# Microscopy<sub>and</sub> Microanalysis

table of contents preview

EDITORIAL Five Years Later Robert Price

# MATERIALS APPLICATIONS

EBSD Analysis of Tungsten-Filament Carburization During the Hot-Wire CVD of Multi-Walled Carbon Nanotubes

Clive J. Oliphant, Christopher, J. Arendse, Sigqibo T. Camagu, and Hendrik Swart A Nanoscale Characterization with Electron Microscopy of Multilayered CrAlYN Coatings: A Singular Functional Nanostructure Teresa C. Rojas, Santiago Domínguez-Meister, Marta Brizuela, Alberto García-Luis, Asunción Fernández, and

I rerea C. Kojas, Sanitago Dominguez-Meister, Marta Brizuela, Alberto Garcia-Luis, Asuncion Fernandez, e Juan Carlos Sánchez-López Hafnium-Silicon Precipitate Structure Determination in a New Heat-Resistant Ferritic Alloy by Precession Electron Diffraction Techniques Désirée Vilado, Joaquim Portillo, Mauro Gemí, Stavros Nicolopoulos, and Núria Llorca-Isern Microstructure of Bentonite in Iron Ore Green Pellets

Iftekhar U. Bhuiyan, Johanne Mouzon, Birgit Schröppel, Andres Kaech, Illia Dobryden, Seija P.E. Forsmo, and

Iftekhar U. Bhuiyan, Johanne Mouzon, Birgit Schröppel, Andres Kaech, Illia Dobryden, Seija P.E. Forsmo, and Jonas Hedlund Intergrowth of Components and Ramps in Coffin-Shaped ZSM-5 Zeolite Crystals Unraveled by Focused Ion Beam-Assisted Transmission Electron Microscopy Jiangbo Lu, Maarten B.J. Roeffaers, Evelyne Bartholomeeusen, Bert F. Sels, and Dominique Schryvers High-Resolution Radial Distribution Function of Pure Ion-Implanted Amorphous Silicon Measured Using Tilted-Illumination Selected-Area Electron Diffraction Alexander Gorecki, Anelia C.Y. Liu, and Timothy C. Petersen Coincident Electron Channeling and Cathodoluminescence Studies of Threading Dislocations in GaN Gunasekar Naresh-Kumar, Jochen Bruckbauer, Paul R. Edwards, Simon Kraeusel, Ben Hourahine, Robert W. Martin, Menno J. Kappers, Michelle A. Moram, Stephen Lovelock, Rachel A. Oliver, Colin J. Humphreys, and Carol Trager-Cowan Work Function Maps and Surface Topography Characterization of Nitroaromatic-Ended Dendron Films on Graphite

Work Function rules and sense the point of the point o

# TECHNIQUES, SOFTWARE, AND INSTRUMENTATION DEVELOPMENT

Dynamic Nanoimpedance Characterization of the Atomic Force Microscope Tip-Surface Contact Mateusz Tomasz Tobiszewski, Artur Zieliński, and Kazimierz Darowicki Improving Scanning Electron Microscope Resolution for Near Planar Samples Through the Use of Image Restoration

Restoration Eric Lifshin, Yudhishthir P. Kandel, and Richard L. Moore

Eric Lifstin, Yudhishthi P. Kandel, and Richard L. Moore Lateral Resolution Enhancement of Vertical Scanning Interferometry by Sub-Pixel Sampling Rolf S. Arvidson, Cornelius Fischer, Dale S. Sawyer, Gavin D. Scott, Douglas Natelson, and Andreas Lüttge Quantitative Annular Dark Field Electron Microscopy Using Single Electron Signals Ryo Ishikawa, Andrew R. Lupini, Scott D. Findlay, and Stephen J. Pennycook Sample Thickness Determination by Scanning Transmission Electron Microscopy at Low Electron Energies Tobias Volkenandt, Erich Müller, and Dagmar Gerthsen An Inexpensive Approach for Bright-Field and Dark-Field Imaging by Scanning Transmission Electron Microscopy in Scanning Electron Microscopy Binay Patel and Masashi Watanabe FIB Plan and Side View Cross-Sectional TEM Sample Preparation of Nanostructures Filip Lenrick, Martin Ek, Daniel Jacobsson, Maguus T. Borgström, and L. Reine Wallenberg A Microbludic-Enabled Mechanical Microcompressor for the Immobilization of Live Single- and Multi-Cellular Specimes

