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(19) **United States**(12) **Patent Application Publication****Han et al.**(10) **Pub. No.: US 2025/0074924 A1**(43) **Pub. Date: Mar. 6, 2025**(54) **BIMETAL-ORGANIC FRAMEWORK FOR
ABSORBING CARBON DIOXIDE AND
METHOD FOR PRODUCING THE SAME**(30) **Foreign Application Priority Data**

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(71) Applicant: **CHANGWON NATIONAL
UNIVERSITY INDUSTRY
ACADEMY COOPERATION
CORPS**, Changwon-si,
Gyeongsangnam-do (KR)**Publication Classification**(51) **Int. Cl.**
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B01J 20/22 (2006.01)(72) Inventors: **Sang Il Han**, Haeundae-Gu, Busan
(KR); **Ranjit Gaikwad**, Uichang-Gu,
Changwon-Si (KR)(52) **U.S. Cl.**
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(2013.01)(73) Assignee: **CHANGWON NATIONAL
UNIVERSITY INDUSTRY
ACADEMY COOPERATION
CORPS**, Changwon-si,
Gyeongsangnam-do (KR)(57) **ABSTRACT**

The present disclosure relates to a method for preparing a bimetal-organic framework including preparing a first mixture by mixing, in a solvent, a first metal precursor including zinc, a coordination compound of organic acid, and a substance including a counterion of the coordination compound; preparing a second mixture by mixing, in the first mixture, a second metal precursor including at least one metal selected from a group of magnesium, manganese, and copper, and irradiating the second mixture with the micro-wave.

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Preparing a first mixture by mixing a first metal precursor including zinc, a coordination compound of organic acids, and the counterion of the coordination compound



Preparing a second mixture by mixing a second metal precursor including at least one metal selected from a group of magnesium, manganese, and copper in the first mixture



Irradiating the second mixture with microwaves