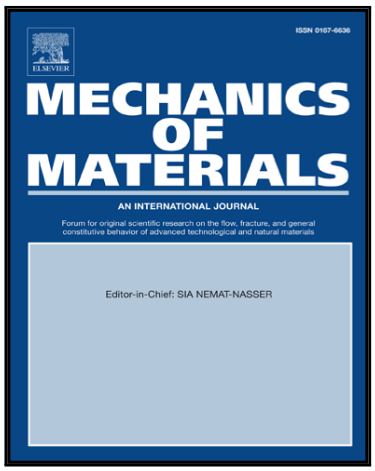

Intrinsic Mechanical Properties of Calcium Aluminate Crystals via the Linear Comparison Composite Method coupled with Nano-Indentation

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PII: S0167-6636(16)30602-0
DOI: 10.1016/j.mechmat.2017.12.007
Reference: MECMAT 2831

To appear in: *Mechanics of Materials*

Received date: 28 December 2016
Revised date: 24 August 2017
Accepted date: 21 December 2017

Please cite this article as: Ange-Therese Akono, Yue Cui, Amrita Kataruka, Kevin Anderson, Pooyan Kabir, Intrinsic Mechanical Properties of Calcium Aluminate Crystals via the Linear Comparison Composite Method coupled with Nano-Indentation, *Mechanics of Materials* (2017), doi: 10.1016/j.mechmat.2017.12.007

Highlights

- The linear comparison composite method is extended to non-porous granular materials
- The effective strength of macro-defect-free cements is connected to the nano-constituents
- The elasto-plastic properties of anhydrous calcium aluminate crystals are measured
- MDF cements are exceptionally strong due to the high packing density of calcium aluminate crystals