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Title: Multifunctionalized mesoporous silica as an efficient reversed-phase/anion exchange mixed-mode sorbent for solid-phase extraction of four acidic nonsteroidal anti-inflammatory drugs in environmental water samples



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**Multifunctionalized mesoporous silica as an efficient  
reversed-phase/anion exchange mixed-mode sorbent for solid-phase  
extraction of four acidic nonsteroidal anti-inflammatory drugs in  
environmental water samples**

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**Highlights:**

- ◆ A novel reversed-phase/anion exchange mixed-mode sorbent based on multifunctional mesoporous silica SBA-15 was prepared.
- ◆ The multifunctional phase is characterized by a high density of multifunctionalities in a branched structure.
- ◆ High carbon and nitrogen contents of 28.30% and 2.84%, respectively.
- ◆ Efficient clean-ups and extractions of NSAIDs from 500 mL of environmental water samples.

**Abstract**

A mesoporous silica Santa Barbara Amorphous-15 (SBA-15) has been first functionalized with 3-[2-(2-aminoethylamino)ethylamino]propyl-trimethoxysilane (a

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