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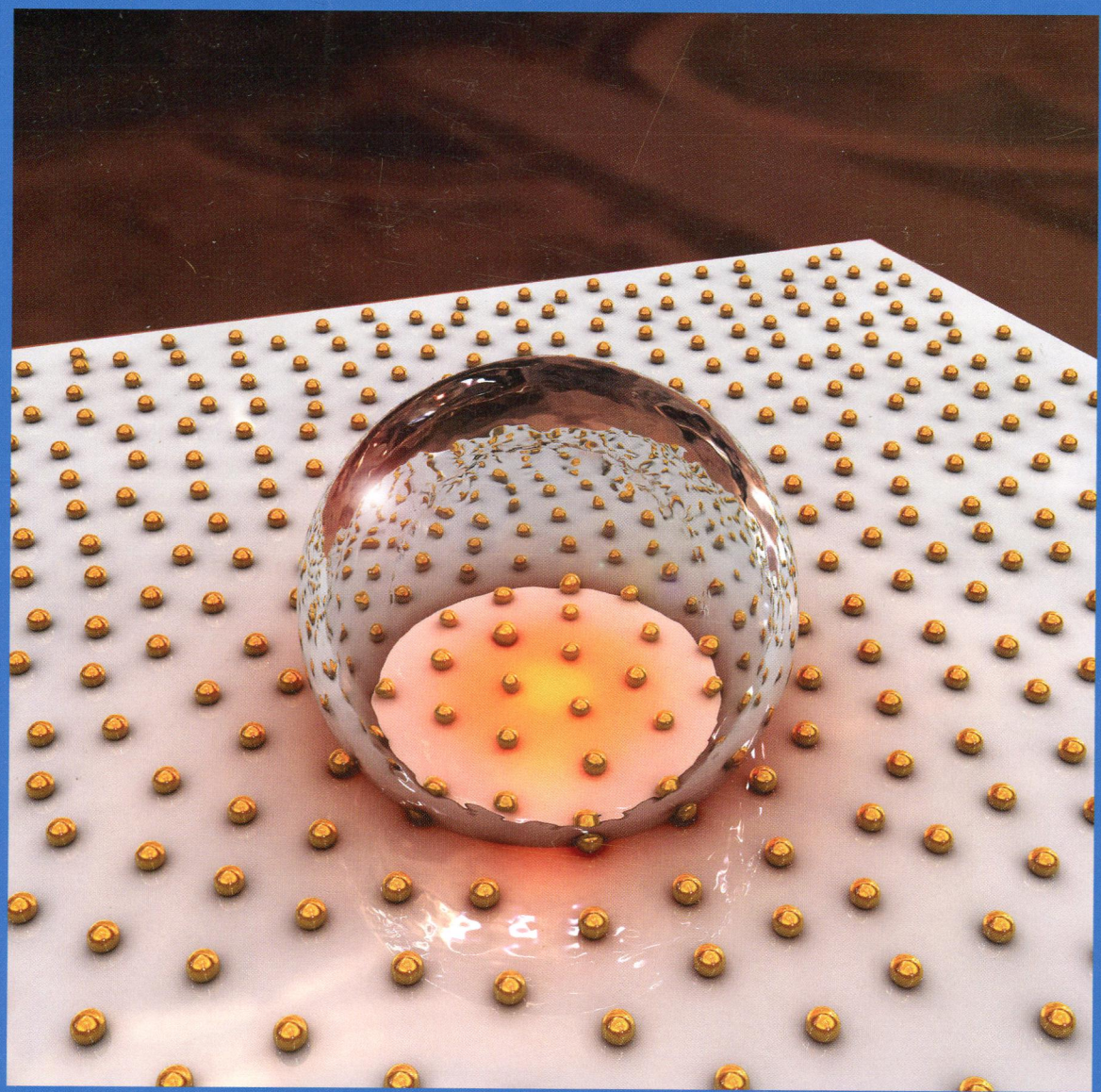

Photothermal Generation of Microbubbles in Super-Heated Water Using Gold Nanoparticles (see page 4890)

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ON THE COVER: Photothermal generation of microbubbles in super-heated water using gold nanoparticles. Gold nanoparticles under illumination behave as ideal nanosources of heat and can locally generate microbubbles. The physics of such microbubbles is detailed. In particular, singular effects are evidenced such as very long life times and temperature formations much larger than 100 °C. This last observation illustrates that superheated liquid water (up to 220 °C) under ambient pressure conditions can be easily achieved using plasmonic nanoparticles. See page 4890.

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