



The single-step printing process allows nanomaterials to be produced for just fractions of current costs | Photo source [ThisisEngineering RAEng on Unsplash](#)

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NANOMATERIAL PRINTING PROCESS MAKES FLEXIBLE AR DEVICES A REALITY



COMPUTING & TECH

The new technology prints in a single step process and dramatically reduces production costs and time

Spotted: A recently developed, thin, moldable nanomaterial produced via a new nano-printing process has the potential to bring augmented, mixed and virtual reality to the masses. The discovery was a joint creation by a research team consisting of Pohang University of Science and Technology (POSTECH) and Korea University scientists.

Metamaterials are artificial assemblages of atoms that are smaller than the wavelengths of light. Current construction techniques are slow and expensive, and what the team created is a new composite material that is freely moulded. Add to the development a significant advance in printing technology, and invisibility cloaks could become commercially available.

The single-step printing process allows nanomaterials to be produced for just fractions of current costs. The thinness of the team's composite makes it ideal for use on and within curved and flexible devices such as capes, eyeglasses and future wearables. Continued research in this area is focusing on commercial production and additional uses.

Other ways that Springwise has spotted printing processes and materials shaping the future of industries include a [rocket engine](#) 3D-printed as a single piece of metal and a [tyre](#) that repairs itself on-the-go.

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Takeaway:

Nearly every industry uses nanotechnology, from self-healing concrete in construction to minute healthcare robots that travel inside the human body. With the abundance of bacteria and other micro-organisms in the world, developments in technology that is invisible to the naked eye may create the most long-term significant changes to the ways in which we live and work, and the materials we use in doing so.