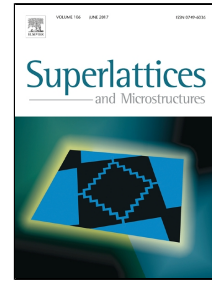


Accepted Manuscript

Antireflection subwavelength structures based on silicon nanowires arrays fabricated by metal-assisted chemical etching

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PII: S0749-6036(17)30101-5

DOI: 10.1016/j.spmi.2017.05.021

Reference: YSPMI 5000

To appear in: *Superlattices and Microstructures*

Received Date: 13 January 2017

Revised Date: 05 May 2017

Accepted Date: 07 May 2017

Please cite this article as: Bin Li, Gao Niu, Yong Yi, Xiu-wen Zhou, Xu-dong Liu, Lai-xi Sun, Chao-yang Wang, Antireflection subwavelength structures based on silicon nanowires arrays fabricated by metal-assisted chemical etching, *Superlattices and Microstructures* (2017), doi: 10.1016/j.spmi.2017.05.021

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Highlights

1. We have obtained low-cost and large-scale single-crystalline silicon nanowires (SiNWs) arrays by combining nanosphere lithography (NSL) and metal-assisted chemical etching (MACE).
2. The diameter, distance and length of Silicon Nanowire Arrays are still controllable by adjusting the diameter of PSs during NSL process compared with some other published results or other methods.
3. The large-scale and controllable SiNWs structure which is covered with an antireflection structure (ARS) can intensively suppress the reflection of light (below 10% or less) over a broad wavelength rang of 300-1000nm.

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