



Materials Science Applications

Study on quantitative analysis of carbon and nitrogen in stoichiometric θ -Fe₃C and γ' -Fe₄N by atom probe tomography

Takahashi, Jun; Kawakami, Kazuto; Kobayashi, Yukiko

Determination of mass attenuation coefficients of Th, U, Np and Pu for oxygen Ka x rays using an electron microprobe

Pöml, Philipp; Llovet, Xavier

Software and Instrumentation

Enhancement of temporal resolution of fluorescent signals acquired by confocal microscope

Samigullin, Dmitry; Arhipov, Arseniy; Khaziev, Eduard; Skorinkin, Andrey; Bukharaeva, Ellya

Locally Condensed Water as a Solution for *in-situ* Wet Corrosion Electron Microscopy

Ahmedi, Majid; Tichelaar, Frans; Ihring, Andreas; Kunze, Michael; Billat, Sophie; Kolahdouz Esfahani, Zahra; Zandbergen, Henny

A Versatile Homebuilt Gas Feeding and Analysis Setup for Operando TEM of Catalysts at Work

Lunkenbein, Thomas; Plodinec, Milivoj; Nerl, Hannah; Farra, Ramzi; Willinger, Marc; Stotz, Eugen; Schlögl, Robert

Introducing and Controlling Water Vapor in Closed-Cell *In Situ* Electron Microscopy Gas Reactions

Unocic, Kinga; Walden II, Franklin; Marthe, Nelson; Datye, Abhaya; Bigelow, Wilbur; Allard, Lawrence

High Efficiency Three-Dimensional Visualization of Complex Microstructures via Multi-Dimensional STEM Acquisition and Reconstruction

Field, Kevin; Eftink, Benjamin; Parish, Chad; Maloy, Stuart

Reflections on the analysis of interfaces and grain boundaries by atom probe tomography

Gault, Baptiste; Jenkins, Benjamin; Danoix, Frédéric; Gouné, Mohamed; Bagot, Paul; Peng, Zirong; Moody, Michael

Field Ion Emission in an Atom Probe Microscope Triggered by Femtosecond-Pulsed Coherent Extreme Ultraviolet Light

Chiaromonti, Ann; Miaja-Avila, Luis; Caplins, Benjamin; Blanchard, Paul; Diercks, David; Gorman, Brian; Sanford, Norman

Biological Applications

Confocal Analysis of Distribution and Persistence of Sindbis Virus Infection in Midguts of *Aedes aegypti* Mosquitoes

Bowers, Doria; Saredy, Jason; Chim, Florence; Lyski, Zoë; Ahearn, Yani

Controlled crystallization and transformation of carbonate minerals with dumbbell-like morphologies on bacterial cell templates

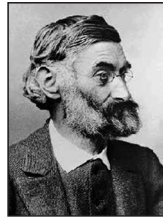
Zhang, Chonghong; Li, Fuchun; Sun, Jun; Lv, Jiejie

Connexin 43 Knockdown Induces Mitochondrial Dysfunction and Affects Early Developmental Competence in Porcine Embryos

Cui, Xiang-Shun; Shin, Kyung-Tae; Nie, Zheng-wen; Zhou, Wenjun; Zhou, Dongjie; Kim, Ju-Yeon; Ock, Sun-A; Niu, Ying-Jie

Filamentous vs. spherical morphology: a case study of the recombinant A/WSN/33 (H1N1) virus

Kordyukova, Larisa; Mintaev, Ramil; Rtishchev, Artyom; Kunda, Marina; Ryzhova, Natalia; Abramchuk, Sergei; Serebryakova, Marina; Khrustalev, Vladislav; Khrustaleva, Tatyana; Poboinev, Victor; Markushin, Stanislav; Voronina, Olga



Dear Abbe

Dear Abbe,

I was having a problem with my CM12 TEM, in that when I quickly lifted the viewing screen it would shut down the microscope. Later we noticed that a small spark would jump from the plate to the metal housing of the vacuum chamber. With the help of a reputable company, we solved the problem. There is a battery-powered circuit connected to the view screen. One of the batteries was dead, and, once replaced, the problem disappeared. I just got an e-mail from someone who wants to publish a book based on my screen lifter problem. They claim they will pay all the publishing costs! I see it now: the hero is a hardworking electron named Icey Electron called on a hero's journey in which he picks up a ragtag band of friends and companions to battle the evil villain Electro-Arc. My problem is how much to negotiate for royalty rights, advance money, etc.

Frank in Akron

Dear Famous Frank,

You have come to the right man for advice! I have been famous for quite some time (mostly in my own mind). I have also had various offers and contractual wranglings for my life story, although there are some plagiarism concerns. But let's not dwell on my issues. It starts with a book, which then gets picked up by Quentin Tarantino for movie adaptation. I can see it now—John Travolta as the evil villain Electro-Arc who becomes the arc-nemesis of Icey Electron (played by Robert Downey Wehnel). I can see myself in the role of Icey's mentor, Photon, an incredibly intelligent and amazingly handsome wizard. I may have to write this myself! I did mention I have plagiarism issues ...

If at first you don't succeed, contact Herr Professor Abbe through his relatively competent assistant at johnshields59@gmail.com and have someone else to blame!

MT



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