

## عنوان مقاله:

Urea based Metal-organic Frameworks for selective Nitroaromatics Sensing

## محل انتشار:

ششمین همایش ملی و نخستین همایش بین المللی کاربردهای شیمی در فناوری های نوین (سال: 1395)

تعداد صفحات اصل مقاله: 7

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## خلاصه مقاله:

Urea groups are known to form strong hydrogen bonds with the molecules containing atom(s) that can act as hydrogen bond acceptor(s). Thus, Urea is a particularly interesting building block for designing receptor for neutral or charged guests. In the quest for new sensors with enhanced performance for the detection of nitroaromatics, a novel pillared metal-organic framework containing urea functional groups was synthesized and structurally characterized. The sensing properties of this framework toward nitroaromatics was investigated and compared to the recently reported structure, which is another member of urea-containing MOFs family. The study clearly reveals the importance of urea groups orientation inside the pore cavity of MOFs, as well as the supramolecular interactions between the interpenetrated networks. This work is interesting as it represents the first example of urea-functionalized MOFs for nitroaromatics recognition.

## کلمات کلیدی:

metal organic frame work, nitroaromatic sensing

## لینک ثابت مقاله در پایگاه سیویلیکا:

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