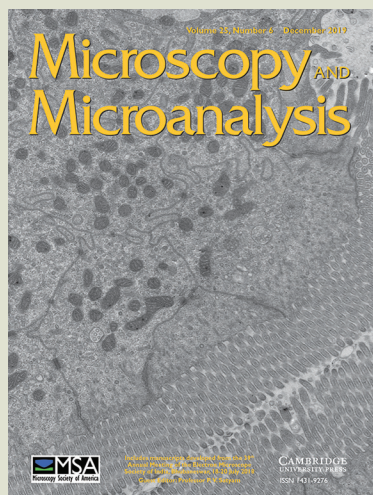


preview of some upcoming articles



### Materials Applications

HAADF-STEM Image Resolution Enhancement Using High-Quality Image Reconstruction Techniques: Case of the  $\text{Fe}_3\text{O}_4(111)$  Surface

G. Bárcena-González, M. P. Guerrero-Lebrero, E. Guerrero, A. Yañez, B. Nuñez-Moraleda, D. Kepaptsoglou, V. K. Lazarov and P. L. Galindo

### Software and Instrumentation

Electrochemical Behavior of Carbon Electrodes for In Situ Redox Studies in a Transmission Electron Microscope

Robin Girod, Nikolaos Nianias and Vasiliki Tileli

### Biological Applications

Quantitative Assessment of Anti-Cancer Drug Efficacy From Coregistered Mass Spectrometry and Fluorescence Microscopy Images of Multicellular Tumor Spheroids

Jan Michálek, Karel Štěpka, Michal Kozubek, Jarmila Navrátilová, Barbora Pavlatovská, Markéta Machálková, Jan Preisler and Adam Pruška

New Insights into the Ultrastructure of Bioapatite After Partial Dissolution: Based on Whale Rostrum, the Densest Bone

Lingyi Tang, Li Zhang, Michael Yue, Da Tian, Mu Su and Zhen Li

Neutron Autoradiography Combined With UV-C Sensitization: Toward the Intracellular Localization of Boron

Mario A. Gadan, Rodrigo Lloyd, Gisela Saint Martin, María S. Olivera, Lucia Policastro and Agustina M. Portu

In Vivo Multivesicular Body and Exosome Secretion in the Intestinal Epithelial Cells of Turtles During Hibernation

Waseem Ali Vistro, Yufei Huang, Xuebing Bai, Ping Yang, Abdul Haseeb, Hong Chen, Yifei Liu, Zhang Yue, Imran Tarique and Qiusheng Chen

### Electron Microscopy Society of India Special Section EMSI 2018

Includes manuscripts developed from the 39th Annual Meeting of the Electron Microscopy Society of India, Bhubaneswar, 18–20 July 2018

Guest Editor: Professor P. V. Satyam

### Biological Applications

Effect of Ultra-Small Chitosan Nanoparticles Doped with Brimonidine on the Ultra-Structure of the Trabecular Meshwork of Glaucoma Patients

Indu Barwal, Rahul Kumar, Tanuj Dada and Subhash Chandra Yadav

Role of Electron Microscopy in Early Detection of Altered Epithelium During Experimental Oral Carcinogenesis

Sharada Sawant, Harsh Dongre, Deepak Kanojia, Sayli Jamhare, Anita Borges and Milind Vaidya

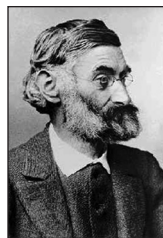
Processing Techniques for Scanning Electron Microscopy Imaging of Giant Cells from Giant Cell Tumors of Bone

Asit Ranjan Mridha, Indu Barwal, Abhishek Gupta, Abdul Majeed, Adarsh W. Barwad, Venkatesan Sampath Kumar, Shivanand Gamanagatti and Subhash Chandra Yadav

### Materials Applications

Microstructural Characterization of GaN Grown on SiC

Sabyasachi Saha, Deepak Kumar, Chandan K. Sharma, Vikash K. Singh, Samartha Channagiri and Duggi V. Sridhara Rao



## Dear Abbe

### Dear Abbe,

I have just replaced our last electron microscope that used film and find myself nervous over no longer having my data stored as for-real, physical negatives. Now they're just bits of magnetic charge in disconnected patches of some mysterious electronic storage device. Then on top of that, I find that these cryptic bits can be rearranged, lost, or otherwise modified, even by such things as cosmic rays. Am I being paranoid, or do I have cause for concern?

*Worried in Worcester*

### Dear Worried,

You do indeed have cause to be paranoid! In this day and age a little paranoia is healthy, mein Freund. Not only do you have to be concerned about your precious images floating about your computers as fragmented ghosts, but what about everyone else's images? They're all just Geister in der Maschine. And who knows what is really in those data packets? You have no doubt heard of steganography, where messages are hidden within other messages. In this case, images within images. Sometimes, if you look at them in a mirror, mysterious messages appear. Ever wonder why you get hungry for some treat while studying your images? *Steganography!* Undetected hackers sneak into the computers' memories and add hidden data to your images. Clever bakers and restaurateurs have used this trick to hide images of beer, pizza, ice cream, Schnitzel, and other delicacies within your images. (I'm not even going to raise the specter of what assistant professors have done for tenure.) So you now understand why, as you study your images of glycogen stores in liver cells, you find yourself craving donuts.

*Worried that you're being manipulated? Need a fresh batch of worries? Just contact Professor Abbe via johnshields59@gmail.com and worry no more!*

MT

