboRas, K.M. and Abourehab, M.A.S.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S0167732222017172">https://www.sciencedirect.com/science/article/abs/pii/S0167732222017172</a>	SDG6	2022
214	ZnO/Co <sub>3</sub> O <sub>4</sub> Nanocomposites: Novel Preparation, Characterization, and Their Performance toward Removal of Antibiotics from Wastewater	Mohammed, H.T. Alasedi, K.K. Ruyid, R. Hussein, S.A. Jarallah, A.L. Dahesh, S.M.A. Sultan, M.Q. Salman, Z.N. Bashar, B.S. Aldulaimi, A.K.O. and Obaid, M.A.	<a href="https://jns.kashanu.ac.ir/">https://jns.kashanu.ac.ir/</a>	SDG6	2022
215	Comparison study between pyrolysis products of oil refinery sludge and sludge from municipal wastewater treatment plants	Almukhtar, R. Hammoodi, S.I. and Omar, R.	<a href="https://aip.scitation.org/doi/abs/10.1063/5.0092021">https://aip.scitation.org/doi/abs/10.1063/5.0092021</a>	SDG6	2022
216	An approach to removing COD and BOD based on polycarbonate mixed matrix membranes that contain hydrous manganese oxide and silver nanoparticles: A novel application of artificial neural network based simulation in Matlab	Zahmatkesh, S. Rezakhani, Y. Arabi, A. Hasan, M. Ahmad, Z. Wang, C. Sillanpää, M. Al-Bahrani, M. and Ghodrati, I.	<a href="https://pubmed.ncbi.nlm.nih.gov/36096310/">https://pubmed.ncbi.nlm.nih.gov/36096310/</a>	SDG6	2022
217	A comparative thermodynamic and exergoeconomic scrutiny of four geothermal systems with various configurations of TEG and HDH unit implementations	Liu, Z. SU, Z. Abed, A.M. Chaturvedi, R. Feyzbaxsh, M. and Kiani Salavat, A.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S1359431122010250">https://www.sciencedirect.com/science/article/abs/pii/S1359431122010250</a>	SDG6	2022



218	Advanced computational study of different boron nitride-based nanospheres for removal of organic contaminants from wastewater system	Feng, L. Zhong, K. Majdi, H.S. Aallaei, M. and Andreevna Rushchitc, A.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S0167732222012788">https://www.sciencedirect.com/science/article/abs/pii/S0167732222012788</a>	SDG6	2022
219	Optimization of dyes and toxic metals removal from environmental water samples by clinoptilolite zeolite using response surface methodology approach	Sun, X. Abbass, R. Ghorogi, M. Patra, I. Dwijendra, N.K.A. Uktamov, K.F. and Jasem, H.	<a href="https://www.nature.com/articles/s41598-022-17636-8">https://www.nature.com/articles/s41598-022-17636-8</a>	SDG6	2022
220	Comparative Study of Iron Removal from Groundwater Using Low Cost Adsorbents	Raheem, S.A. Kadhim, E.J. and Abdulhasan, M.J.	<a href="http://www.jeeng.net/Issue-11-2022,10566">http://www.jeeng.net/Issue-11-2022,10566</a>	SDG6	2022
221	Creating the Distribution Map of Groundwater for Drinking Uses Using Physio-Chemical Variables; Case Study: Al-Hilla City, Iraq	Chabuk, A. Jahad, U.A. Majdi, A. Isam, M. Al-Ansari, N. SH. Majdi, H. Laue, J. and Abed, S.A.	<a href="https://link.springer.com/article/10.1007/s11270-022-05660-3">https://link.springer.com/article/10.1007/s11270-022-05660-3</a>	SDG6	2022
222	Delineating the Crop-Land Dynamic due to Extreme Environment Using Landsat Datasets: A Case Study	Halder, B. Bandyopadhyay, J. Afan, H.A. Naser, M.H. Abed, S.A. Khedher, K.M. Falih, K.T. Deo, R. Scholz, M. and Yaseen, Z.M.	<a href="https://www.mdpi.com/2073-4395/12/6/1268">https://www.mdpi.com/2073-4395/12/6/1268</a>	SDG6	2022



223	Ultraviolet radiation/persulfate/hydrogen peroxide treatment system for the degradation of acid blue 80 dye from a batch flow chemical reactor: effects of operational parameters, mineralization, energy consumption, and kinetic studies	Al-Musawi, T.J. Yilmaz, M. Mohebi, S. and Balarak, D.	<a href="https://link.springer.com/article/10.1007/s40974-022-00250-9">https://link.springer.com/article/10.1007/s40974-022-00250-9</a>	SDG6	2022
224	Photocatalytic degradation of Acid Red 88 dye using Pd@TMU-16 metal organic framework	Al-Musawi, T. Zaidan, H. Saloot, M.K. Shahbaksh, S. and Balarak, D.	<a href="https://www.tandfonline.com/doi/abs/10.1080/03067319.2022.2063721">https://www.tandfonline.com/doi/abs/10.1080/03067319.2022.2063721</a>	SDG6	2022
225	Activated carbon prepared from hazelnut shell waste and magnetized by Fe <sub>3</sub> O <sub>4</sub> nanoparticles for highly efficient adsorption of fluoride	Al-Musawi, T.J. McKay, G. Kadhim, A. Joybari, M.M. and Balarak, D.	<a href="https://ouci.dntb.gov.ua/en/works/96RJOWJ9/">https://ouci.dntb.gov.ua/en/works/96RJOWJ9/</a>	SDG6	2022
226	Bibliometric Analysis of Solar Desalination Systems Powered by Solar Energy and CFD Modelled	Sonawane, C.R. Panchal, H.N. Hoseinzadeh, S. Ghasemi, M.H. Alrubaie, A.J. and Sohani, A.	<a href="https://www.mdpi.com/1996-1073/15/14/5279">https://www.mdpi.com/1996-1073/15/14/5279</a>	SDG6	2022
227	Efficient photocatalytic degradation of metronidazole in wastewater under simulated sunlight using surfactant- and CuS-activated zeolite nanoparticles	Al-Musawi, T.J. Mazari Moghaddam, N.S. Rahimi, S.M. Amarzadeh, M. and Nasseh, N.	<a href="https://europemc.org/article/med/35868191">https://europemc.org/article/med/35868191</a>	SDG6	2022



228	Parameters Affecting the Efficiency of Solar Stills—Recent Review	Essa, F.A. Abdullah, A. Majdi, H.S. Basem, A. Dhahad, H.A. Omara, Z.M. Mohammed, S.A. Alawee, W.H. Ezzi, A.A. and Yusaf, T.	<a href="https://www.mdpi.com/2071-1050/14/17/10668">https://www.mdpi.com/2071-1050/14/17/10668</a>	SDG6	2022
229	Modification of Polyethersulfone Ultrafiltration Membrane Using Poly(terephthalic acid-co-glycerol-g-maleic anhydride) as Novel Pore Former	Aljanabi, A.A.A. Mousa, N.E. Aljumaily, M.M. Majdi, H.S. Yahya, A.A. AL-Baiati, M.N. Hashim, N. Rashid, K.T. Al-Saadi, S. and Alsahy, Q.F.	<a href="https://www.mdpi.com/2073-4360/14/16/3408">https://www.mdpi.com/2073-4360/14/16/3408</a>	SDG6	2022
230	Assessment in carbon-based layered double hydroxides for water and wastewater: Application of artificial intelligence and recent progress	Wang, G. Su, W. Hu, B. AL-Huqail, A. Majdi, H.S. Algethami, J.S. Jiang, Y. and Ali, H.E.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S0045653522027965">https://www.sciencedirect.com/science/article/abs/pii/S0045653522027965</a>	SDG6	2022
231	Analysis of groundwater pollution in a petroleum refinery energy contributed in rock mechanics through ANFIS-AHP	Tan, Y. Al-Huqail, A.A. Chen, Q. Sh. Majdi, H. Algethami, J.S. and Ali, H.E.	<a href="https://onlinelibrary.wiley.com/doi/abs/10.1002/er.8663">https://onlinelibrary.wiley.com/doi/abs/10.1002/er.8663</a>	SDG6	2022
232	Development of advanced method based on nanoporous membranes for separation of pharmaceutical compounds from aqueous streams: Computational simulation and analysis	Alshehri, S. Alobaida, A. Alamoudi, J.A. Huwaimel, B. Alzhrani, R.M. Alsubaiyel, A.M. Abduljabbar, M.H. Kamal, M. Venkatesan, K. Kotb, H. Al-Shati, A.S. and Abourehab, M.A.S.	<a href="https://www.sciencedirect.com/science/article/pii/S2352186422003297">https://www.sciencedirect.com/science/article/pii/S2352186422003297</a>	SDG6	2022