A Microfluidic-Enabled Mechanical successing and the second provided provided and the second provided and the second provided provided and the second provided provided provided and the second provided provided

- Kent L. McDonald Capturing Enveloped Viruses on Affinity Grids for Downstream Cryo-Electron Microscopy Applications Gabriella Kiss, Xuemin Chen, Melinda A. Brindley, Patricia Campbell, Claudio L. Afonso, Zunlong Ke, Jens M. Holl, Ricardo C. Guerrero-Ferreira, Lauren A. Byrd-Leotis, John Steel, David A. Steinhauer, Richard K. Plemper, Deborah F. Kelly, Paul W. Spearman, and Elizabeth R. Wright

BIOLOGICAL APPLICATIONS In-Focus Electrostatic Zach Phase Plate Imaging for Transmission Electron Microscopy with Tunable Phase

- In-rocus electrostatic Zater Prater Imaging for Fransmission Electron Microscopy With 1 unable Phase Contrast of Frozen Hydrated Biological Samples Nicole Frindt, Marco Oster, Simon Hettler, Björn Gamm, Levin Dieterle, Wolfgang Kowalsky, Dagmar Gerthsen, and Rasmus R. Schröder The Effect of Magnesium Ions on Chromosome Structure as Observed by Helium Ion Microscopy Astari Dwiranti, Tohru Hamano, Hitdeaki Takata, Shoko Nagano, Hongxuan Guo, Keiko Onishi, Toshiyuki Wako, Susumu Uchiyama, and Kiichi Fukui Gold Nanoparticle Uptake in Whole Cells in Liquid Examined by Environmental Scanning Electron Microscopy
- Cold Nanoparticle Optake in whole Cells in Equal Examined of International Cells and Cells an

Observer interpendent Catanana Microscopy Magnus Matz, Kirstin Schumacher, Kathrin Hatlapatka, Dirk Lorenz, Knut Baumann, and Ingo Rustenbeck Texture Analyses Show Synergetic Effects of Biomechanical and Biochemical Stimulation on Mesenchymal Stem Cell Differentiation into Early Phase Osteoblasts So Hee Park, Ji Won Shin, Yun Gyeong Kang, Jin-Sook Hyun, Min Jae Oh, and Jung-Woog Shin Structural Characterization of the Cell Division Cycle in Strigomonas culicis, an Endosymbiont-Bearing

Structural Characterization of the Cell Division Cycle in our generate conservation of the Source, Sergio Schenkman, Felipe Lopes Brum da Silveira, Carolina Moura Costa Catta-Preta, Wanderley de Souza, Sergio Schenkman, Maria Carolina Elias, and Maria Cristina Machado Motta Inactivation and Ultrastructure Analysis of Bacillus spo, and Clostridium perfringens Spores Christine A. Brantner, Ryan M. Hannah, James P. Burans, and Robert K. Pope Surface Microanalysis and Chemical Imaging of Early Dentin Remineralization Manuel Toledano, Inmaculada Cabello, Miguel Angel Cabrerizo Vilchez, Miguel Angel Fernández, and Raquel Osorio Evaluation of X-Ray Microanalysis for Characterization of Dental Enamel Lisa Melin, Jörgen G. Norén, Fabian Taube, and David H. Cornell

Lisa Melin, Jörgen G. Norén, Fabian Taube, and David H. Cornell Qualitative Evaluation of Scanning Electron Microscopy Methods in a Study of the Resin Cement/Dentine

