Hydrous alteration experiments of Allende meteorite with organic acid

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Hydrous alteration experiments of Allende meteorite with acetic acid are carried out to reproduce hydrous phyllosilicate minerals. Serpentine is major component of 'spinach' found in Murchison CM chondrite. 0.1N acetic acid solution accelerates formation of serpentine at 150 and 200 degree C. 1N acetic acid solution, however, prohibits serpentine formation.