MATERIALS RESEARCH SOCIETY SYMPOSIUM PROCEEDINGS VOLUME 1588

## Functional Oxide Thin Films and Heterostructures for Innovative Devices

September 16-20, 2013 Kyoto, Japan

Printed from e-media with permission by:

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

ISBN: 978-1-5108-0334-3

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

©Materials Research Society 2013

This reprint is produced with the permission of the Materials Research Society and Cambridge University Press.

This publication is in copyright, subject to statutory exception and to the provisions of relevant collective licensing agreements. No reproduction of any part may take place without the written permission of Cambridge University Press.

Cambridge University Press Cambridge, New York, Melbourne, Madrid, Cape Town, Singapore, São Paulo, Delhi, Tokyo, Mexico City

Cambridge University Press 32 Avenue of the Americas, New York, NY 10013-2473, USA www.cambridge.org

Materials Research Society 506 Keystone Drive, Warrendale, PA 15086 www.mrs.org

## CODEN: MRSPDH

ISBN: 978-1-5108-0334-3

Cambridge University Press has no responsibility for the persistence or accuracy of URLs for external or third-part Internet Web sites referred to in this publication and does not guarantee that any content on such Web sites is, or will remain, accurate or appropriate.

## Additional copies of this publication are available from:

Curran Associates, Inc. 57 Morehouse Lane Red Hook, NY 12571 USA Phone: 845-758-0400 Fax: 845-758-2634 Email: curran@proceedings.com Web: www.proceedings.com



## TABLE OF CONTENTS

Si Surface Orientation Dependence on the Electrical Characteristics of HfN
Gate Insulator with Sub-0.5 nm EOT Formed by ECR Plasma Sputtering1
N. Atthi, D. Han, S. Ohmi
Phonon Deformation Potential Constants of Wurtzite ZnO: A First-
Principles Study
K. Shimada, T. Hiramatsu, H. Kato

Author Index