Qualitative Evaluation of Scanning Electron Microscopy Methods in a Study of the Resin Cement/Dentine Adhesive Interface Carolina N. d. B. Pereira, Bruno Daleprane, Paola F. Barbosa, Allyson N. Moreira, and Cláudia S. de Magalhães Unusual Micrometric Calcite-Aragonite Interface in the Abalone Shell Haliotis (Mollusca, Gastropoda) Yamicke Dauphin, Jean-Pierre Cuif, Hiram Castillo-Michel, Corinne Chevallard, Bastien Farre, and Anders Meibom Ultrastructure of the Excretory Organs of Bombus morio (Hymenoptera: Bombini): Eee Without Rectal Pads Wegner Gonzaga Gonçalves, Maria do Carmo Queiroz Fialho, Dihego Oliveira Azevedo, José Cola Zanuncio, and José Eduardo Serrão

Leaf Anatomy and Histochemistry of Three Species of Ficus sect. Americanae Supported by Light and

Electron Microscopy Nathalia Diniz Araújo, Victor Peçanha M. Coelho, Marília Contin Ventrella, and Maria de Fátima Agra Multiscale 3D Virtual Dissections of 100-Million-Year-Old Flowers Using X-Ray Synchrotron Micro- and Neurotemeraphy. Nanotomography Jean-David Moreau, Peter Cloetens, Bernard Gomez, Véronique Daviero-Gomez, Didier Néraudeau,

Tamzin A. Lafford, and Paul Tafforeau BOOK REVIEW

nning Electron Microscopy for the Life Sciences. Heide Schatten (Ed.). William Russin



# **Dear Abbe**

# Dear Abbe

We are at our wit's end! We are still using film and making wet prints in our EM lab. We're not happy about this situation, but the real problem is Bob. Bob simply cannot knock on the darkroom door to see if someone is processing film or making prints. I cannot tell you how many batches of negatives and unexposed sheets of printing paper have gone into the trash. Management is sympathetic but has firmly ruled out the use of a Lab Bat and claims that there is no money for a revolving darkroom door. Please help! Frustrated in Fishkill

## Dear Frustrated

Quit your whining! You may at least be reassured that the journey to your wit's end was only half as long as for most people. This noble palindromic pest is trying to solve your research data acquisition problems! Still using film and wet chemistry? I am surprised you are not making daguerreotypes and breathing mercury fumes! (Maybe you are...) As I see it, you have two solutions to your alleged problem: One, buy a supply of darkbulbs to replace your lightbulbs (these can only be found at your local existential photo supply house) and thereby prevent unwanted exposure by Bob; or two, realize the support he is providing for your so-called research. Just thinkby exposing every silver grain on a photographic negative, he is not losing your data but instead creating one universal negative! All you need to do is apply the correct noise-removal algorithm to the negative to reveal the image you want. Trot down the hall to your friends in the cryo-electron tomography lab, and they will have the software you need. Trust me on this one.

### Dear Abbe

I recently learned of the work of the German research group that has successfully overcome the conventional limit of resolution in light-based investigations by applying a range of different methods (e.g., 4Pi-microscopy, localization microscopy, spatially structured illumination, etc.). How do you feel about someone breaking the so-called "Abbe Limit" of resolution? Gloating in Göttingen

# Dear Glowplug

Break the Abbe Limit you say? Bollox! If this so-called optische Gruppe really is hot stuff, then I challenge the Oberhaupt to a spirited round of Nagelspielen. Ground rules are as follows: First, each contestant must consume an entire bottle of Beerenauslese. Next, wearing nothing but a pair of Gauplattlerhosen, each player chooses a striker and begins the whacking. I feel it only fair to warn the opposition that my record stands at 122 wins, 0 losses, and 2 ties, the ties coming when Karl Ferdinand Braun tricked me into striking the wrong nail by shouting "betrachten Sie die große Dinger!" just as my hammer was coming down. If my opponent plans a similar sort of distraction, he should bear in mind that this time we'll be playing with Helko field hatchets and that I suffer fools badly.

If you are feeling limited by Abbe, send your challenges to *Herr Abbe's faithful assistant at jpshield@uga.edu.* 

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