# Article information:

流化床燃烧过程中传热的颗粒尺度研究 - ScienceDirect  
<https://www.sciencedirect.com/science/article/pii/S0032591023000256?via%3Dihub>

# Article summary:

1. This article discusses the research of heat transfer in a fluidized bed during the combustion process of solid fuels.

2. The article introduces four numerical approaches to simulate the gas-solid reaction system, and five heat transfer modes are integrated with the gas-solid hydrodynamics, homogeneous and heterogeneous reactions.

3. Parametric analysis is carried out to investigate the effects of fuel volatile content and thermal conductivity on each heat transfer mode.

# Article rating:

Appears well balanced: The article presents the information in a reliable and balanced way, without biases and prejudices. The claims made in the article are well supported and, where applicable, all sides of the argument are given opportunity to present their point of view. The article appears trustworthy and reliable.

# Article analysis:

The article is generally reliable and trustworthy, as it provides a comprehensive overview of the research into heat transfer in a fluidized bed during the combustion process of solid fuels. The article is well-structured and clearly outlines its main points, making it easy to follow for readers. It also provides detailed information on the numerical approaches used to simulate the gas-solid reaction system, as well as an analysis of the contribution of five heat transfer modes in a fluidized bed reactor.

The article does not appear to be biased or one-sided, as it presents both sides equally and does not make any unsupported claims or omit any counterarguments. Furthermore, there is no promotional content or partiality present in the article, and all possible risks are noted throughout.

In conclusion, this article is reliable and trustworthy due to its comprehensive overview of research into heat transfer in a fluidized bed during combustion processes, lack of bias or one-sidedness, absence of promotional content or partiality, and noting of all possible risks.

# Topics for further research:

* Fluidized bed combustion process
* Heat transfer modes in fluidized bed reactors
* Numerical simulation of gas-solid reaction systems
* Heat transfer mechanisms in fluidized beds
* Solid fuel combustion in fluidized beds
* Fluidized bed combustion efficiency

# Report location:

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