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(54) **MODIFIED ZEOLITES THAT INCLUDE TITANIUM-CONTAINING ORGANOMETALLIC MOIETIES AND METHODS FOR MAKING SUCH**

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See application file for complete search history.

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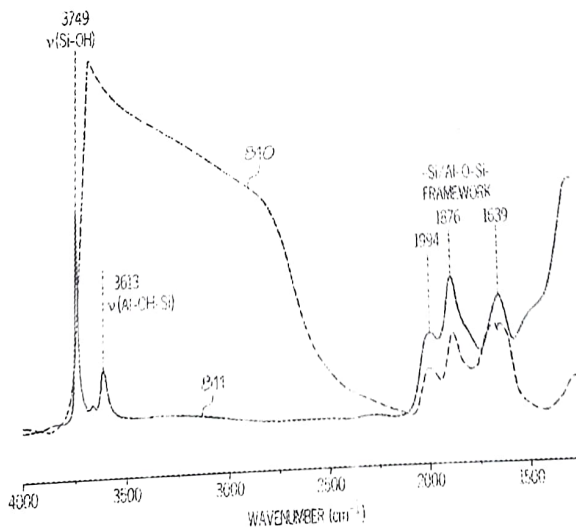
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(57) **ABSTRACT**

Disclosed herein are modified zeolites and methods for making modified zeolites. In one or more embodiments disclosed herein, a modified zeolite may include a microporous framework comprising a plurality of micropores having diameters of less than or equal to 2 nm. The microporous framework may include at least silicon atoms and oxygen atoms. The modified zeolite may further include organometallic moieties each bonded to bridging oxygen atoms. The organometallic moieties may include a titanium atom. The titanium atom may be bonded to a bridging oxygen atom, and the bridging oxygen atom may bridge the titanium atom of the organometallic moiety and a silicon atom of the microporous framework.

20 Claims, 10 Drawing Sheets



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