

Abstract Submitted  
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**Metallic glass nanowire** KOJI NAKAYAMA, Tohoku University, YOSHIHIKO YOKOYAMA, GUOQIANG XIE, QINGSHENG ZHANG, MINGWEI CHEN, TOSHIO SAKURAI, AKIHISA INOUE — Metallic glass nanowires were spontaneously created on the fracture surfaces that were produced by a conventional mechanical test. The presence of the nanowires is directly related to the one-dimensional meniscus configuration with a small viscosity at high temperatures and to the wide supercooled liquid region of the metallic glass. The electron microscopic observations demonstrate the diameters, the lengths, and the amorphous structural states, and the energy dispersive X-ray reveals the chemical components. In addition, we found that round ridges are constructed from nanotubes. The finding of amorphous nanostructures provides not only fundamental understanding of fracture processes but also give a new insight into nano-science and engineering.

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