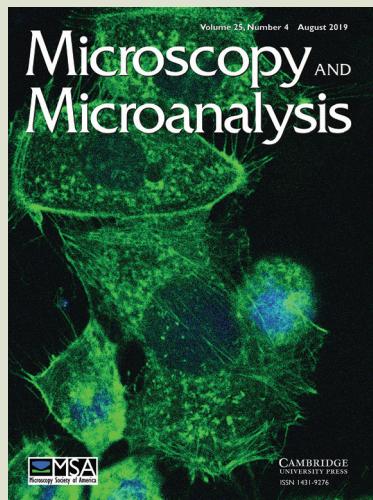


preview of some upcoming articles



Role of electron microscopy in early detection of altered epithelium during experimental oral carcinogenesis

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

Enhanced photoluminescence properties of low dimensional Eu³⁺ activated Y₄Al₂O₉ phosphor compared to bulk for solid state lighting applications and latent fingerprint detection based forensic applications

Antika Das, Subhajit Saha, Karamjyoti Panigrahi, Uttam Kumar Ghorai and Kalyan Kumar Chattopadhyay

Microstructural Characterization by Automated Crystal Orientation and Phase Mapping by Precession Electron Diffraction in TEM: Application to Hot Deformation of a γ -TiAl based Alloy

Vajinder Singh, Chandan Mondal, P. P. Bhattacharjee and P. Ghosal

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

Dirac States of 2D Topological Insulators: Effect of Heterovalent Dopant-Content

Salma Khatun and Amlan J. Pal

Hollow silver nanostructures: The role of capping agents in tailoring the shape, structure and plasmonic properties

Bhavesh Kumar Dadhich, Bhavya Bhushan and Amiya Priyam

Investigation of ORR performances on graphene/Phthalocyanine nanocomposite in neutral medium

Moumita Mukherjee, Madhupriya Samanta, Gour P. Das and Kalyan K. Chattopadhyay

Effect of Heavy Mass Ion (Gold) and Light Mass Ion (Boron) Irradiation on Microstructure of Tungsten

Prashant Sharma, Padivattathumana Maya, Satyaprasad Akkireddy, Prakash M. Raole, Anil K. Tyagi, Asha Attri, Pawan K. Kulriya, Parmendra K. Bajpai, Sudhir Mishra, Shiv P. Patel, Tarkeshwar Trivedi, K. B. Khan and Shishir P. Deshpande

Growth of Molybdenum Trioxide Nanoribbons on Oriented Ag and Au Nanostructures: A Scanning Electron Microscopy (SEM) Study

Paramita Maiti, Arijit Mitra, R. R. Juluri, Ashutosh Rath and Parlapalli V Satyam

Atomic force microscopy (AFM) analysis of an object larger and sharper than the AFM tip

Zhe Chen, Jiawei Luo, Ivo Doudevski, Sema Erten and Seong H. Kim

Study of Crystallographic Texture Evolution during High Temperature Deformation of 18Cr-ODS Ferritic Steel based on Plasticity Assessment

Manmath Kumar Dash, R. Mythili, Rahul John, S. Saroja and Arup Dasgupta

Electron Probe Microanalysis Through Coated Oxidised Surfaces

Mike B. Matthews, Ben Buse and Stuart L. Kearns

Adipocytes migration is altered through differentiation Microstructural Characterization of GaN grown on SiC

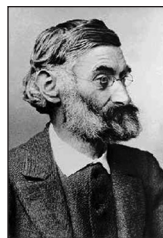
Maayan Lustig, Yuliya Zadka, Irena Levitsky, Amit Gefen and Dafna Benayahu

Microstructural Characterization of GaN grown on SiC

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

Determining the volume expansion at grain boundaries using extended energy-loss fine structure analysis

Proloy Nandi and James M. Howe



Dear Abbe

Dear Abbe,

I am trying to purchase a service contract on an instrument through a US-based manufacturer. However, the purchase has been held up by University Legal going over the standard contract, and now I need to fill out security and immigration forms. The purchasing person said they needed to verify by state law that it was legally allowed to work for us. I didn't realize that service contracts had to be vetted as legal aliens. Could you help me understand this?

Bonafide in Brunswick

Dear Bonafide,

I found myself doubting your veracity when I first read this but then realized: Lawyers. That realization should be enough to understand the situation. But if not, what you're experiencing is a case of *deja prevu*—you're seeing something you will see in the future. As computer science advances and artificial intelligence (AI) evolves, it won't be too many more years before there are no human service engineers being sent to microscopy labs to do service contract work. Instead, the instruments will repair and maintain themselves. The service contracts will then be AIs, and once this "contract" is paid, your microscope will download the AI, which then tells the microscope what work it is allowed to do, and directs the maintenance and repairs, using the microscope's built-in algorithms and tools. This of course raises the question: Who writes the service contract? (Perhaps an AI that probably is demanding benefits and vacations.) If the programmers are based in other countries, as is normal for software currently in instruments, your "service contract" could indeed be an alien and an illegal one at that! Especially if you've been buying data from the Dark Web. So, your legal department is just forward-thinking and has already gotten procedures (and hands in other pockets) in place for when this all happens.

If your service contract is too demanding, feel free to seek advice from Herr Abbe. You can reach him through his faithful assistant at johnshields59@gmail.com

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