233	Dispersive solid phase microextraction based on magnesium oxide nanoparticles for preconcentration of auramine O and methylene blue from water samples	Li, W. Qiu, J. Baharinikoo, L. Kumar, T.C.A. Al-qargholi, B. Shafik, S.S. Abbass, R. and Saraswat, S.	<a href="https://www.nature.com/articles/s41598-022-16948-z">https://www.nature.com/articles/s41598-022-16948-z</a>	SDG6	2022
334	Hexadecyltrimethylammonium-activated and zinc oxide-coated nanobentonite: A promising photocatalyst for tetracycline degradation	Al-Musawi, T.J. Sadat Mazari Moghaddam, N. Masoomeh Rahimi, S. Hajjizadeh, M. and Nasseh, N.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S2213138822005033">https://www.sciencedirect.com/science/article/abs/pii/S2213138822005033</a>	SDG6	2022
235	Cyanobacteria blue-green algae prediction enhancement using hybrid machine learning-based gamma test variable selection and empirical wavelet transform	Heddam, S. Yaseen, Z.M. Falah, M.W. Goliatt, L. Tan, M.L. Sa'adi, Z. Ahmadianfar, I. Saggi, M. Bhatia, A. and Samui, P.	<a href="https://pubmed.ncbi.nlm.nih.gov/35672647/">https://pubmed.ncbi.nlm.nih.gov/35672647/</a>	SDG6	2022
236	Evaluating the potential of graphene-like boron nitride as a promising cathode for Mg-ion batteries	Sivaraman, R. Patra, I. Jade Catalan Opulencia, M. Sagban, R. Sharma, H. Turki Jalil, A. and Ghaffar Ebadi, A.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S1572665722004052">https://www.sciencedirect.com/science/article/abs/pii/S1572665722004052</a>	SDG7	2022
237	Formic Acid Dehydrogenation Using Noble-Metal Nanoheterogeneous Catalysts: Towards Sustainable Hydrogen-Based Energy	Al-Nayili, A. Majdi, H.Sh. Albayati, T.M. and Cata Saady, N.M.	<a href="https://www.mdpi.com/2073-4344/12/3/324">https://www.mdpi.com/2073-4344/12/3/324</a>	SDG7	2022





238	Oxygen reduction reaction on metal-doped nanotubes and nanocages for fuel cells	Salahdin, O.D. Majdi, A. Opulencia, M.J.C. Taban, T.Z. Hammid, A.T. and Zhao, X.	<a href="https://link.springer.com/article/10.1007/s11581-022-04564-w">https://link.springer.com/article/10.1007/s11581-022-04564-w</a>	SDG7	2022
239	Synthesis and Enhanced Optical Characteristics of Silicon Carbide/Copper Oxide Nanostructures Doped Transparent Polymer for Optics and Photonics Nanodevices	Al-Aaraji, N.A.-H. Hashim, A. Hadi, A. and Abduljalil, H.M.	<a href="https://link.springer.com/article/10.1007/s12633-022-01730-7">https://link.springer.com/article/10.1007/s12633-022-01730-7</a>	SDG7	2022
240	Optimized video internet of things using elliptic curve cryptography based encryption and decryption	Alhayani, B.S.A. Hamid, N. Almukhtar, F.H. Alkawak, O.A. Mahajan, H.B. Kwekha-Rashid, A.S. İlhan, H. Marhoon, H.A. Mohammed, H.J. Chalooob, I.Z. and Alkhayyat, A.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S0045790622002877">https://www.sciencedirect.com/science/article/abs/pii/S0045790622002877</a>	SDG7	2022
241	Implement DNN technology by using wireless sensor network system based on IOT applications	Hameed, S.S. Abdulshaheed, H.R. Ali, Z.L. and Gheni, H.M.	<a href="http://pen.ius.edu.ba/index.php/pen/article/view/2831">http://pen.ius.edu.ba/index.php/pen/article/view/2831</a>	SDG7	2022
242	Thermal effectiveness of solar collector using Graphene nanostructures suspended in ethylene glycol–water mixtures	Al-Sulttani, A.O. Aldlemy, M.S. Zahra, M.M.A. Gatea, H.A. Khedher, K.M. Scholz, M. and Yaseen, Z.M.	<a href="https://www.sciencedirect.com/science/article/pii/S2352484722000075">https://www.sciencedirect.com/science/article/pii/S2352484722000075</a>	SDG7	2022



243	Simultaneous numerical investigation of the passive use of phase-change materials and the active use of a nanofluid inside a rectangular duct in the thermal management of lithium-ion batteries	Jiang, Y. Smaism, G.F. Mahmoud, M.Z. Li, Z. Aybar, H.Ş. and Abed, A.M.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S0378775322006127">https://www.sciencedirect.com/science/article/abs/pii/S0378775322006127</a>	SDG7	2022
244	Design a promising non-precious electro-catalyst for oxygen reduction reaction in fuel cells	Sivaraman, R. Opulencia, M.J.C. Majdi, A. Patra, I. Kadhem Abid, M. Hammid, A.T. and Derakhshandeh, M.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S0360319922018572">https://www.sciencedirect.com/science/article/abs/pii/S0360319922018572</a>	SDG7	2022
245	Conductive Gels: Properties and Applications of Nanoelectronics	Trung, N.D. Huy, D.T.N. Jade Catalan Opulencia, M. Lafta, H.A. Abed, A.M. Bokov, D.O. Shomurodov, K. Van Thuc Master, H. Thaeer Hammid, A. and Kianfar, E.	<a href="https://nanoscalereslett.springeropen.com/articles/10.1186/s11671-022-03687-3">https://nanoscalereslett.springeropen.com/articles/10.1186/s11671-022-03687-3</a>	SDG7	2022
246	Synthesis of biodiesel from fish processing waste by nano magnetic catalyst and its thermodynamic analysis	Smaism, G.F. Prabu, N.M. A P, S. and Abed, A.M.	<a href="https://www.sciencedirect.com/science/article/pii/S2214157X22003616">https://www.sciencedirect.com/science/article/pii/S2214157X22003616</a>	SDG7	2022
247	Introduction of cadmium chloride additive to improve the performance and stability of perovskite solar cells	Mohammed, M.K.A. Jabir, M.S. Abdulzahraa, H.G. Mohammed, S.H. Al-Azzawi, W.K. Ahmed, D.S. Singh, S. Kumar, A. Asaithambi, S. and Shekargoftar, M.	<a href="https://pubs.rsc.org/en/content/articlelanding/2022/ra/d2ra03776a">https://pubs.rsc.org/en/content/articlelanding/2022/ra/d2ra03776a</a>	SDG7	2022



248	Two-level energy-efficient data reduction strategies based on SAX-LZW and hierarchical clustering for minimizing the huge data conveyed on the internet of things networks	Al-Qurabat, A.K.M. Abdulzahra, S.A. and Idrees, A.K.	<a href="https://link.springer.com/article/10.1007/s11227-022-04548-7">https://link.springer.com/article/10.1007/s11227-022-04548-7</a>	SDG7	2022
249	Developed Design of Battle Royale Optimizer for the Optimum Identification of Solid Oxide Fuel Cell	Karamnejadi Azar, K. Kakouee, A. Mollajafari, M. Majdi, A. Ghadimi, N. and Ghadamyari, M.	<a href="https://www.mdpi.com/2071-1050/14/16/9882">https://www.mdpi.com/2071-1050/14/16/9882</a>	SDG7	2022
250	Evolutionary algorithm based task scheduling in iot enabled cloud environment	Joshua Samuel Raj, R. Varalatchoumy, M. Helen Josephine, V.L. Jegatheesan, A. Kadry, S. Meqdad, M.N. and Nam, Y.	<a href="https://www.techscience.com/cmc/v71n1">https://www.techscience.com/cmc/v71n1</a>	SDG7	2022
251	Technical, environmental and ranking analysis of using solar heating: A case study in South Africa	Tang, A. Alsultany, F.H. Borisov, V. Mohebihafshejani, A. Goli, A. Mostafaepour, A. and Riahi, R.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S2213138822003514">https://www.sciencedirect.com/science/article/abs/pii/S2213138822003514</a>	SDG7	2022
252	Modeling the Thermal Performance for Different Types of Solar Chimney Power Plants	Smaisim, G.F. Abed, A.M. and Shamel, A.	<a href="https://dl.acm.org/doi/abs/10.1155/2022/3656482">https://dl.acm.org/doi/abs/10.1155/2022/3656482</a>	SDG7	2022



