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JVSTA

Journal of Vacuum Science & Technology A | 2nd Series | Volume 32, Number 2 | March/April 2014

Vacuum, Surfaces, and Films



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Critical review: Effects of complex interactions on structure and dynamics of supported metal catalysts

-by Anatoly I. Frenkel, Michael W. Cason, Annika Elsen, Ulrich Jung, Matthew W. Small, Ralph G. Nuzzo, Fernando D. Vila, John J. Rehr, Eric A. Stach, and Judith C. Yang

Papers from the 12th International Symposium on Sputtering and Plasma Processes



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Journal of Vacuum Science & Technology A

Vacuum, Surfaces, and Films

JVST A

Second Series
Volume 32, Number 2
Feb/Mar 2014

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Journal of Vacuum Science & Technology A (ISSN: 0734-2101) is published six times annually (Jan/Feb, Mar/Apr, May/Jun, Jul/Aug, Sep/Oct, Nov/Dec) by AVS through AIP Publishing LLC, Suite 1NO1, 2 Huntington Quadrangle, Melville, NY 11747-4502. POSTMASTER: Send address changes to *Journal of Vacuum Science & Technology A*, Membership Services, AVS, 125 Maiden Lane, 15th Floor, New York, NY 10038, membership@avs.org, www.avs.org. Periodicals postage paid at Huntington Station, NY 11746, and at additional mailing offices.

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On The Cover: Hideki Sato, Nobuo Kubonaka, Atsushi Nagata, and Yuji Fujiwara, *JVST A*, **32**(2), p. 02B102-3 (2014). Cover shows a photograph of carbon nanotubes grown on a silicon substrate by a chemical vapor deposition method using ferrocene as a carbon source. Each nanotube is filled with iron nanowires. A catalyst (iron) film, which is previously deposited on the substrate, is irradiated by hydrogen plasma. This treatment activates the growth of the nanotubes on the substrate and gives the thick and long nanotubes as seen in the photograph.