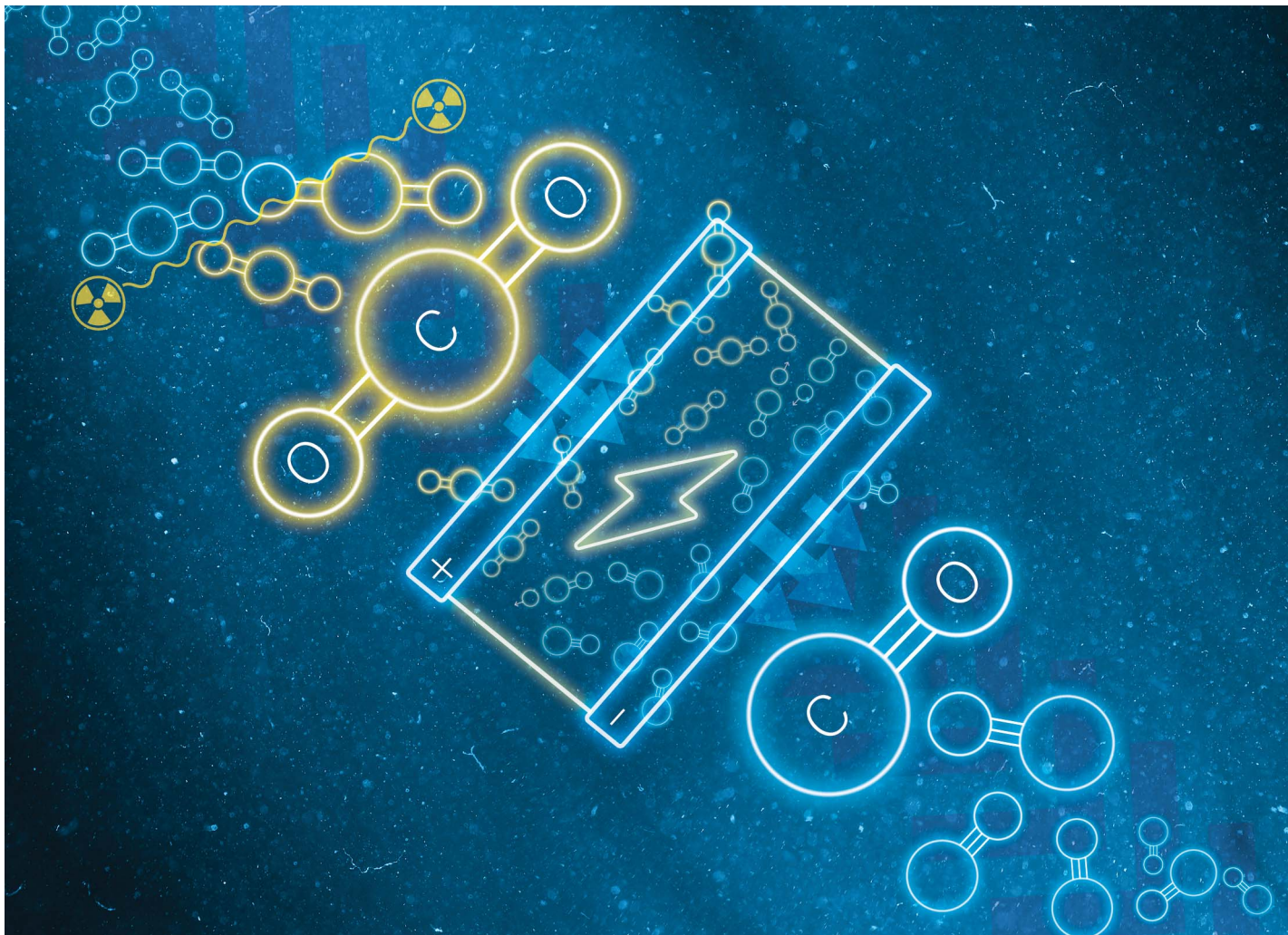


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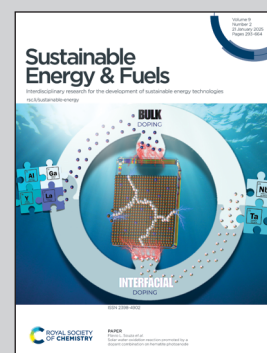


Showcasing research from Dr. Ramirez-Corredores' laboratory, Mineral & Molecular Separations & Analysis Department, Energy and Environment Science and Technology, Idaho National Laboratory, Idaho, United States.

Radiation-assisted electrochemical reduction of CO_2 to CO

Carbon monoxide (CO), a versatile intermediate feedstock can be produced from the electrochemical (EC) reduction of carbon dioxide (CO_2). The current low conversion efficiencies and significant energy requirements of considered EC processes lead to high production costs. This work demonstrated that ionizing radiation (e.g., γ -radiation) enhanced the EC CO yield and most likely, improved costs. In fact, radiation decreased the overpotential barrier enhancing the electrochemical reduction of CO_2 to CO by 25%.

As featured in:



See Maria Magdalena Ramirez-Corredores *et al.*, *Sustainable Energy Fuels*, 2025, **9**, 424.