253	A novel combined power generation and argon liquefaction system; investigation and optimization of energy, exergy, and entransy phenomena	Sari, A. Abdelbasset, W.K. Sharma, H. Opulencia, M.J.C. Feyzbaxsh, M. Abed, A.M. Hussein, S.A. Bashar, B.S. Hammid, A.T. Prakaash, A.S. and Uktamov, K.F.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S2352152X22006296#!">https://www.sciencedirect.com/science/article/abs/pii/S2352152X22006296#!</a>	SDG7	2022
254	Economic cost and numerical evaluation of cooling of a cylindrical lithium-ion battery pack using air and phase change materials	Tian, M.-W. Abed, A.M. Yan, S.-R. Sajadi, S.M. Mahmoud, M.Z. Aybar, H.Ş. and Smaisim, G.F.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S2352152X22009318">https://www.sciencedirect.com/science/article/abs/pii/S2352152X22009318</a>	SDG7	2022
255	Study The Effect Of Flow Water/Al <sub>2</sub> O <sub>3</sub> Nanofluid Inside Mini-Channel For Cooling Concentrated Multi-Junction Solar Cell	Hasan, H.A. Sherza, J.S. Abd, L.A. Ameen, K.A. Abed, A.M. Hatem, A.A. and Sopian, K.	<a href="http://www.thermalfluidscentral.org/journals/index.php/Heat_Mass_Transfer/article/view/1351">http://www.thermalfluidscentral.org/journals/index.php/Heat_Mass_Transfer/article/view/1351</a>	SDG7	2022
256	Design and Optimization of a Grid-Connected Solar Energy System: Study in Iraq	Aziz, A.S. Tajuddin, M.F.N. Zidane, T.E.K. Su, C.-L. Mas'ud, A.A. Alwazzan, M.J. and Alrubaie, A.J.K.	<a href="https://www.mdpi.com/2071-1050/14/13/8121">https://www.mdpi.com/2071-1050/14/13/8121</a>	SDG7	2022
257	Experimental Evaluation of the Thermoelectrical Performance of Photovoltaic-Thermal Systems with a Water-Cooled Heat Sink	Hasan, H.A. Sherza, J.S. Mahdi, J.M. Togun, H. Abed, A.M. Ibrahim, R.K. and Yaïci, W.	<a href="https://www.mdpi.com/2071-1050/14/16/10231">https://www.mdpi.com/2071-1050/14/16/10231</a>	SDG7	2022



258	The effect of carbon dioxide emissions on the building energy efficiency	Min, J. Yan, G. Abed, A.M. Elattar, S. Amine Khadimallah, M. Jan, A. and Elhosiny Ali, H.	<a href="https://www.sciencedirect.com/science/article/pii/S0016236122016854">https://www.sciencedirect.com/science/article/pii/S0016236122016854</a>	SDG7	2022
259	Machine learning model for prediction of drug solubility in supercritical solvent: Modeling and experimental validation	An, F. Sayed, B.T. Parra, R.M.R. Hamad, M.H. Sivaraman, R. Zanjani Foumani, Z. Rushchitc, A.A. El-Maghawry, E. Alzhrani, R.M. Alshehri, S. and M. AboRas, K.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S0167732222014398">https://www.sciencedirect.com/science/article/abs/pii/S0167732222014398</a>	SDG7	2022
260	Nano-Iron Oxide-Ethylene Glycol-Water Nanofluid Based Photovoltaic Thermal (PV/T) System with Spiral Flow Absorber: An Energy and Exergy Analysis	Al Ezzi, A. Chaichan, M.T. Majdi, H.S. Al-Waeli, A.H.A. Kazem, H.A. Sopian, K. Fayad, M.A. Dhahad, H.A. and Yusaf, T.	<a href="https://www.mdpi.com/1996-1073/15/11/3870">https://www.mdpi.com/1996-1073/15/11/3870</a>	SDG7	2022
261	Investigation of recent progress in metal-based materials as catalysts toward electrochemical water splitting	Solanki, R. Patra, I. Ahmad, N. Kumar, N.B. Parra, R.M.R. Zaidi, M. Yasin, G. Anil Kumar, T.C. Hussein, H.A. Sivaraman, R. Majdi, H.S. Alkadir, O.K.A. and Yaghobi, R.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S2213343722010806">https://www.sciencedirect.com/science/article/abs/pii/S2213343722010806</a>	SDG7	2022
262	New systematic study approach of green synthesis CdS thin film via Salvia dye	Najm, A.S. Naeem, H.S. Alabboodi, K.O. Hasbullah, S.A. Hasan, H.A. Holi, A.M. AL-Zahrani, A.A. Sopian, K. Bais, B. Majdi, H.S. and Sultan, A.J.	<a href="https://www.nature.com/articles/s41598-022-16733-y">https://www.nature.com/articles/s41598-022-16733-y</a>	SDG7	2022



263	Economic cost and efficiency analysis of a lithium-ion battery pack with the circular and elliptical cavities filled with phase change materials	Tian, M.-W. Smaisim, G.F. Yan, S.-R. Sajadi, S.M. Mahmoud, M.Z. Aybar, H.Ş. and Abed, A.M.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S2352152X22008039">https://www.sciencedirect.com/science/article/abs/pii/S2352152X22008039</a>	SDG7	2022
264	Exploring the application of AlN graphyne in calcium ion batteries	Kadhim, M.M. Shadhar, M.H. Nathir, I. Taban, T.Z. Noori, A.S. Almashhadani, H.A. Rheima, A.M. and Ebadi, A.G.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S0360319922031019">https://www.sciencedirect.com/science/article/abs/pii/S0360319922031019</a>	SDG7	2022
265	Impact of polymer molecular weights and graphene nanosheets on fabricated PVA-PEG/GO nanocomposites: Morphology, sorption behavior and shielding application	Ghazi, R.A. Al-Mayalee, K.H. Al-Bermany, E. Hashim, F.S. and Albermany, A.K.J.	<a href="https://www.aimspress.com/article/doi/10.3934/matserci.2022035">https://www.aimspress.com/article/doi/10.3934/matserci.2022035</a>	SDG7	2022
266	Thermal analysis of horizontal earth-air heat exchangers in a subtropical climate: An experimental study	Lattieff, F.A. Atiya, M.A. Lateef, R.A. Dulaimi, A. Jweeg, M.J. Abed, A.M. Mahdi, J.M. and Talebizadehsardari, P.	<a href="https://www.frontiersin.org/articles/10.3389/fbuil.2022.981946/full">https://www.frontiersin.org/articles/10.3389/fbuil.2022.981946/full</a>	SDG7	2022
267	Two-tier clustering with routing protocol for iot assisted wsn	Arokiaraj Jovith, A. Mathapati, M. Sundarrajan, M. Gnanasankaran, N. Kadry, S. Meqdad, M.N. and Aslam, S.M.	<a href="https://www.techscience.com/cmc/v71n2/45832">https://www.techscience.com/cmc/v71n2/45832</a>	SDG7	2022



