Nanotechnology



MRS Advances: Nanotechnology

Associate Editor:

Marilyn L. Minus, Northeastern University

Principal Editors:

Alexander Govorov, Ohio University Ningzhong Bao, Nanjing Tech University Chuanhua Duan, Boston University Jean-Charles Arnault, CEA LIST

Manish Keswani, University of Arizona Kash Mittal, Reviews of Adhesion and

Adhesives

Al Meldrum, University of Alberta

MRS Advances Editorial Board:

Chair: David F. Bahr, Purdue University Asa Barber, University of Portsmouth, United Kingdom Elizabeth L. Fleischer, Materials Research Society

Marian Kennedy, Clemson University Marilyn L. Minus, Northeastern University Roger J. Narayan, University of North Carolina/North Carolina State University

Materials Research Society Editorial Office, Warrendale, PA:

Ellen W. Kracht, Publications Manager Kirby L. Morris, Journals Production Assistant Susan Dittrich, Journals Editorial Assistant Eileen M. Kiley, Director of Communications

Disclaimer

Authors of each article appearing in this Journal are solely responsible for all contents in their article(s) including accuracy of the facts, statements, and citing resources. Facts and opinions are solely the personal statements of the respective authors and do not necessarily represent the views of the editors, the Materials Research Society, or Cambridge University Press.

MRS Advances (EISSN: 2059-8521) is published by Cambridge University Press, One Liberty Plaza, Floor 20, New York, NY 10006 for the Materials Research Society.

Copyright © 2016, Materials Research Society. All rights reserved. No part of this publication may be reproduced, in any form or by any means, electronic, photocopying, or otherwise, without permission in writing from Cambridge University Press. Policies, request forms and contacts are available at: http://www.cambridge.org/rights/permissions/permission.htm. Permission to copy (for users in the USA) is available from Copyright Clearance Center at: http://www.copyright.com, email: info@copyright.com.

Purchasing Options:
Premium Subscription-Premium Subscription- Premium Subscription includes current subscription and one year's lease access to the full MRS Online Proceedings Library Archive for \$6,875.00 / £4,655.00 / €6,330.00. Subscription-Subscription with perpetual access to the content subscribed to in a given year, including three years of back-file lease access to content from the MRS Online Proceedings Library Archive. The price for a 2016 subscription is \$2,875.00 / £1,855.00 / €2,500.00. MRS Members- Access to MRS Advances is available to all MRS members without charge.

Contact Details:

For all inquiries about pricing and access to MRS Advances, please get in touch via the following email addresses: online@cambridge.org (for the Americas); library.sales@cambridge.org (for UK, Europe, and rest of world).

🖁 journals.cambridge.org/adv

CONTENTS

*	Solution-based Production of 2D-layered Materials
*	Metal-organic Chemical Vapor Deposition of BN on Sapphire and its Heterostructures with 2D and 3D Materials
	Modification of Electronic and Vibrational Properties of Doped Black-P Films
	Effects of Synthesis Parameters on CVD Molybdenum Disulfide Growth
	Strain Engineering of Thermal Conductivity of Two-dimensional MoS ₂ and h-BN
	Characterization of 2D MoS ₂ and WS ₂ Dispersed in Organic Solvents for Composite Applications

^{*}Invited Paper