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Sommario/riassunto	This brief describes a novel approach to overcome the disadvantages of hemp fibres in cementitious composites. The authors describe how the new approach includes the combination of thermal pre-treatment of nanoclay (producing calcined nanoclay) and chemical pre-treatment of fibre surfaces to improve the microstructure, mechanical, physical and thermal properties and also durability of hemp fibre reinforced cement composites. In this work, the synthesis of several materials are studied: nanoclay-cement nanocomposite, calcined nanoclay-cement nanocomposite, untreated & treated hemp fabric-reinforced cement composite, hemp fabric-reinforced nanoclay-cement nanocomposite

and treated hemp fabric-reinforced nanoclay-cement nanocomposite. The influence of nanoclay on properties of cement paste and hemp fabric-reinforced cement composite is also presented together with the influence of NaOH pre-treatment of fibre surfaces on properties of hemp fabric-reinforced cement composite. The authors have aimed this brief at those working on environmental-friendly, biodegradable, building materials.