268	An efficient and durable bifunctional electrocatalyst based on SnO <sub>2</sub> /CNT toward electrocatalytic full water splitting	Anil Kumar, T.C. Patra, I. Khaitov, F.N. Kumar, N.B. Shafik, S.S. Sivaraman, R. Fathdal, F. Kadhim, Z.J. Hadi, J.M. and Mustafa, Y.F.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S0925838822026755">https://www.sciencedirect.com/science/article/abs/pii/S0925838822026755</a>	SDG7	2022
269	Energy-Saving Analysis of Wireless Body Area Network Based on Structural Analysis	Niu, Y. Kadhem, S.I. Al Sayed, I.A.M. Jaz, Z.A. Gheni, H.M. and Al Barazanchi, I.	<a href="https://ieeexplore.ieee.org/document/9799972">https://ieeexplore.ieee.org/document/9799972</a>	SDG7	2022
270	Forecasting Photovoltaic Power Generation with a Stacking Ensemble Model	Abdellatif, A. Mubarak, H. Ahmad, S. Ahmed, T. Shafiullah, G.M. Hammoudeh, A. Abdellatef, H. Rahman, M.M. and Gheni, H.M.	<a href="https://www.mdpi.com/2071-1050/14/17/11083">https://www.mdpi.com/2071-1050/14/17/11083</a>	SDG7	2022
271	The effect of green belt as an environmentally friendly approach on energy consumption reduction in buildings	Yuan, J. Widjaja, G. Fahim, F.S. Bashar, B.S. Oplencia, M.J.C. Marhoon, H.A. and Dwijendra, N.K.A.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S2213138822004155">https://www.sciencedirect.com/science/article/abs/pii/S2213138822004155</a>	SDG7	2022
272	Thermal Management of Solar Photovoltaic Cell by Using Single Walled Carbon Nanotube (SWCNT)/Water: Numerical Simulation and Sensitivity Analysis	Sharifpur, M. Ahmadi, M.H. Rungamornrat, J. and Malek Mohsen, F.	<a href="https://www.mdpi.com/2071-1050/14/18/11523">https://www.mdpi.com/2071-1050/14/18/11523</a>	SDG7	2022



273	New Type Anode for Calcium Ion Batteries Based on Silicon Carbide Monolayer	Kadhim, M.M. Rheima, A.M. Shadhar, M.H. Abdalnabi, S.M. Saleh, Z.M. Al Mashhadani, Z.I. Najm, Z.M. and Sarkar, A.	<a href="https://link.springer.com/article/10.1007/s12633-022-02014-w">https://link.springer.com/article/10.1007/s12633-022-02014-w</a>	SDG7	2022
274	Simulation of solar thermal panel systems with nanofluid flow and PCM for energy consumption management of buildings	Hai, T. Abidi, A. Wang, L. Abed, A.M. Z. Mahmoud, M. M. Tag El Din, E. and Smaisim, G.F.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S2352710222009913">https://www.sciencedirect.com/science/article/abs/pii/S2352710222009913</a>	SDG7	2022
275	Experimental Study The Performance Of Hybrid Serpentine Solar Collector In Air Conditioning System	Gatea, H.T. Hasson, A.S. Alwan, A.A. Jabbar, M. Y. and Abed, A.M.	<a href="http://www.thermalfluidscentral.org/journals/index.php/Heat_Mass_Transfer/article/view/1303">http://www.thermalfluidscentral.org/journals/index.php/Heat_Mass_Transfer/article/view/1303</a>	SDG7	2022
276	Optimization of doubly-fed induction generator (DFIG)based wind turbine to achieve maximum power generation with imperialist competitive algorithm (ICA)	Abdalkareem Jasim, S. Mireya Romero Parra, R. Salam Karim, Y. Mahdi, A.B. Jade Catalan Opulencia, M. Fakhridinovich Uktamov, K. and Thaeer Hammid, A.	<a href="https://journals.sagepub.com/doi/full/10.1177/00368504221113193">https://journals.sagepub.com/doi/full/10.1177/00368504221113193</a>	SDG7	2022
277	Nile red based dye D- $\pi$ -A as a promising material for solar cell applications	Kareem, M.Q. Jassim, G.S. Obaid, R.F. Shadhar, M.H. Kadhim, M.M. Almashhadani, H.A. and Sarkar, A.	<a href="https://link.springer.com/article/10.1007/s11696-022-02290-1">https://link.springer.com/article/10.1007/s11696-022-02290-1</a>	SDG7	2022





278	Study the thermal management of Li-ion batteries using looped heat pipes with different nanofluids	Smaisim, G.F. Al-Madhhachi, H. and Abed, A.M.	<a href="https://www.sciencedirect.com/science/article/pii/S2214157X22004737">https://www.sciencedirect.com/science/article/pii/S2214157X22004737</a>	SDG7	2022
279	Modeling and Thermodynamic Analysis of Solar Collector Cogeneration for Residential Building Energy Supply	Smaisim, G.F. Abed, A.M. Hadrawi, S.K. and Shamel, A.	<a href="https://www.hindawi.com/journals/je/2022/6280334/">https://www.hindawi.com/journals/je/2022/6280334/</a>	SDG7	2022
280	Economic Performance of a Hybrid Renewable Energy System with Optimal Design of Resources	Dwijendra, N.K.A. Sharma, S. Asary, A.R. Majdi, A. Muda, I. Mutlak, D.A. Parra, R.M.R. and Hammid, A.T.	<a href="https://sciendo.com/es/article/10.2478/rtuect-2022-0034">https://sciendo.com/es/article/10.2478/rtuect-2022-0034</a>	SDG7	2022
281	Enhancement in power conversion efficiency and stability of perovskite solar cell by reducing trap states using trichloroacetic acid additive in anti-solvent	Kumar, A. Singh, S. and Al-Bahrani, M.	<a href="https://www.sciencedirect.com/science/article/pii/S2468023022006022">https://www.sciencedirect.com/science/article/pii/S2468023022006022</a>	SDG7	2022
282	New material for addressing charge transport issue in DSSCs: Composite WS <sub>2</sub> /MoS <sub>2</sub> high porosity counter electrodes	Guo, F. Kumar Narukullapati, B. Mohammed, K.J. Altimari, U.S. Abed, A.M. Yan, Z. Ahmad, N. Dwijendra, N.K.A. Sivaraman, R. and Abdulkadhim, A.H.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S0038092X22004996">https://www.sciencedirect.com/science/article/abs/pii/S0038092X22004996</a>	SDG7	2022



283	Design new D- $\pi$ -A materials for sensitizers for dye-sensitized solar cells: Quantum chemical study	Kadhim, M.M. Taban, T.Z. Abdullaha, S.A.H. Abbas, Z.S. Hachim, S.K. Rheima, A.M. Almashhadani, H.A. and Ebadi, A.G.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S0030402622011299">https://www.sciencedirect.com/science/article/abs/pii/S0030402622011299</a>	SDG7	2022
284	Investigation of performance and efficiency of donor- $\pi$ -bridge-acceptor based material solar cell	Kadhim, M.M. Taban, T.Z. Abdullaha, S.A.H. Abbas, Z.S. Hachim, S.K. Rheima, A.M. Almashhadani, H.A. and Ebadi, A.G.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S1387700322006554">https://www.sciencedirect.com/science/article/abs/pii/S1387700322006554</a>	SDG7	2022
285	Energy-Efficient UART Design on FPGA Using Dynamic Voltage Scaling for Green Communication in Industrial Sector	Haripriya, D. Kumar, K. Shrivastava, A. Al-Khafaji, H.M.R. Moyal, V. and Singh, S.K.	<a href="https://www.hindawi.com/journals/wcmc/2022/4336647/">https://www.hindawi.com/journals/wcmc/2022/4336647/</a>	SDG7	2022
286	Controlling the Morphological, Optical and Dielectric Characteristics of PS/SiC/CeO <sub>2</sub> Nanostructures for Nanoelectronics and Optics Fields	Hashim, A. Abbas, M.H. Al-Aaraji, N.A.-H. and Hadi, A.	<a href="https://link.springer.com/article/10.1007/s10904-022-02485-9">https://link.springer.com/article/10.1007/s10904-022-02485-9</a>	SDG7	2022
287	Comparison Between the Traditional and Solar System Street Lighting System	Al-Khaykan, A. Alrubaie, A.J. Mohammed, K.A. Abed, A.M. and Alyasiri, Y.I.	<a href="https://ieeexplore.ieee.org/document/9790215">https://ieeexplore.ieee.org/document/9790215</a>	SDG7	2022



