# Article information:

An investigation on the influence of highly acidic media on the microstructural stability and dye adsorption performance of UiO-66 - ScienceDirect
<https://www.sciencedirect.com/science/article/pii/S0169433223002076>

# Article summary:

1. UiO-66 stability in highly acidic media was studied and a partial degradation occurred, but the main structure was maintained.

2. The exposure to HCl solution added to the missing-linker defects in the structure of UiO-66.

3. Adsorptive performance of HCl-aged UiO-66 nanoparticles towards anionic methyl orange (MO) dye showed over 60% loss for 15 days aged UiO-66.

# 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 overall reliable and trustworthy, as it provides detailed information on the influence of highly acidic media on the microstructural stability and dye adsorption performance of UiO-66. The article is well researched and supported by various characterization techniques such as XRD, FESEM, TEM, TGA, and nitrogen adsorption/desorption. It also provides insights into the effects of acid aging on the surface charge of UiO-66 particles and their selective adsorption properties towards anionic methyl orange (MO) dye.

The article does not appear to be biased or one sided in its reporting, as it presents both sides equally with evidence to support its claims. It also does not contain any promotional content or partiality towards any particular point of view or opinion. Furthermore, possible risks are noted throughout the article where applicable.

The only potential issue with this article is that it does not explore counterarguments or present any alternative points of view that may contradict its findings. This could be addressed by including more research from other sources that provide different perspectives on this topic.

# Topics for further research:

* Acid aging effects on surface charge
* Adsorption properties of UiO-66
* Anionic dye adsorption performance
* Microstructural stability of UiO-66
* Alternative points of view on acid aging
* Characterization techniques for UiO-66

# Report location:

<https://www.fullpicture.app/item/f1cbe786eec3ebbbd9a8575db3d8420b>