# Article information:

优化Pd–SSZ-13中骨架元素的比例和活性位点的分布，以获得更好的被动NOx吸附性能|工业与工程化学研究  
<https://pubs.acs.org/doi/abs/10.1021/acs.iecr.2c01132>

# Article summary:

1. This study focuses on exploring the effects of Si-Al ratio, Pd loading, and C presence on the performance of Pd-SSZ-13 catalysts.

2. When the Si-Al ratio is 15 and the Pd loading is 1%, the catalyst has the best NOx adsorption performance.

3. NO can be adsorbed to cation exchange sites in two different pathways, and a certain amount of Pd content provides large amounts of weak adsorption sites for NO and NO+2.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article is generally reliable and trustworthy as it provides detailed information about the research conducted by a team of experts from Shanghai Jiao Tong University's Key Laboratory for Power Machine and Engineering of Ministry of Education. The authors have provided sufficient evidence to support their claims, such as citing relevant literature and providing data from experiments conducted during their research. Furthermore, they have discussed potential risks associated with their findings, such as how an increase in Pd content could lead to excessive oxidation of palladium material covering the surface of molecular sieves, which would then block active sites from being used.

However, there are some areas that could be improved upon in terms of trustworthiness and reliability. For example, while the authors have discussed potential risks associated with their findings, they do not provide any counterarguments or alternative solutions that could be explored to mitigate these risks. Additionally, there is no discussion about possible biases or sources of bias that may have influenced their results or conclusions. Finally, there is no mention of any promotional content within the article which could potentially influence readers’ opinions or decisions regarding this research topic.

# Topics for further research:

* Palladium oxidation prevention
* Molecular sieve active sites
* Pd content effects on molecular sieves
* Mitigation strategies for palladium oxidation
* Bias in research studies
* Promotional content in research articles

# Report location:

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