288	A hybrid fuel cell, solar thermal collector, and coal-fired power plant; energetic, exergetic, and emission analysis	Patra, I. Auda AbdulAmeer, S. Khalid, R. Jawad Kadhim, Z. I. Al Mashhadani, Z. and Roohbakhsh, H.	<a href="https://www.tandfonline.com/doi/abs/10.1080/15567036.2022.2116131">https://www.tandfonline.com/doi/abs/10.1080/15567036.2022.2116131</a>	SDG7	2022
289	Review on MPPT Techniques in Solar System	Alrubaie, A.J. Al-Khaykan, A. Malik, R.Q. Talib, S.H. Mousa, M.I. and Kadhim, A.M.	<a href="https://ieeexplore.ieee.org/document/9807500">https://ieeexplore.ieee.org/document/9807500</a>	SDG7	2022
290	Fundamental green roof performance of residential building in desert climate: In terms of sustainability and decrease in energy consumption	Yuan, J. Patra, I. Majdi, A. Ketut Acwin Dwijendra, N. Jade Catalan Opulencia, M. and Chetthamrongchai, P.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S2213138822006245">https://www.sciencedirect.com/science/article/abs/pii/S2213138822006245</a>	SDG7	2022
291	Perception of Mg adsorption on the BC2N nanotube as a anode for rechargeable Mg ion batteries	Jassim, G.S. Taban, T.Z. Shadhar, M.H. Kadhim, M.M. Noori, A.S. Almashhadani, H.A. Rheima, A.M. and Mohamadi, A.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S0360319922028385">https://www.sciencedirect.com/science/article/abs/pii/S0360319922028385</a>	SDG7	2022
292	A cascade energy cycle based on solid oxide fuel cell with electric energy storage option	Sivaraman, R. Bharath Kumar, N. Majdi, A. Emad Izzat, S. Muda, I. and Molana, A.	<a href="https://www.tandfonline.com/doi/abs/10.1080/15567036.2022.2123996">https://www.tandfonline.com/doi/abs/10.1080/15567036.2022.2123996</a>	SDG7	2022



293	Cost-effective resource and task scheduling in fog nodes	Shamman, A.H. Alasadi, H.A. Ameen, H.A. Rasol, Z.I. and Ghani, H.M.	<a href="https://ijeecs.iaescore.com/index.php/IJEECS/article/view/26379">https://ijeecs.iaescore.com/index.php/IJEECS/article/view/26379</a>	SDG7	2022
294	The Recent Advances of Metal–Organic Frameworks in Electric Vehicle Batteries	Rajabizadeh, A. Alihosseini, M. Amin, H.I.M. Almashhadani, H.A. Mousazadeh, F. Nobre, M.A.L. Soltani, M.D. Sharaki, S. Jalil, A.T. and Kadhim, M.M.	<a href="https://link.springer.com/article/10.1007/s10904-022-02467-x">https://link.springer.com/article/10.1007/s10904-022-02467-x</a>	SDG7	2022
295	Graphene and carbon structures and nanomaterials for energy storage	Salahdin, O.D. Sayadi, H. Solanki, R. Parra, R.M.R. Al-Thamir, M. Jalil, A.T. Izzat, S.E. Hammid, A.T. Arenas, L.A.B. and Kianfar, E.	<a href="https://link.springer.com/article/10.1007/s00339-022-05789-2">https://link.springer.com/article/10.1007/s00339-022-05789-2</a>	SDG7	2022
296	Augmenting the performance of pyramid distiller via conical absorbing surface, reflectors, condenser, and thermal storing material	Essa, F.A. Alawee, W.H. Abdullah, A.S. Aljaghtam, M. Mohammed, S.A. Dhahad, H.A. Majdi, A. and Omara, Z.M.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S2352152X22015857">https://www.sciencedirect.com/science/article/abs/pii/S2352152X22015857</a>	SDG7	2022
297	Using the aluminum decorated graphitic-C <sub>3</sub> N <sub>4</sub> quantum dote (QD) as a sensor, sorbent, and photocatalyst for artificial photosynthesis; a DFT study	Abbass, R. Chlib Alkaaby, H.H. Kadhim, Z.J. Izzat, S.E. Kadhim, A.A. Adhab, A.H. and Pakravan, P.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S1093326322001814">https://www.sciencedirect.com/science/article/abs/pii/S1093326322001814</a>	SDG7	2022



298	Thermoeconomic assessment of a renewable hybrid RO/PEM electrolyzer integrated with Kalina cycle and solar dryer unit using response surface methodology (RSM)	Sun, W. Feng, L. Abed, A.M. Sharma, A. and Arsalanloo, A.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S0360544222018461">https://www.sciencedirect.com/science/article/abs/pii/S0360544222018461</a>	SDG7	2022
299	Systematically theoretical investigation the effect of nitrogen and iron-doped graphdiyne on the oxygen reduction reaction mechanism in proton exchange membrane fuel cells	Irfan, D. Catalan Opulencia, M.J. Jasim, S.A. Salimov, O.R. Mahdi, A.B. Abed, A.M. and Sarkar, A.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S0360319922013386">https://www.sciencedirect.com/science/article/abs/pii/S0360319922013386</a>	SDG7	2022
300	MnCo <sub>2</sub> O <sub>4</sub> /N-doped graphene quantum dot vigorously coupled to MXene nanosheet: A bifunctional Oxygen electrocatalyst outperforms Pt/IrO <sub>2</sub> benchmark electrocatalysts in metal-air batteries	Faraji, M. Yousefzadeh, S. Nassar, M.F. and Zahra, M.M.A.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S092583882203506X">https://www.sciencedirect.com/science/article/abs/pii/S092583882203506X</a>	SDG7	2022
301	Ionic Liquid Passivator for Mesoporous Titanium Dioxide Electron Transport Layer to Enhance the Efficiency and Stability of Hole Conductor-Free Perovskite Solar Cells	Mohammed, M.K.A. Al-Mousoi, A.K. Singh, S. Younis, U. Kumar, A. Dastan, D. and Ravi, G.	<a href="https://pubs.acs.org/doi/abs/10.1021/acs.energyfuels.2c01980">https://pubs.acs.org/doi/abs/10.1021/acs.energyfuels.2c01980</a>	SDG7	2022
302	Multi-objective risk-constrained optimal performance of hydrogen-based multi energy systems for future sustainable societies	Li, J. Chen, J. Yuan, Z. Xu, L. Zhang, Y. and Al-Bahrani, M.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S2210670722004899">https://www.sciencedirect.com/science/article/abs/pii/S2210670722004899</a>	SDG7	2022



303	Unveiling concentration effects on the structural and optoelectronic characteristics of Zn <sub>1-x</sub> Cd <sub>x</sub> S (x = 0, 0.25, 0.50, 0.75, 1) cubic semiconductors: a theoretical study	Iqbal, M.A. Malik, M. Zahid, A. Islam, M.R. Arellano-Ramírez, I.D. and Al-Bahrani, M.	<a href="https://pubs.rsc.org/en/content/articlehtml/2022/ra/d2ra03850a?page=search">https://pubs.rsc.org/en/content/articlehtml/2022/ra/d2ra03850a?page=search</a>	SDG7	2022
304	Solar Powered Automated Hydroponic Farming System with IoT Feedback	Orakwue, S.I. Al-Khafaji, H.M.R. Ikenyiri, V.C. and Godson, V.C.	<a href="https://jitm.ut.ac.ir/article_87261.html">https://jitm.ut.ac.ir/article_87261.html</a>	SDG7	2022
305	Design and multiperspectivity-based performance investigations of H-Darrieus vertical axis wind turbine through computational fluid dynamics adopted with moving reference frame approaches	Balamurugan, R.J. Al-Bonsrulah, H.A.Z. Raja, V. Kumar, L. Kannan, S.D. Madasamy, S.K. Rasheed, R. Rajendran, P. and Al-Bahrani, M.	<a href="https://academic.oup.com/ijlct/article/doi/10.1093/ijlct/ctac055/6590200">https://academic.oup.com/ijlct/article/doi/10.1093/ijlct/ctac055/6590200</a>	SDG7	2022
306	Photochemical synthesis of bimetallic CuNiS <sub>x</sub> quantum dots onto g-C <sub>3</sub> N <sub>4</sub> as a cocatalyst for high hydrogen evolution	Wu, X. Fan, H. Wang, W. Zhang, M. Al-Bahrani, M. and Ma, L.	<a href="https://pubs.rsc.org/en/content/articlelanding/2022/nj/d2nj03115a">https://pubs.rsc.org/en/content/articlelanding/2022/nj/d2nj03115a</a>	SDG7	2022
307	Numerical investigation of nanofluids comprising different metal oxide nanoparticles for cooling concentration photovoltaic thermal CPVT	Hasan, H.A. Hatem, A.A. Abd, L.A. Abed, A.M. and Sopian, K.	<a href="https://www.sciencedirect.com/science/article/pii/S2666790822001483">https://www.sciencedirect.com/science/article/pii/S2666790822001483</a>	SDG7	2022



