

Is "Solar Energy and Power Electronic Co., Ltd." a Fake Company?

When investigating the publications by HAI Tao (海涛), who is working for multiple universities in China and Malaysia, the 5GH Team noted a company named "Solar Energy and Power Electronic Co., Ltd." (SEPE), and suspect that it is a fake company, like the Sun-Life Company which was exposed in 2023 by other academic sleuths.

Articles with Authors from Solar Energy and Power Electronic Co., Ltd.					
Red: authors from Solar Energy and Power Electronic Co., Ltd., Japan/Turkey/Germany					
Blue: authors from institutions in China					
DOI	Authors	Title	Journal	Year	
10.1016/j.est.2021.103805	Sheng Xuebin, Shao (Beih University of Arts and Sciences), Henan Fangjun , Wang, Aibao (Beih University of Arts and Sciences), Wang, Jie , Shao, Chong	Scheduling of renewable energy and plug-in hybrid electric vehicles based on integrated energy hybrid control	Journal of Energy Storage	2022	
10.1016/j.est.2022.02.009	Zhao, Ma (Weihua University), Hu, Neng , Meng, Jang (Hainan Institute of Technology), Dagid, Dettar , Teng, Kaitang	Novel hybrid modified with hard algorithm and fuzzy control based MPPT to generate the maximum power for PV system in the three phase grid-connected grid	ISA Transactions	2022	
10.1016/j.est.2022.106792	Tao Hai (Guangxi Normal University for Nationalities), Shao, Zhen (Guangxi Normal University for Nationalities), Kengo, Mutsaka	Energy management and operational planning of renewable energy resources based on integrated energy storage	Electric Power Systems Research	2022	
10.1016/j.est.2022.106936	Tao Hai (Guangxi Normal University for Nationalities), Shao, Zhen (Guangxi Normal University for Nationalities), Kengo, Mutsaka	An efficient fuzzy logic based MPPT controller for grid-connected PV systems by farmstead fertility optimization algorithm	Optik	2022	
10.1016/j.est.2022.106475	Muhyiddin Hasea, Yusuf Al-Turki, Khalid Sedraoui, Sajad Dettar , Yoshida, Koki (Japan)	Optimal operation and stochastic scheduling of renewable energy of a microgrid with optimal use of battery energy storage considering cost reduction	Journal of Energy Storage	2022	
10.1016/j.est.2022.117208	Chen, Huan , Zuo, J. , Shao, Zhen , Almusa, Haseem , Shi, Niguan (Lanzhou University)	Analysis and enhancement of MPPT technique to increase accuracy and speed in photovoltaic systems under different conditions	Optik	2023	
10.1016/j.conengprac.2021.104809	Yip, Yag (Guangxi Normal University for Nationalities), Almusa, Haseem , Farouk, Wajid , Almusa, Haseem , Yip, Yag (Guangxi Institute of Technology), Muhammad Shafiqul, Nadeem (China)	A novel MPPT controller in PV systems with hybrid state optimization-PS algorithm based ANFIS under different conditions	Control Engineering Practice	2021	
10.1016/j.est.2022.102156	Zaid M. Al. , Thamer, Alqutham , Salem, Alkhatib , Hadi, Nouran , Sajad, Dettar , Kengo, Mutsaka	Novel hybrid improved bat algorithm and fuzzy system based MPPT for photovoltaic under variable atmospheric conditions	Sustainable Energy Technologies and Assessments	2022	
10.1016/j.est.2021.101812	Emad M. Ahmed , Hadi, Nouran , Salem, Alkhatib , Zaid M. Al. , Sajad, Dettar , Kengo, Mutsaka	Enhancement of MPPT controller in PV-BES system using incremental conductance along with hybrid cross pattern search approach based ANFIS under different environmental conditions	Sustainable Energy Technologies and Assessments	2021	
10.1016/j.est.2022.102628	Tao Hai (Guangxi Normal University for Nationalities), Shao, Zhen (Guangxi Normal University for Nationalities), Kengo, Mutsaka	An improved MPPT control based ANFIS method to maximize power tracking of PEM fuel cell system	Sustainable Energy Technologies and Assessments	2022	
