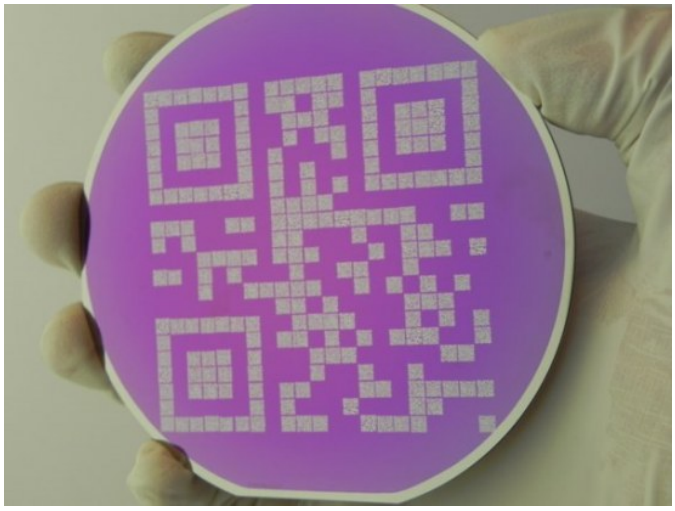
University of Twente MESA+ Institute for Nanotechnology researcher Jeroen de Vries claims he has a means of storing data for long periods of time-- an optical information carrier possibly capable of outliving the human race.



Current HDDs have a life of roughly 10 years. CDs and DVDs are also relatively short-lived, as are paper, tape, clay and stone if one keeps immense scales of time in mind. As de Vrier puts it, "One scenario is that a disaster has devastated the earth and society must rebuild the world. Another scenario could be that we create a kind of legacy for future intelligent life that evolves on Earth or comes from other worlds. You must then think about archival storage of between one million and one billion years."

The storage medium de Vriers proposes consists of a tungsten wafer encapsulated in silicon nitride, a material able to withstand "extreme" temperatures. The tungsten is etched with a QR code made out of multiple, smaller QR codes, each storing different information.

"In principle, we can store everything on the disc that we believe is worthwhile saving," de Vriers says.

According to the Arrhenius model, such a disc should continue to work for at least 1 million years if heated to 200 degrees Celsius and kept in an oven for an hour. The quality of the QR codes degrades if heated to 440 degrees Celsius, even if the tungsten itself is not affected. However de Vriers suggests such discs should be kept in stable locations (such as a nuclear storage facility) in order to endure for millions of years.

Go A Mega to Giga Year Storage Medium Can Outlive the Human Race