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Title: Ultra-wideband Air-Core Plasmonic Slow-Light Waveguide with Ultralow High-Order Dispersion
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Abstract：We propose a surface plasmonic waveguide that consists of a metal–dielectric–metal structure and an air-core which are sandwiched in both metals and dielectric material. Numerical results show that the waveguide is able to confine the surface plasmonic modes in a very small air area and achieve slow light with a group velocity of 0:0086 c and cancelled even-orders dispersion over the ultrawideband of 21 THz. © 2011 Optical Society of America OCIS codes: 160.5298, 260.2030, 230.7370.