10.1016/j.est.2021.103124	Ali, Zhen (Hebei University of Science and Technology), Muhammad, Jie , Rahat, Akbar , Bin, Liu (Hebei University of Science and Technology), Muhammad, Jie , Wahid, Nadeem	Using renewable energy systems with energy storage systems based on intelligent control method using hybrid shuffled frog leaping and pattern search algorithm	Sustainable Cities and Society	2021	
10.1016/j.conengprac.2021.104890	Almusa, Haseem (Hainan Institute of Technology), Almusa, Haseem , Sajad, Dettar , Hu, Jie (Capital Aerospace Machinery Co., Ltd.), Yahya N. Sadek , Nadeem, Nadeem	A novel combinatorial hybrid BPSO-PS algorithm based neural network with parallel search for the MPPT controller of a hybrid PV-storage system	Control Engineering Practice	2021	
10.1016/j.jowp.2022.232894	Tao Hai (Guangxi Normal University for Nationalities), Shao, Zhen (Guangxi Normal University for Nationalities), Muhyiddin, Koki (Turkey)	Optimal planning and design of integrated energy systems in a microgrid incorporating electric vehicles and fuel cell system	Journal of Power Sources	2023	
10.1016/j.jowp.2021.156573	Shao, Zhen (Guangxi Normal University for Nationalities), Almusa, Haseem , Kengo, Mutsaka	Efficient maximum power point tracking for a photovoltaic using hybrid shuffled frog leaping and pattern search algorithm under changing environmental conditions	Journal of Cleaner Production	2021	
10.1016/j.conengprac.2023.105481	Zaid M. Al. , Majid, Al-Chalabi , Said K. Al-Gharib , Talawa, Mutsaka	A new maximum power point tracking method for PEM fuel cell power system based on ANFIS with modified cross pattern search algorithm	Control Engineering Practice	2023	
10.1016/j.est.2022.102879	Tao Hai (Guangxi Normal University for Nationalities), Almusa, Haseem , Almusa, Haseem , Sajad, Dettar , Hu, Jie (Capital Aerospace Machinery Co., Ltd.), Yahya N. Sadek , Nadeem, Nadeem	A stochastic optimal scheduling of distributed energy resources with electric vehicles based on microgrid considering electricity price	Sustainable Energy Technologies and Assessments	2022	
10.1016/j.conengprac.2021.104831	Almusa, Haseem , Zaid M. Al. , Muhammad M. Alkhatib , Muhyiddin, Koki (Turkey), Sajad, Dettar , Kengo, Mutsaka	A modified shuffled frog algorithm to improve MPPT controller in PV system with storage batteries under variable atmospheric conditions	Control Engineering Practice	2021	
10.1016/j.est.2020.102081	Hu, Jie (Capital Aerospace Machinery Co., Ltd.), Almusa, Haseem , Shao, Zhen (Guangxi Normal University for Nationalities), Almusa, Haseem	Optimal day-ahead scheduling of microgrid with hybrid electric vehicles using NSGA-II algorithm considering control strategies	Sustainable Cities and Society	2020	
10.1016/j.jowp.2020.123719	Shao, Zhen (Guangxi Normal University for Nationalities), Almusa, Haseem , Sajad, Dettar , Kengo, Mutsaka	Enhancement of maximum power point tracking technique based on PV-Battery system using hybrid BAT algorithm and fuzzy controller	Journal of Cleaner Production	2020	
10.1016/j.jhyd.2021.101103	Tao Hai (Guangxi Normal University for Nationalities), Almusa, Haseem , Shao, Zhen (Guangxi Normal University for Nationalities), Almusa, Haseem	Performance improvement of PEM fuel cell power system using fuzzy logic controller based MPPT technique to extract the maximum power under various conditions	International Journal of Hydrogen Energy	2022	
10.1016/j.jowp.2021.127215	Tao Hai (Beih University of Arts and Sciences), Farouk, Wajid , Almusa, Haseem , Almusa, Haseem , Shao, Zhen (Guangxi Normal University for Nationalities), Almusa, Haseem	Hybrid whale optimization and pattern search algorithm for day-ahead operation of a microgrid in the presence of electric vehicles and renewable energies	Journal of Cleaner Production	2021	
10.1016/j.jowp.2020.124435	Almusa, Haseem , Jie, Hui , Almusa, Haseem , Muhammad, Nadeem	A day-ahead joint energy management and battery using framework based on renewable fuel cell system for a renewable energy integrated microgrid	Journal of Cleaner Production	2020	
