



Nanotechnology in Eco-Efficient Construction: Materials, Processes and Applications (Hardback)

By -

ELSEVIER SCIENCE TECHNOLOGY, United Kingdom, 2013. Hardback. Condition: New. Language: English . Brand New Book. As the environmental impact of existing construction and building materials comes under increasing scrutiny, the search for more eco-efficient solutions has intensified. Nanotechnology offers great potential in this area and is already being widely used to great success. Nanotechnology in eco-efficient construction is an authoritative guide to the role of nanotechnology in the development of eco-efficient construction materials and sustainable construction. Following an introduction to the use of nanotechnology in eco-efficient construction materials, part one considers such infrastructural applications as nanoengineered cement-based materials, nanoparticles for high-performance and self-sensing concrete, and the use of nanotechnology to improve the bulk and surface properties of steel for structural applications. Nanoclay-modified asphalt mixtures and safety issues relating to nanomaterials for construction applications are also reviewed before part two goes on to discuss applications for building energy efficiency. Topics explored include thin films and nanostructured coatings, switchable glazing technology and third generation photovoltaic (PV) cells, high-performance thermal insulation materials, and silica nanogel for energy-efficient windows. Finally, photocatalytic applications are the focus of part three, which investigates nanoparticles for pollution control, self-cleaning and photosterilisation, and the role of nanotechnology in manufacturing paints...



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Reviews

Simply no phrases to clarify. It is really basic but surprises from the 50 percent of the ebook. Once you begin to read the book, it is extremely difficult to leave it before concluding.

-- **Mr. Noah Cummerata IV**

Totally among the best ebook I actually have ever go through. It is probably the most awesome ebook we have go through. You can expect to like just how the blogger publish this ebook.

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