

Rebuttal to: Fan et al. (2021) 'A bibliometric analysis of the water-energy-food nexus based on the SCIE and SSCI database of the Web of Science', *Mitig. Adapt. Strateg. Glob. Chang.* vol. 26, 8

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Fan et al. (2021) recently published a paper in *Mitigation and Adaptation Strategies for Global Change* entitled 'A bibliometric analysis of the water-energy-food nexus based on the SCIE and SSCI database of the Web of Science'. Fan et al. stated in 2.1 Data sources that "We collected publications on the WEF nexus research topic using the Science Citation Index Expanded (SCIE) and the Social Science Citation Index (SSCI) databases in the Web of Science (WoS) Core Collection. The publication dates ranged from 1988 to 2019." and "The search query was as follows: TS=(((water OR freshwater OR wastewater OR rainwater) AND (energy OR biofuel* OR electricity OR nuclear OR coal OR 'natural gas' OR oil OR 'conventional gas' OR 'unconventional gas' OR 'wind power' OR 'generate power' OR 'thermoelectric power' OR solar OR bioenergy OR hydropower) AND (food OR agricultur* OR crop* OR land) OR (water-energy-food OR energy-water-food OR food-water-energy OR water-food-energy OR energy-food-water OR food-energy-water)) AND (nexus OR couple OR coupling))."

The search keywords: (water–energy–food OR energy–water–food OR food–water–energy OR water–food–energy OR energy–food–water OR food–energy–water) means ((water and energy and food) OR (energy and water and food) OR (food and water and energy) OR (water and food and energy) OR (energy and food and water) OR (food and energy and water)) which are not necessary when the search keywords: (water OR freshwater OR wastewater OR rainwater) AND (energy OR biofuel* OR electricity OR nuclear OR coal OR 'natural gas' OR oil OR 'conventional gas' OR 'unconventional gas' OR 'wind power' OR 'generate power' OR 'thermoelectric power' OR solar OR bioenergy OR hydropower) AND (food OR agricultur* OR crop* OR land) were used.

Using the strategies:

TS=(((water OR freshwater OR wastewater OR rainwater) AND (energy OR biofuel* OR electricity OR nuclear OR coal OR 'natural gas' OR oil OR 'conventional gas' OR 'unconventional gas' OR 'wind power' OR 'generate power' OR 'thermoelectric power'

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OR solar OR bioenergy OR hydropower) AND (food OR agricultur* OR crop* OR land)) AND (nexus OR couple OR coupling)) AND PY = 1988–2019

A total of 3,570 documents in SCI-EXPANDED and SSCI from 1988 to 2019 were found. After filtering documents in the Web of Science category of pharmacology and pharmacy, a total of 3,537 documents were found including 3,171 articles (90%), 296 reviews (8.4%), 128 proceedings papers (3.6%), 39 editorial materials (1.1%), 25 meeting abstracts (0.71%), 13 book chapters (0.37%), three corrections (0.085%), two letters (0.057%), one book review (0.028%), and one data paper (0.028%). However, 45 documents do not contain any search keywords on their "front page", including the title, abstract, and author keywords (Fu et al. 2012). Furthermore, a total of 3,174, 3,226, and 2,188 documents contain search keywords: (water, freshwater, wastewater, or rainwater); (energy, biofuel*, electricity, nuclear, coal, 'natural gas', oil, 'conventional gas', 'unconventional gas', 'wind power', 'generate power', 'thermoelectric power', solar, bioenergy, or hydropower); and (nexus, couple, or coupling) on their "front page" respectively. Finally, only 1,855 documents contained search keywords on their "front page". Based on the methods in the manuscript, 1,682 documents (48% of 3,537 documents) do not contain search keywords in their title, abstract, or author keywords. These documents are irrelevant to the "water-energy-food nexus".

Fan et al. (2022) used inappropriate search strategies and data to publish "A bibliometric analysis of the water-energy-food nexus based on the SCIE and SSCI database of the Web of Science" in *Mitigation and Adaptation Strategies for Global Change* which might be misleading readers of the journal. Appling an appropriate study design and methods are recommended for future studies.

Data availability Data available on request from the authors.

Declarations

Ethics approval and consent to participate The authors declare that they have no conflict of interest.

Competing interests Not applicable.

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Fan JL, Wang Q, Zhang X (2021) A bibliometric analysis of the water-energy-food nexus based on the SCIE and SSCI database of the Web of Science. Mitig Adapt Strateg Glob Chang 26:8

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