10.1016/j.est.2022.105882	Tao Hai (Guangxi Normal University for Nationalities), Shao, Zhen (Guangxi Normal University for Nationalities), Almusa, Haseem , Almusa, Haseem , Shao, Zhen (Guangxi Normal University for Nationalities), Almusa, Haseem	Management of renewable-based multi-energy microgrids with energy storage and integrated electric vehicles considering uncertainties	Journal of Energy Storage	2022	
10.1016/j.smp.2022.105884	Tao Hai (Guangxi Normal University for Nationalities), Shao, Zhen (Guangxi Normal University for Nationalities), Almusa, Haseem , Almusa, Haseem , Shao, Zhen (Guangxi Normal University for Nationalities), Almusa, Haseem	Modeling and simulation of photovoltaic system using hybrid improved shuffled frog leaping algorithm-Fuzzy controller under partial shaded condition	Simulation Modelling Practice and Theory	2022	
10.1016/j.est.2021.103279	Tao Hai (Guangxi Normal University for Nationalities), Shao, Zhen (Guangxi Normal University for Nationalities), Almusa, Haseem , Almusa, Haseem , Shao, Zhen (Guangxi Normal University for Nationalities), Almusa, Haseem	Energy management and optimized operation of renewable sources and electric vehicles based on microgrid using hybrid genetic search and pattern search algorithm	Sustainable Cities and Society	2021	
10.1016/j.frankl.2021.02.021	Van-Quang, Binh , Muhammad, Jie , Rahat, Akbar , Muhammad, Jie , Khatun, Chahira , Muhammad, Jie	Hybrid bat and new algorithm based using cross MPPT controller for variable size size PSC method in PV system under simultaneous change of irradiance and temperature	Journal of the Franklin Institute	2021	
10.1016/j.est.2022.106070	Tao Hai (Guangxi Normal University for Nationalities), Shao, Zhen (Guangxi Normal University for Nationalities), Almusa, Haseem , Almusa, Haseem , Shao, Zhen (Guangxi Normal University for Nationalities), Almusa, Haseem	Optimal energy management strategy for a renewable based microgrid with electric vehicles and demand response program	Electric Power Systems Research	2023	
10.1016/j.est.2022.106049	Zaid M. Al. , Majid, Al-Chalabi , Salem, Alkhatib , Chen, Huan , Sajad, Dettar	Optimal planning and design of a microgrid with integration of energy storage and electric vehicles considering cost change and emissions reduction	Journal of Energy Storage	2023	
10.1007/s00500-022-07588-6	Tao Hai (Guangxi Normal University for Nationalities), Almusa, Haseem , Almusa, Haseem , Shao, Zhen (Guangxi Normal University for Nationalities), Almusa, Haseem	Maximum power point tracking technique based on variable size size with sliding mode controller in photovoltaic system	Soft Computing	2022	
10.1007/s00500-022-09195-5	Tao Hai (Guangxi Normal University for Nationalities), Almusa, Haseem , Almusa, Haseem , Shao, Zhen (Guangxi Normal University for Nationalities), Almusa, Haseem	Optimized MPPT model for different environmental conditions to improve efficiency of a photovoltaic system	Soft Computing	2023	
10.1007/s00500-022-07283-7	Zaid M. Al. , Majid, Al-Chalabi , Talawa, Mutsaka	Optimal operation and scheduling of a multi-generator microgrid using grasshopper optimization algorithm with real data	Soft Computing	2022	
10.1007/s00500-022-07462-7	Shao, Zhen (Guangxi Normal University for Nationalities), Almusa, Haseem , Almusa, Haseem , Shao, Zhen (Guangxi Normal University for Nationalities), Almusa, Haseem	A new MPPT design using ISFLA algorithm and FLC to use the member function under different environmental conditions	Soft Computing	2022	
10.1007/s00500-022-07138-z	Salem, Alkhatib , Zaid M. Al. , Shao, Zhen	Optimal operation and scheduling of a multi-generator microgrid using grasshopper optimization algorithm with real data	Soft Computing	2022	
