

MEGAPIXELS

THE MUST-SEE PHOTOS OF THE MONTH

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LIGHT TOUCH

A WHISPERING GALLERY OF PHOTONS MEASURES NANOPARTICLES

In this illustration, a tiny particle alights on a doughnut-shaped piece of glass, demonstrating a new kind of detector developed by researchers at Washington University. The technology could someday detect viruses and measure nanoparticles engineered for pharmaceutical delivery. Nanoparticles disrupt the light waves resonating within the doughnut, setting off the detector. According to electrical-engineering professor Lan Yang, these microresonators are much less susceptible to environmental noise than other detectors. Yang predicts that the sensors will be ready to leave the lab in five years. BY SANDEEP RAVINDRAN IMAGE BY JIANGANG ZHU/JINGYANG GAN

MICRO-DOUGHNUT Each glass torus in the detector is 20 to 30 micrometers across. The light in each torus can make a million passes around it without dimming.

WUSTL