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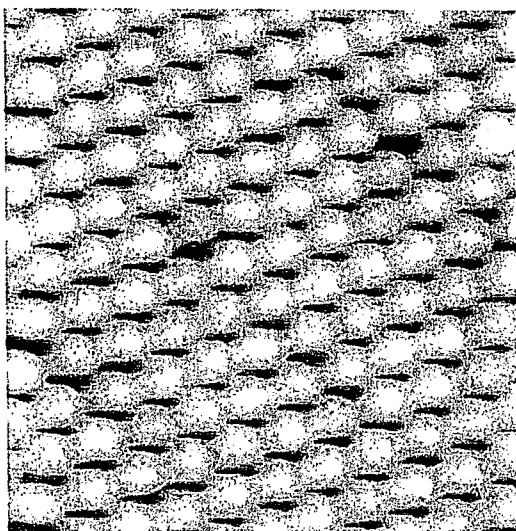
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(54) Title: METHOD FOR FABRICATING NANOSTRUCTURES



(57) Abstract: Nanorings and methods for fabrication thereof, preferably of gold and tungsten, involve deposition on silicon wafer and/or glass substrates using random incidence sputtering deposition and thermal vapor deposition techniques to produce two dimensional tungsten nanotriangle and gold nanoring arrays on the silicon wafer substrates with the size of resulting equilateral tungsten nanotriangles being about 100 nm per side and being spaced about 210 nm from each other, and with the gold nanorings being about 220 nm in diameter, 40 nm wide, 10 nm thick and being spaced about 560 nm from each other.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
INV. C23C14/04 C23C14/22

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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
C23C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, COMPENDEX

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	<p>DATABASE COMPENDEX [Online] ENGINEERING INFORMATION, INC., NEW YORK, NY, US; 4 November 2005 (2005-11-04), LI QIMING ET AL: "Formation of epitaxial Ge nanorings on Si by self-assembled SiO₂ particles and touchdown of Ge through a thin layer of SiO₂" XP002474316 Database accession no. E2006159816196 abstract -/--</p>	1-48

Further documents are listed in the continuation of Box C.

See patent family annex.

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INTERNATIONAL SEARCH REPORT

International application No
PCT/US2006/049163

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
	-& LI QIMING ET AL: "Formation of epitaxial Ge nanorings on Si by self-assembled SiO ₂ particles and touchdown of Ge through a thin layer of SiO ₂ " AICHE ANNUAL MEETING AND FALL SHOWCASE, CONFERENCE PROCEEDINGS 2005, 4 November 2005 (2005-11-04), page 13896, XP002474362 the whole document	
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A	----- US 2005/224779 A1 (WANG ZHONG L [US] ET AL) 13 October 2005 (2005-10-13) paragraphs [0039] - [0041]	1-48
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International application No
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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

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P, X	DATABASE COMPENDEX [Online] ENGINEERING INFORMATION, INC., NEW YORK, NY, US; LI QIMING ET AL: "Formation of epitaxial Ge nanorings on Si by self-assembled SiO ₂ particles and touchdown of Ge through a thin layer of SiO ₂ " XP002474385 Database accession no. E20071410522693 abstract & MATER RES SOC SYMP PROC; MATERIALS RESEARCH SOCIETY SYMPOSIUM PROCEEDINGS; NANOMANUFACTURING 2006, vol. 921, 2006, pages 26-35, *EXPERIMENT*	1
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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2006/049163

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WO 9739159	A	23-10-1997	AU 2518197 A 07-11-1997