10.1007/s00500-022-09171-y	Tao Hai (Guangxi Normal University for Nationalities), Shao, Zhen (Guangxi Normal University for Nationalities), Almusa, Haseem , Almusa, Haseem , Shao, Zhen (Guangxi Normal University for Nationalities), Almusa, Haseem	Performance enhancement of fuzzy logic controller for MPPT of PV system to extract maximum power under different conditions	Soft Computing	2023	
10.1007/s00500-023-08921-y	Tao Hai (Guangxi Normal University for Nationalities), Shao, Zhen (Guangxi Normal University for Nationalities), Almusa, Haseem , Almusa, Haseem , Shao, Zhen (Guangxi Normal University for Nationalities), Almusa, Haseem	Stochastic energy scheduling in microgrid with real-time and day-ahead markets in the presence of renewable energy resources	Soft Computing	2023	
10.1151/459626	Tao Hai (Guangxi Normal University for Nationalities), Shao, Zhen (Guangxi Normal University for Nationalities), Almusa, Haseem , Almusa, Haseem , Shao, Zhen (Guangxi Normal University for Nationalities), Almusa, Haseem	Optimal Energy Scheduling of Microgrid With Electric Vehicles Based on Electricity Market Price	Journal of Energy Resources Technology	2023	
10.1007/s00500-022-08862-w	Shao, Zhen (Guangxi Normal University for Nationalities), Almusa, Haseem , Almusa, Haseem , Shao, Zhen (Guangxi Normal University for Nationalities), Almusa, Haseem	An efficient tracking of MPPT in PV systems using hybrid FCS-PS algorithm based ANFIS under partially shaded conditions	Soft Computing	2022	
10.1007/s40195-023-01622-x	Majid, Al-Chalabi , Salem, Alkhatib , Shao, Zhen (Guangxi Normal University for Nationalities), Almusa, Haseem , Almusa, Haseem , Shao, Zhen (Guangxi Normal University for Nationalities), Almusa, Haseem	Performance Enhancement of MPPT Controller to Tune Control Voltage to PV-BES System Using Genetic Algorithms Using Optimal Algorithm Based ANFIS	International Journal of Fuzzy Systems	2023	
10.1151/4550487	Almusa, Haseem , Muhyiddin, Koki (Turkey), Sajad, Dettar , Kengo, Mutsaka	Applying a Fuzzy-based Intelligent Algorithm in Energy Management of a Microgrid Considering Renewable Energy and Varying Weather Conditions	Journal of Energy Resources Technology	2021	
10.1007/s00500-022-08453-9	Chen, Huan , Gul, Gul , Al, Elhadi , Majid, Al-Chalabi , Muhammad, Jie	A new MPPT design using PV-BES system using modified cross pattern search algorithm based ANFIS under partially shaded conditions	Neural Computing and Applications	2023	
10.1007/s00500-022-09068-w	Tao Hai (Guangxi Normal University for Nationalities), Shao, Zhen (Guangxi Normal University for Nationalities), Almusa, Haseem , Almusa, Haseem , Shao, Zhen (Guangxi Normal University for Nationalities), Almusa, Haseem	A novel global MPPT technique to enhance maximum power from PV systems under variable atmospheric conditions	Soft Computing	2023	
10.1007/s00500-023-09188-8	Hu, Jie (Capital Aerospace Machinery Co., Ltd.), Almusa, Haseem , Shao, Zhen (Guangxi Normal University for Nationalities), Almusa, Haseem , Shao, Zhen (Guangxi Normal University for Nationalities), Almusa, Haseem	Optimal energy management and scheduling of a microgrid with integrated electric vehicles and cost minimization	Soft Computing	2023	
10.1007/s00500-023-09997-5	Tao Hai (Guangxi Normal University for Nationalities), Shao, Zhen (Guangxi Normal University for Nationalities), Almusa, Haseem , Almusa, Haseem , Shao, Zhen (Guangxi Normal University for Nationalities), Almusa, Haseem	Optimal planning and operation of power grid with electric vehicles considering cost reduction	Soft Computing	2024	
10.1007/s00500-024-0964-z	Hu, Jie (Capital Aerospace Machinery Co., Ltd.), Almusa, Haseem , Shao, Zhen (Guangxi Normal University for Nationalities), Almusa, Haseem , Shao, Zhen (Guangxi Normal University for Nationalities), Almusa, Haseem	Optimization strategies for microgrid based on generation scheduling considering cost reduction and electric vehicles	Soft Computing	2024	