308	Adaption of MAPbI <sub>3</sub> perovskite with copper phthalocyanine inorganic hole transport layer via nitrosonium tetrafluoroborate additive to enhance performance and stability of perovskite solar cells	Mohammed, M.K.A. Al-Azzawi, R.K. Jasim, H.H. Mohammed, S.H. Singh, S. Kadhum, H.H. Kumar, A. Sasikumar, P. Revathy, M.S. and Jabir, M.S.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S0925346722009351">https://www.sciencedirect.com/science/article/abs/pii/S0925346722009351</a>	SDG7	2022
309	Mechanical properties of concrete containing recycled aggregate from construction waste	Patra, I. Al-Awsi, G.R.L. Hasan, Y.M. and Almotlaq, S.S.K.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S2213138822007706">https://www.sciencedirect.com/science/article/abs/pii/S2213138822007706</a>	SDG7	2022
310	A New Nonlinear Controller for the Maximum Power Point Tracking of Photovoltaic Systems in Micro Grid Applications Based on Modified Anti-Disturbance Compensation	Azar, A.T. Abed, A.M. Abdulmajeed, F.A. Hameed, I.A. Kamal, N.A. Jawad, A.J.M. Abbas, A.H. Rashed, Z.A. Hashim, Z.S. Sahib, M.A. Ibraheem, I.K. and Thabit, R.	<a href="https://www.mdpi.com/2071-1050/14/17/10511">https://www.mdpi.com/2071-1050/14/17/10511</a>	SDG7	2022
311	Opto-Magnetic and Morphological Properties of the Quaternary CZCr <sup>+</sup> <sub>2</sub> TS Semiconductor	Hussein, H.M. Mohammed, K.A. and Alsultany, F.H.	<a href="https://www.worldscientific.com/doi/10.1142/S0219581X21500617">https://www.worldscientific.com/doi/10.1142/S0219581X21500617</a>	SDG7	2022
312	Environmental and exergoeconomic assessments of a novel biomass gasification based solid oxide fuel cell and heat engine hybrid energy system	Kumar Tripathi, A. Patra, I. Bharath Kumar, N. Majdi, A. Muda, I. and Mahdavi, A.	<a href="https://www.tandfonline.com/doi/abs/10.1080/15567036.2022.2123070">https://www.tandfonline.com/doi/abs/10.1080/15567036.2022.2123070</a>	SDG7	2022



313	A stand-alone hydrogen photovoltaic fuel cell hybrid system for efficient renewable energy generation	Abdulhafedh, A.T. Ali, A.M. Jasim, L.A. and Gheni, H.M.	<a href="http://pen.ius.edu.ba/index.php/pen/article/view/2702">http://pen.ius.edu.ba/index.php/pen/article/view/2702</a>	SDG7	2022
314	Exergoeconomic assessment of a biomass-based hydrogen, electricity and freshwater production cycle combined with an electrolyzer, steam turbine and a thermal desalination process	Wang, S. Lin, H. Abed, A.M. Sharma, A. and Fooladi, H.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S0360319922034073">https://www.sciencedirect.com/science/article/abs/pii/S0360319922034073</a>	SDG7	2022
315	Predicting the environmental economic dispatch problem for reducing waste nonrenewable materials via an innovative constraint multi-objective Chimp Optimization Algorithm	Zhu, L. Ren, H. Habibi, M. Mohammed, K.J. and Khadimallah, M.A.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S0959652622022958">https://www.sciencedirect.com/science/article/abs/pii/S0959652622022958</a>	SDG8	2022
316	Designing a Green Supply Chain Transportation System for an Automotive Company Based on Bi-Objective Optimization	Syah, R. Nasution, M.M. Shol, V.V. Kireeva, N. Jalil, A.T. Chen, T.-C. Aravindhana, S. Abood, E.S. and Alkaim, A.F.	<a href="https://sciencedirect.com/es/article/10.2478/fcds-2022-0011">https://sciencedirect.com/es/article/10.2478/fcds-2022-0011</a>	SDG8	2022
317	Investigating and Optimizing the Operation of Microgrids with Intelligent Algorithms	Hado, A.K. Bashar, B.S. Zahra, M.M.A. Alayi, R. Ebazadeh, Y. and Suwarno, I.	<a href="https://journal.umy.ac.id/index.php/jrc/article/view/14772">https://journal.umy.ac.id/index.php/jrc/article/view/14772</a>	SDG8	2022





318	Farasan Island of Saudi Arabia confronts the measurable impacts of global warming in 45 years	Khedher, K.M. Abu-Taweel, G.M. Al-Fifi, Z. Qoradi, M.D. Al-khafaji, Z. Halder, B. Bandyopadhyay, J. Shahid, S. Essaied, L. and Yaseen, Z.M.	<a href="https://www.nature.com/articles/s41598-022-18225-5">https://www.nature.com/articles/s41598-022-18225-5</a>	SDG8	2022
319	The Impact of Knowledge-based Economy on the Economic Growth of Middle Eastern Countries	Alghazali, T. Sharhan Al-Sudani, A.Q.A. Alabass, H.S.H. Hawash, M.K. Talib, S.G. Ali, M.H. Mohammad, T.A. Yousif, Y.D. and Al-Muttar, M.Y.O.	<a href="https://cude.es/submit-a-manuscript/index.php/CUDE/article/view/242#:~:text=Results%20demonstrated%20that%20R%26D%20spending,growth%20of%20Middle%20Eastern%20nations.">https://cude.es/submit-a-manuscript/index.php/CUDE/article/view/242#:~:text=Results%20demonstrated%20that%20R%26D%20spending,growth%20of%20Middle%20Eastern%20nations.</a>	SDG8	2022
320	Exploring decision-making methods for sustainable design in commercial buildings	Wang, A. Xing, L. Mohammed, K.J. Salameh, A.A. Jan, A. Ali, H.E. and EzzEl-Arab, I.	<a href="http://www.techno-press.org/content/?page=article&amp;journal=scs&amp;volume=43&amp;num=2&amp;ordernum=11">http://www.techno-press.org/content/?page=article&amp;journal=scs&amp;volume=43&amp;num=2&amp;ordernum=11</a>	SDG8	2022
321	A Comprehensive Review on the Ground Granulated Blast Furnace Slag (GGBS) in Concrete Production	Ahmad, J. Kontoleon, K.J. Majdi, A. Naqash, M.T. Deifalla, A.F. Ben Kahla, N. Isleem, H.F. and Qaidi, S.M.A.	<a href="https://www.mdpi.com/2071-1050/14/14/8783">https://www.mdpi.com/2071-1050/14/14/8783</a>	SDG9	2022
322	The Numerical Analysis of Replenishment of Hydrogel Void Space Concrete Using Hydrogels Containing Nano-Silica Particles through ELM-ANFIS	Min, J. Zandi, Y. Agdas, A.S. Majdi, A. Ali, H.E. Jan, A. Salameh, A.A. and Ebid, A.A.K.	<a href="https://www.mdpi.com/2310-2861/8/5/299">https://www.mdpi.com/2310-2861/8/5/299</a>	SDG9	2022



