

MATERIALS RESEARCH SOCIETY
SYMPOSIUM PROCEEDINGS VOLUME 1036

Materials and Hyperintegration Challenges in Next-Generation Interconnect Technology

November 26-30, 2007
Boston, Massachusetts, USA

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571
www.proceedings.com

ISBN: 978-1-60560-833-4

Some format issues inherent in the e-media version may also appear in this print version.

Copyright (2008) by the Materials Research Society.
All rights reserved.

For permission requests, please contact the Materials Research Society at the address below.

Materials Research Society
Proceedings
506 Keystone Dr.
Warrendale, PA 15086
Phone: 724-779-3004 x 531
Fax: 724-779-4396
eproceedings@mrs.org

TABLE OF CONTENTS

Crystallization of yttrium-iron Garnet (YIG) in Thin Films: Nucleation and Growth Aspects	1
<i>M. V. Zaezjev, M. C. Sekhar, M. Ferrera, L. Razzari, B. M. Holmes, M. Sorel, D. C. Hutchings, A. Pignolet, R. Morandotti</i>	
Low Temperature Silicon Nitride Films Deposited on 3D Topography by Hot Wire Chemical Vapor Deposition (HWCVD)	8
<i>S. Warnat, M. Hoefer, L. Schaefer, H. Foell, P. Lange</i>	
Effects of Nanometer-Scale Surface Roughness and Applied Load on the Bond Strength and Contact Resistance of Cu-Cu Bonded 3D ICs	14
<i>H. L. Leong, C. L. Gan, C. V. Thompson, K. L. Pey, H. Li</i>	
Electromigration Reliability in Nanoscale Cu Interconnects	23
<i>C. K. Hu, L. M. Gignac, B. C. Baker-O'Neal, G. Bonilla, E. G. Liniger, P. L. Flaitz</i>	
A Unique Method of Forming Ge_xSi_{1-x} Thin-Films on Insulator	34
<i>K. Hossain, O. W. Holland, T. D. Mishima, M. B. Santos, J. L. Duggan, F. D. McDaniel</i>	
ALD of Lanthanum Aluminate Using Lanthanum Formamidinate Precursor	41
<i>H. Li, D. V. Shenai, R. Pugh, J. Kim</i>	
Author Index	