

Supporting information

# Highly Ordered and Damage-Free Ge Inverted Pyramid Array Structure for Broadband Antireflection in the Mid-Infrared

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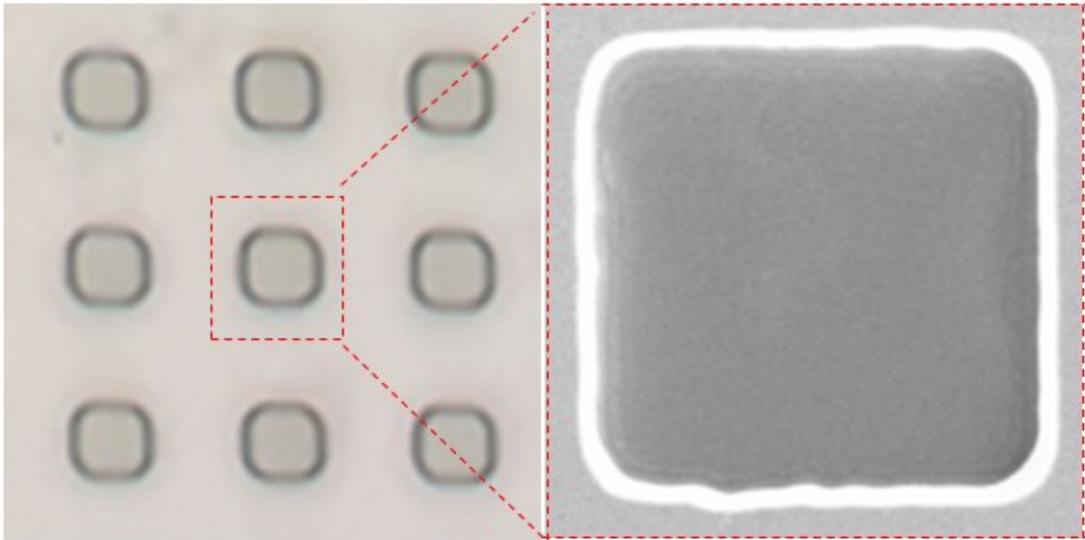


Figure S1. Optical microscopic image of photoresist mesh.

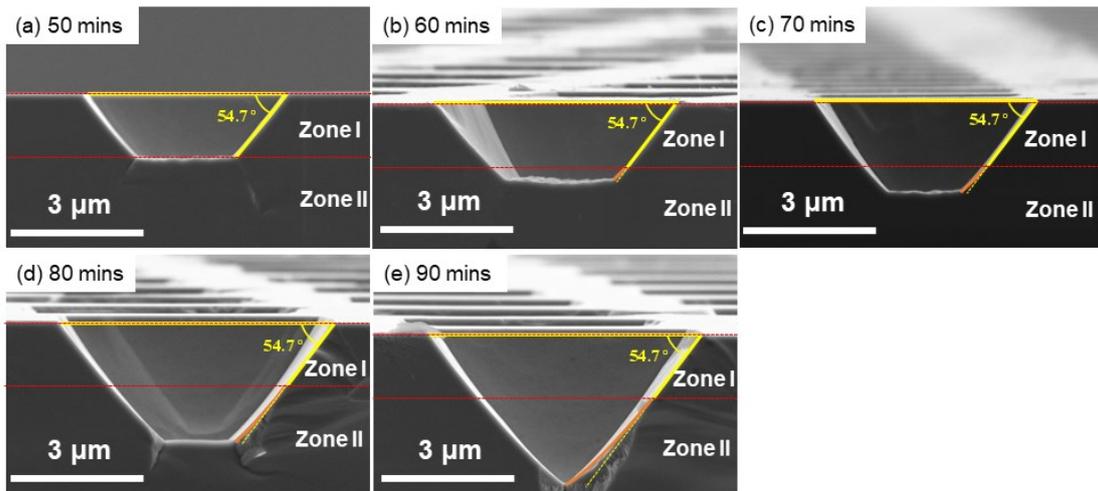


Figure S2. Formation process of inverted pyramid.