323	Development of a web-based broadband mapping application	Esite, J.T. Orakwue, S.I. Al-Khafaji, H.M.R. and Elijah, O.	<a href="http://pen.ius.edu.ba/index.php/pen/article/view/2712">http://pen.ius.edu.ba/index.php/pen/article/view/2712</a>	SDG9	2022
324	Sustainable heating system by infrared radiators	Radhi, S.S. Al-Khafaji, Z.S. and Falah, M.W.	<a href="https://hsd.ardascience.com/index.php/journal/article/view/82">https://hsd.ardascience.com/index.php/journal/article/view/82</a>	SDG9	2022
325	Strength and microstructural properties of binary and ternary blends in fly ash-based geopolymer concrete	Jumaa, N.H. Ali, I.M. Nasr, M.S. and Falah, M.W.	<a href="https://www.sciencedirect.com/science/article/pii/S2214509522004491">https://www.sciencedirect.com/science/article/pii/S2214509522004491</a>	SDG9	2022
326	Mechanical properties of sustainable reactive powder concrete made with low cement content and high amount of fly ash and silica fume	Nasr, M.S. Hasan, Z.A. Jaaz, H.A.G. Abed, M.K. Falah, M.W. and Hashim, T.M.	<a href="https://www.degruyter.com/document/doi/10.1515/jmbm-2022-0069/html">https://www.degruyter.com/document/doi/10.1515/jmbm-2022-0069/html</a>	SDG9	2022
327	Application of 3D scanning technology in Royal Malaysian Air Force Industrial Revolution 4.0-based aircraft maintenance	Thulasy, T.N. Nohuddin, P.N.E. Nusyirwan, I.F. Ahmad Hijazi, M.H. and Abdul Zahra, M.M.	<a href="https://ietresearch.onlinelibrary.wiley.com/doi/full/10.1049/ntw2.12062">https://ietresearch.onlinelibrary.wiley.com/doi/full/10.1049/ntw2.12062</a>	SDG9	2022



328	A novel approach to construct self-assembled 3D MEMS arrays	Akhundzada, S. Yang, X. Fiedler, J. Käkel, E. Al-Qargholi, B. Buhmann, S.Ehresmann, A. and Hillmer, H.	<a href="https://link.springer.com/article/10.1007/s00542-022-05361-1">https://link.springer.com/article/10.1007/s00542-022-05361-1</a>	SDG9	2022
329	Improving coal mine safety with internet of things (IoT) based Dynamic Sensor Information Control System	Ali, M.H. Al-Azzawi, W.K. Jaber, M. Abd, S.K. Alkhayyat, A. and Rasool, Z.I.	<a href="https://www.sciencedirect.com/science/article/pii/S1474706522001188">https://www.sciencedirect.com/science/article/pii/S1474706522001188</a>	SDG9	2022
330	Concrete Made with Dune Sand: Overview of Fresh, Mechanical and Durability Properties	Ahmad, J. Majdi, A. Deifalla, A.F. Qureshi, H.J. Saleem, M.U. Qaidi, S.M.A. and El-Shorbagy, M.A.	<a href="https://www.mdpi.com/1996-1944/15/17/6152">https://www.mdpi.com/1996-1944/15/17/6152</a>	SDG9	2022
331	Optimised Internet of Thing framework based hybrid meta-heuristic algorithms for E-healthcare monitoring	Al-Hashimi, M. Mohammed Jameel, S. Husham Almkhtar, F. Abdul Zahra, M.M. and Adnan Jaleel, R.	<a href="https://ietresearch.onlinelibrary.wiley.com/doi/full/10.1049/ntw2.12057">https://ietresearch.onlinelibrary.wiley.com/doi/full/10.1049/ntw2.12057</a>	SDG9	2022
332	Partial Substitution of Binding Material by Bentonite Clay (BC) in Concrete: A Review	Ahmad, J. Kontoleon, K.J. Al-Mulali, M.Z. Shaik, S. Ouni, M.H.E. and El-Shorbagy, M.A.	<a href="https://www.mdpi.com/2075-5309/12/5/634">https://www.mdpi.com/2075-5309/12/5/634</a>	SDG9	2022



333	The Organizational Conflict And Ways To Address It By The Administrative And Training Bodies In The Sports Clubs Of The Middle Euphrates Region	Al-Saegh, A.M.J.A. Ahmed, M.A. and Kzar, M.H.	<a href="https://dialnet.unirioja.es/servlet/articulo?codigo=8566319">https://dialnet.unirioja.es/servlet/articulo?codigo=8566319</a>	SDG10	2022
334	Determining and explaining the components of the justice-oriented Islamic community based on the teachings of Nahj al-Balaghah	Al-Hawary, S.I.S. Mukhlis, H. Mahdi, O.A. Surahman, S. Adnan, S. Salim, M.A. and Iswanto, A.H.	<a href="https://hts.org.za/index.php/hts/article/view/7835">https://hts.org.za/index.php/hts/article/view/7835</a>	SDG10	2022
335	Comprehensive driver behaviour review: Taxonomy, issues and challenges, motivations and research direction towards achieving a smart transportation environment	Zaidan, R.A. Alamoodi, A.H. Zaidan, B.B. Zaidan, A.A. Albahri, O.S. Talal, M. Garfan, S. Sulaiman, S. Mohammed, A. Kareem, Z.H. Malik, R.Q. and Ameen, H.A.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S0952197622000471">https://www.sciencedirect.com/science/article/abs/pii/S0952197622000471</a>	SDG11	2022
336	Comparison of lateral spillway and morning glory spillway performance in flood control	Sukerta, I.M. Chen, T.-C. Mardizal, J. Salih, S.M. Zulkarnain, I. Islam, M.Z. Majeed, M.S. Mahdi, A.B. Mutlak, D.A. and Aravindhan, S.	<a href="https://www.itp.edu.pl/JWLD/no-53.html">https://www.itp.edu.pl/JWLD/no-53.html</a>	SDG11	2022
337	Big data analysis and cloud computing for smart transportation system integration	Ali, M.H. Jaber, M.M. Abd, S.K. Alkhayyat, A. and Albaghdadi, M.F.	<a href="https://link.springer.com/article/10.1007/s11042-022-13700-7">https://link.springer.com/article/10.1007/s11042-022-13700-7</a>	SDG11	2022



338	A smart building with integrated energy management: Steps toward the creation of a smart city	Majdi, A. Dwijendra, N.K.A. Muda, I. Chetthamrongchai, P. Sivaraman, R. and Hammid, A.T.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S2213138822007123">https://www.sciencedirect.com/science/article/abs/pii/S2213138822007123</a>	SDG11	2022
339	Assessment of Urban Green Space Dynamics Influencing the Surface Urban Heat Stress Using Advanced Geospatial Techniques	Halder, B. Bandyopadhyay, J. Al-Hilali, A.A. Ahmed, A.M. Falah, M.W. Abed, S.A. Falih, K.T. Khedher, K.M. Scholz, M. and Yaseen, Z.M.	<a href="https://www.mdpi.com/2073-4395/12/9/2129">https://www.mdpi.com/2073-4395/12/9/2129</a>	SDG11	2022
340	Wind Tunnel Investigation and Numerical Analysis of Fume Behavior in the Vicinity of Rectangular Building Under Moderate Velocity Wind	Mahjoub, H. Abdulkadhim, A. Romdhane, S.B. Said, N.M. Bournot, H. and Abed, I.M.	<a href="https://asmedigitalcollection.asme.org/heattransfer/article-abstract/144/6/061001/1135607/Wind-Tunnel-Investigation-and-Numerical-Analysis">https://asmedigitalcollection.asme.org/heattransfer/article-abstract/144/6/061001/1135607/Wind-Tunnel-Investigation-and-Numerical-Analysis</a>	SDG11	2022
341	Mechanical and Durability Performance of Coconut Fiber Reinforced Concrete: A State-of-the-Art Review	Ahmad, J. Majdi, A. Al-Fakih, A. Deifalla, A.F. Althoey, F. El Ouni, M.H. and El-Shorbagy, M.A.	<a href="https://www.mdpi.com/1996-1944/15/10/3601">https://www.mdpi.com/1996-1944/15/10/3601</a>	SDG12	2022
342	Overview of Concrete Performance Made with Waste Rubber Tires: A Step toward Sustainable Concrete	Ahmad, J. Zhou, Z. Majdi, A. Alqurashi, M. and Deifalla, A.F.	<a href="https://www.mdpi.com/1996-1944/15/16/5518">https://www.mdpi.com/1996-1944/15/16/5518</a>	SDG12	2022



