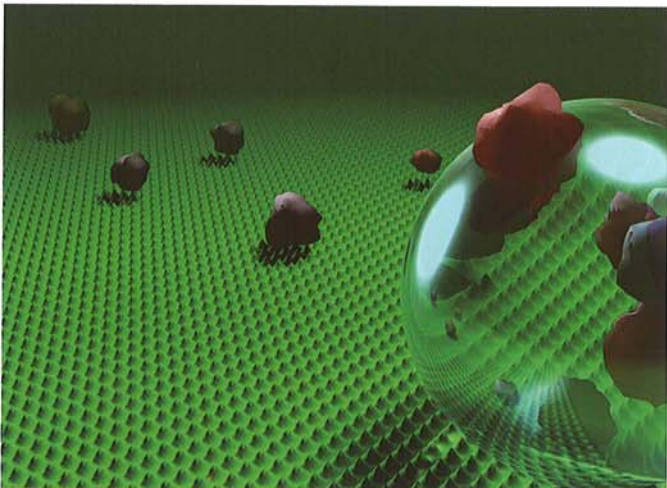


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100nm and below. Materials that are built bottom-up, with exactly specified atomic and molecular infrastructures. One of the key technologies of the 21st century, nanotechnology has a transformative potential that is already being explored and has much more to offer in the future. Combining extraordinary functional and economic advantages, in architecture and construction nanotechnology has led to the development of performance-enhancing materials, coatings and additives. And yet, even though «both the term and the concept are much over-used (...), few people, and even fewer designers, really know what nanotechnology actually is and what it is good for. It is, however, most definitely more than just a passing fashion,» says Sylvia Leydecker, whose book casts light on the matter. Starting with the brief history of nanotechnology, Leydecker goes through the advantages and limits of nanomaterials and their various applications in architecture, interior architecture and product design, with particular attention to built case studies. The mass of available materials is organized into a comprehensive system according to their function and is presented in 17 colour-coded chapters: self-cleaning, air-purifying, thermal insulation, solar protection, scratch proofing and much more.

*An illustration from the book visualises the Lotus-Effect®, a self-cleaning effect patented by the botanist Wilhelm Barthlott. There exists a number of plants whose surface becomes water-repellent due to microscopic spikes that doesn't allow water to settle. This, together with low surface adhesion makes water form droplets that run off, washing away dirt deposits. The Lotus-Effect with its capability to drastically reduce the cleaning requirement has been translated into self-cleaning textiles and facade coatings.*

AUTHOR: SYLVIA LEYDECKER

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