Up to recently, we uncover 44 articles, most of which were published on Elsevier and Springer Nature journals, having authors from the SEPE company. In most of those articles (38 of 44), the authors claimed the company was in Tokyo, Japan, while in 5 articles, the authors claimed the company was in Turkey, and in the other one article, the authors claimed the company was in Germany.

Some common authors being affiliated to both SEPE Japan and SEPE Turkey, such as Mehrdad Khaki in article [1] and [2], suggests that both of these two companies have strong linkages to each other, or that they were likely operated by a same group of individuals. There is no direct evidence about the relation between SEPE Germany and SEPE Japan (or SEPE Turkey), although the 5GH Team has a strong feel that they were linked.

The first reason why we consider SEPE to be a fake company is that its name does not have a brand identifier, such as the "Mitsubishi" in "Mitsubishi Heavy Industries". Companies in Japan usually combine their brand identifier and their business field to form their names, only the top companies in their field do not have a brand identifier in their names, such as Tokyo Electric Power Company. But SEPE is not such a case.

The second reason is that the SEPE company never cooperates with Japanese universities. Instead, the "researchers" from the SEPE company seemed prefer to coauthor with individuals in China, Malaysia, Saudi Arabia, Iran, Iraq, Egypt and others. Each article usually has authors from multiple nations. Take the article [3] for an example, it has six authors from six different nations. And this is likely an indicator of paper mill works.

The 5GH Team also noted that 31 of the 44 above-mentioned articles have authors from China. HAI Tao (海涛), a senior professor at Qiannan Normal University for Nationalities (黔南民族师范学院) and many other universities in China and Malaysia, coauthored in 19 articles, in most of which, HAI is the first author. ZHOU Jincheng (周锦程), another senior professor at Qiannan Normal University for Nationalities also has high number of authorship in those 44 articles. It remains unknown what is the relationship between HAI, ZHOU and the SEPE company.

Name	E-mail
Farah Jamali	farah.jamali.ieee@gmail.com
Mehrdad khaksar	mehrdad.khaksar2000@gmail.com
Tetsuya Muranaka	Tetsuya.muranaka.japan@gmail.com
Mehrdad khaki	mehrdad.khaki.ie@gmail.com
Hojat Norouzi	hojat.norouzi.ieee@gmail.com
Sajjad Dadfar	sajjad.dadfar.usa@gmail.com
Kentaro Nishihara	kentaro.nishihara.japan.ieee@gmail.com
Hitoshi Oikawa	hitoshi.oikawa2000@gmail.com
Noritoshi Furukawa	noritoshi.furukawa2525@gmail.com
Mohsen Latifi	mohsen.latifi.ieee.usa@gmail.com
Kengo Muranaka	kengo.muranaka2000@gmail.com
Samaneh Samad	samaneh.samad.ieee@gmail.com
Arman Nasr	arman.nasr.im@gmail.com

The 5GH Team also notes that multiple articles by HAI Tao (海涛) are flagged on PubPeer due to irrelevant citations. The team followed those leads and noted the SEPE company.

The third reason that the abnormal e-mail ID pattern. The SEPE company does not have its own e-mail service, and the authors from the company used personal GMail for their publications. However, those personal GMail IDs exhibit strong patterns, such as "name + nation" (like Tetsuya.muranaka.japan@gmail.com, and mohsen.latifi.ieee.usa@gmail.com), and "name + ieee" (like hojjat.norouzi.ieee@gmail.com and samaneh.samad.ieee@gmail.com). Such patterns indicate the registration of those IDs were highly organized.

These reasons suggest that the SEPE is more likely a paper mill rather than a real company. Any further information about the SEPE company is welcome, please feel free to contact us at: 5GH@5gh.org.cn. The 5GH Team invites the publishers to step in for a joint investigation, and to share detailed outcomes.

[1] 10.1016/j.est.2022.106475

[2] 10.1016/j.ijleo.2023.171208

[3] 10.1016/j.jclepro.2020.123719

This article is licensed to the 5GH Foundation under a CC BY-NC-ND 4.0 International License.