High-resolution spectromicroscopy of cementitious materials

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Abstract

Our research group has been using synchrotron radiation to characterize and optimize the nano and microstructure of advanced construction materials. I will discuss how three-dimensional tomographic images are providing fresh new insights into the complex nature of composite materials and how this information coupled with XANES done at the nanoscale can be used in the design of improved materials. The lecture will also cover the exciting goal of producing x-ray images with a spatial resolution of 1 nm.

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