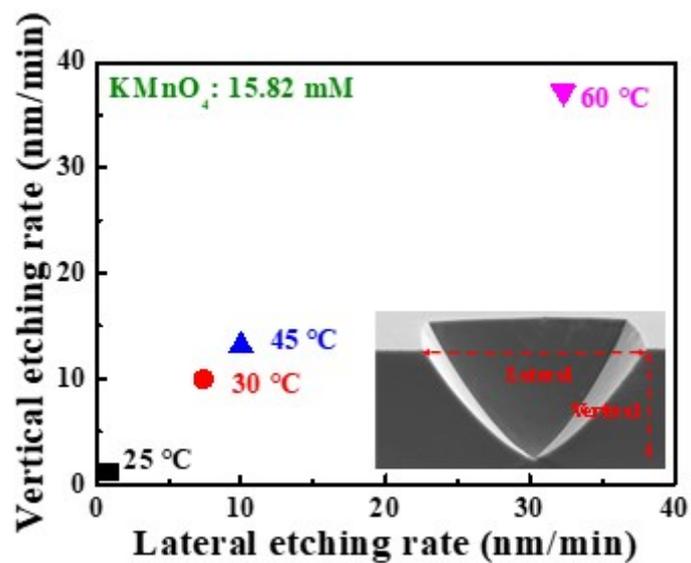


Figure S3. Vertical and lateral etching rate with different etching temperatures.

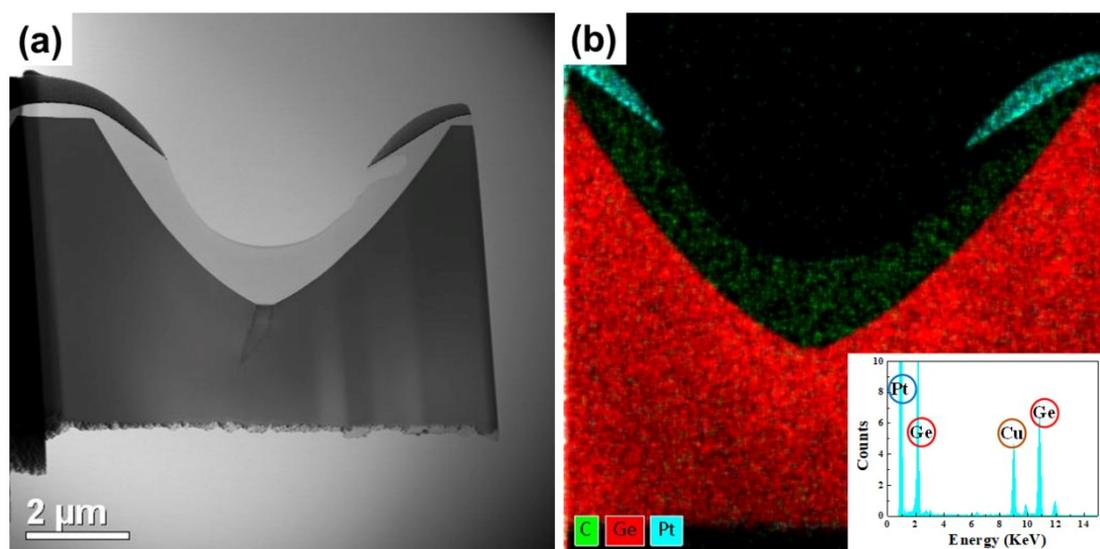


Figure S4. (a) Sampling of the inverted pyramid for TEM. (b) Mapping and amount of elements in the inverted pyramid.

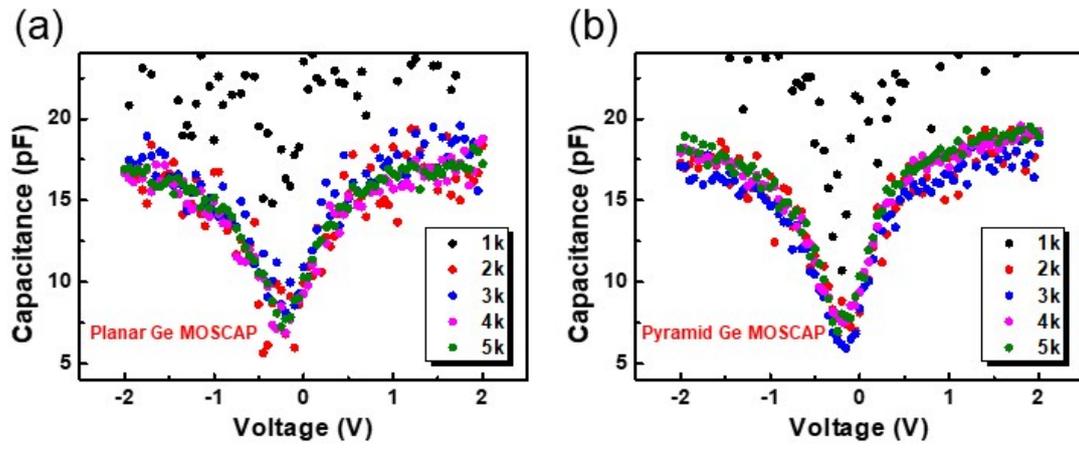


Figure S5. C-V characteristic of (a) planar and (b) pyramid Ge MOSCAPs with AC frequency from 1k to 5k.