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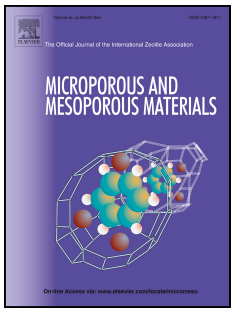

Bio-inspired manganese mesoporous silica hybrid material as a water compatible antioxidant

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SYNOPSIS AND GRAPHICAL ABSTRACT

The incorporation of a bio-mimetic manganese compound inside a functionalized mesoporous matrix generates a hybrid material that is a robust and excellent antioxidant catalyst in water. It can be restarted several times, adding new aliquots of H_2O_2, and even recycled with no metal leaching after extraction from the reaction media.