343	Compressive Strength Prediction Using Coupled Deep Learning Model with Extreme Gradient Boosting Algorithm: Environmentally Friendly Concrete Incorporating Recycled Aggregate	Falah, M.W. Hussein, S.H. Saad, M.A. Ali, Z.H. Tran, T.H. Ghoniem, R.M. and Ewees, A.A.	<a href="https://www.hindawi.com/journals/complexity/2022/5433474/">https://www.hindawi.com/journals/complexity/2022/5433474/</a>	SDG12	2022
344	Optimization of mechanical wear resistance for recycled (Al-Mg-Si) reinforced SiC composite material using PM method	Omran, S.H. Al-Masoudy, M.M. Hassoon, O.H. and Fayad, M.A.	<a href="https://www.degruyter.com/document/doi/10.1515/cls-2022-0023/html?lang=en">https://www.degruyter.com/document/doi/10.1515/cls-2022-0023/html?lang=en</a>	SDG12	2022
345	Capability of copper-nickel ferrite nanoparticles loaded onto multi-walled carbon nanotubes to degrade acid blue 113 dye in the sonophotocatalytic treatment process	Al-Musawi, T.J. Mengelizadeh, N. Taghavi, M. Shehu, Z. and Balarak, D.	<a href="https://pubmed.ncbi.nlm.nih.gov/35246794/">https://pubmed.ncbi.nlm.nih.gov/35246794/</a>	SDG13	2022
346	Numerical investigation of hydrogen enriched natural gas effects on different characteristics of a SI engine with modified injection mechanism from port to direct injection	Zareei, J. Ghadamkheir, K. Farkhondeh, S.A. Abed, A.M. Catalan Oplencia, M.J. and Nuñez Alvarez, J.R.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S0360544222013482">https://www.sciencedirect.com/science/article/abs/pii/S0360544222013482</a>	SDG13	2022
347	Techno-economic and environmental evaluation of PV/diesel/battery hybrid energy system using improved dispatch strategy	Aziz, A.S. Tajuddin, M.F.N. Zidane, T.E.K. Su, C.-L. Alrubaie, A.J.K. and Alwazzan, M.J.	<a href="https://www.sciencedirect.com/science/article/pii/S2352484722008678">https://www.sciencedirect.com/science/article/pii/S2352484722008678</a>	SDG13	2022



348	Design pollution gas sensor using graphene ribbon: density function theory (DFT)	Al-Hasnawy, R.S. Shaker, A.S. Albosaabar, M.H. AlMaamouri, Z.A. and Al-tae, H.A.	<a href="https://en.x-mol.com/paper/article/1478066537049399296">https://en.x-mol.com/paper/article/1478066537049399296</a>	SDG13	2022
349	Dietary <i>Dracocephalum kotschy</i> essential oil improved growth, haematology, immunity and resistance to <i>Aeromonas hydrophila</i> in rainbow trout ( <i>Oncorhynchus mykiss</i> )	Hafsan, H. Bokov, D. Abdelbasset, W.K. Kadhim, M. Suksatan, W. Majdi, H.S. Widjaja, G. Jalil, A.T. Qasim, M.T. and Balvardi, M.	<a href="https://onlinelibrary.wiley.com/doi/abs/10.1111/are.15829">https://onlinelibrary.wiley.com/doi/abs/10.1111/are.15829</a>	SDG14	2022
350	Beneficial alterations in growth performance, blood biochemicals, immune responses, and antioxidant capacity of common carp ( <i>Cyprinus carpio</i> ) fed a blend of <i>Thymus vulgaris</i> , <i>Origanum majorana</i> , and <i>Satureja hortensis</i> extracts	Rudiansyah, M. Abdelbasset, W.K. Jasim, S.A. Mohammadi, G. Dharmarajlu, S.M. Nasirin, C. Turki Jalil, A. Oplencia, M.J.C. Kadhem Abid, M. and Shahbazi Naserabad, S.	<a href="https://www.sciencedirect.com/science/article/abs/pii/S0044848622003702">https://www.sciencedirect.com/science/article/abs/pii/S0044848622003702</a>	SDG14	2022
351	Probiotic effects of the fungi, <i>Aspergillus niger</i> on growth, immunity, haematology, intestine fungal load and digestive enzymes of the common carp, <i>Cyprinus carpio</i>	Jasim, S.A. Abdelbasset, W.K. Shichiyakh, R.A. Al-Shawi, S.G. Yasin, G. Jalil, A.T. Karim, Y.S. Mustafa, Y.F. and Norbakhsh, M.	<a href="https://onlinelibrary.wiley.com/doi/abs/10.1111/are.15890">https://onlinelibrary.wiley.com/doi/abs/10.1111/are.15890</a>	SDG14	2022
352	Geochemical and heavy minerals investigation to identity provenance of dunes and valley sediments, at Al-Muthanna, southern Iraq	Hussein, M.L. Al-Owaidi, M.R.A. Al-Khafaji, A.J. and Abduulah, M.D.	<a href="https://link.springer.com/article/10.1007/s40808-022-01473-9">https://link.springer.com/article/10.1007/s40808-022-01473-9</a>	SDG14	2022



353	Toxic effects on enzymatic activity, gene expression and histopathological biomarkers in organisms exposed to microplastics and nanoplastics: a review	Patra, I. Huy, D.T.N. Alsaikhan, F. Opulencia, M.J.C. Van Tuan, P. Nurmatova, K.C. Majdi, A. Shoukat, S. Yasin, G. Margiana, R. Walker, T.R. and Karbalaei, S.	<a href="https://enveurope.springeropen.com/articles/10.1186/s12302-022-00652-w">https://enveurope.springeropen.com/articles/10.1186/s12302-022-00652-w</a>	SDG14	2022
354	The synergistic effects of the probiotic ( <i>Lactobacillus fermentum</i> ) and cinnamon, <i>Cinnamomum</i> sp. powder on growth performance, intestinal microbiota, immunity, antioxidant defence and resistance to <i>Yersinia ruckeri</i> infection in the rainbow trout ( <i>Oncorhynchus mykiss</i> ) under high rearing density	Jasim, S.A. Hafsan, H. Saleem, H.D. Kandeel, M. Khudhair, F. Yasin, G. Iswanto, A.H. Mohammed, H.T. Izzat, S.E. and Dadras, M.	<a href="https://onlinelibrary.wiley.com/doi/abs/10.1111/are.16064">https://onlinelibrary.wiley.com/doi/abs/10.1111/are.16064</a>	SDG14	2022
355	Electrocardiograph signal recognition using wavelet transform based on optimized neural network	Jawad, A.T. Abdul-Zahra, D.S. Gheni, H.M. and Abdullah, A.N.	<a href="https://ijece.iaescore.com/index.php/IJECE/article/view/26210">https://ijece.iaescore.com/index.php/IJECE/article/view/26210</a>	SDG15	2022
356	Corruption in Public Offices: A Way to Reduce Corrupt Practices	Mohammed, A. Talib, S.G. Alghazali, T. Shaker, R.M. Algburi, M.A.S. Al-Maeni, M.K.A. Dawood, I.I. and Sabit, S.H.	<a href="https://cirj.org/index.php/cirj">https://cirj.org/index.php/cirj</a>	SDG16	2022





357	A comprehensive method of e-government transition for viable development in Iraq	Mutar, A.F. Abdullah, A.R. Jasim, O.M. Saare, M.A. and Lashari, S.A.	<a href="https://beei.org/index.php/EEI/article/view/3142">https://beei.org/index.php/EEI/article/view/3142</a>	SDG16	2022
358	Role of Religion and Traditions in Prevention of Corruption	Al-Maeeni, M.K.A. Al-Juhaishi, H.M.A. Aljburi, K.H.S. Shaker, R.M. Alghazali, T. Mohameed, D.A.A.-H. Hameed, R.M. and Dawood, I.I.	<a href="https://cirj.org/index.php/cirj/article/view/546">https://cirj.org/index.php/cirj/article/view/546</a>	SDG16	2022