

A Smart AI Research Assistant to Enhance Your Path to New Discoveries.

| ⊘ | Hey Saira |
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- Hello there! What would you like to research today, the physics of time travel or the chemistry of chocolate addiction? � *
- Can you help find papers on hydrogen bonding
- Absolutely! Hydrogen bonding is a fascinating topic. To help narrow down the search, could you tell me a bit more about your focus? Are you interested in its role in biological systems, chemical reactions, or perhaps its influence on material properties?
- aterial properties
- Great choice! Hydrogen bonding in material properties is quite intriguing. Let's explore further.

 Are you interested in how hydrogen bonding affects:
 - 1. Mechanical strength
 - 2. Thermal stability
 - 3. Electrical conductivity
 - 4. Optical properties

Or is there another aspect you're curious about?

- Electrical conductivity
- Fascinating! Exploring hydrogen bonding's impact on electrical conductivity can lead to some exciting insights. Let's refine our search with a few more details. Are you focusing on:
 - 1. Polymers
 - 2. Nanomaterials
 - 3. Liquid crystals
 - 4. Biological materials

Or something else?

- (S) Nanomaterials
- Excellent! Nanomaterials and hydrogen bonding can lead to groundbreaking discoveries. Let's summarize the keywords so far:
 - 1. Hydrogen bonding
 - 2. Material properties
 - 3. Electrical conductivity
 - 4. Nanomaterials

We need one more keyword to refine the search. Are you interested in a specific application, like sensors, energy storage, or something else?



- (a) Which application are you interested in exploring? Sensors, energy storage, or another area?
- energy storage
- Perfect! Here's a summary of the keywords:
 - 1. Hydrogen bonding
 - 2. Material properties
 - 3. Electrical conductivity
 - 4. Nanomaterials
 - 5. Energy storage

I'll start searching for relevant research papers now.



- It seems we have some exciting topics to choose from. Which one best aligns with your research interest?
 - 1. Supercapacitor Materials and Fabrication
 - 2. Electrocatalysts for Energy Conversion
 - 3. Graphene Research and Applications
 - 4. Advancements in Battery Materials
 - 5. Carbon Nanotubes in Composites
 - 6. Electrochemical Sensors and Biosensors
 - 7. Conducting Polymers and Applications
 - 8. Advanced Photocatalysis Techniques
 - 9. Advanced Sensor and Energy Harvesting Materials
 - 10. Advanced Biosensing and Bioanalysis Techniques

Please pick one, and I'll proceed with finding the relevant research papers!

- Electrocatalysts for Energy Conversion
- Here are some research papers on electrocatalysts for energy conversion:
 - 1. Defect Chemistry of Nonprecious-Metal Electrocatalysts for Oxygen Reactions
 - Authors: Dafeng Yan, Yunxiao Li, Jia Huo, Ru Chen, Liming Dai, Shuangyin Wang
 - o Year: 2017
 - o Institution: Hunan University, Case Western Reserve University
 - Catalyzing the Hydrogen Evolution Reaction (HER) with Molybdenum Sulfide Nanomaterials
 - Authors: Jesse D. Benck, Thomas R. Hellstern, Jakob Kibsgaard, Pongkarn Chakthranont, Thomas F. Jaramillo
 - Year: 2014
 - Institution: Stanford University

- 3. <u>Surface and Interface Engineering of Noble-Metal-Free Electrocatalysts for Efficient Energy</u>
 <u>Conversion Processes</u>
 - Authors: Yun Pei Zhu, Chunxian Guo, Yao Zheng, Shi Zhang Qiao
 - o Year: 2017
 - o Institution: The University of Adelaide
- 4. <u>Carbon-Based Metal-Free Catalysts for Electrocatalysis beyond the ORR</u>
 - o Authors: Chuangang Hu, Liming Dai
 - o Year: 2016
 - o Institution: Case Western Reserve University
- 5. <u>Highly efficient nonprecious metal catalysts towards oxygen reduction reaction based on three-dimensional porous carbon nanostructures</u>
 - o Authors: Chengzhou Zhu, He Li, Shaofang Fu, Dan Du, Yuehe Lin
 - o Year: 2015
 - o Institution: Washington State University

If you need more information or another search, feel free to ask!

What can I help you with?

