

You can't see it, but it's 200+ times stronger than steel

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by Hisato Yamaguchi

The evolution of armor has been a constant struggle between protection and performance. Consider armor used to protect knights on the battlefield. Original armor designs were cumbersome and heavy, and although they worked well for keeping swords and spears at bay, the suits themselves were uncomfortably hot. The warriors inside sweated heavily during their prolonged battles. Kevlar armor used by military and police units today has evolved to protect them from bullets, but even this lighter type of armor does little to expel heat and sweat.

It was this struggle between keeping some things (bullets) out, while letting others (heat and perspiration) out that inspired scientists at Los Alamos National Laboratory to develop a radical new type of coating dubbed "atomic armor." Made from two-dimensional, ultrathin crystal materials, atomic armor can be applied in a skin-like layer to a particularly sensitive device without hindering its performance. So, for instance, night-vision goggles can be coated with atomic armor to protect against corrosive gases without hindering their ability to turn darkness into light.

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