



ABSTRACT SUBMISSION

The quality of the abstracts will form the basis for selection of papers for the conference and these will be peer reviewed according to the following criteria:

- originality of the work
- specific results achieved and described
- potential impact and interest to attendees

Abstracts should be submitted online at

www.eipbn.org

Abstracts are limited to one page of text (12 point or larger type) and a second, optional page with up to four figures.

Abstract deadline: January 9, 2012

Late submissions may be considered but only if they report truly outstanding results. Please prepare abstracts carefully and describe accomplishments specifically. Authors will be notified of acceptance by email by April 1, 2012.

MICROGRAPH CONTEST

On a less technical level, EIPBN offers the opportunity to immortalize your favorite micrograph(s). Categories and previous winners are described on the conference web site, www.eipbn.org

MANUSCRIPT SUBMISSION

Manuscripts must be submitted at the time of the conference and will be subjected to a critical peer review before they can be accepted for publication in the Nov/Dec issue of the *Journal of Vacuum Science and Technology*. Please note that authors are required to pay a publication charge of around \$100 per page.

CONFERENCE CHAIR

Dr. Reginald C. Farrow
Research Professor
Department of Physics
New Jersey Institute of Technology
323 Dr. Martin Luther King, Jr. Blvd
Newark, NJ 07102-1982
Phone: 973-596-2473
E-mail: eipbn.2012@gmail.com

PROGRAM CHAIR

Dr. Michael Fritze
Director, Information Sciences Institute
& Research Professor
Ming Hsieh Department of Electrical Engineering
University of Southern California
3811 North Fairfax Drive, Suite 200
Arlington, Virginia 22203
Phone: 703-812-3702, FAX: 703-812-3712
Email: mfritze@isi.edu

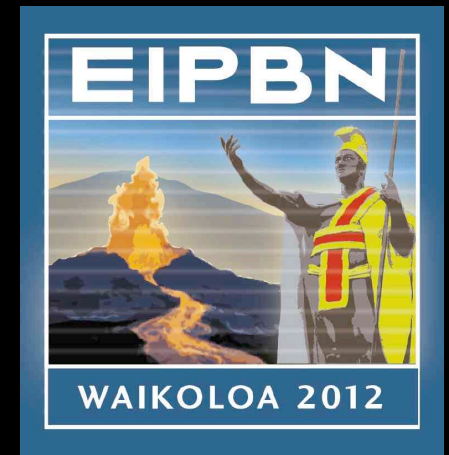
STUDENT SUPPORT

Limited funds are available to support student travel to the conference. The Conference Chair must receive a letter requesting support from the student's advisor by January 10, 2012. PhD student and postdoc resumes will also be collected and distributed to potential employers by email.

OTHER INFORMATION

The EIPBN conference is incorporated as a nonprofit organization in the state of New Jersey and is co-sponsored by the American Vacuum Society (www.avs.org), in cooperation with the IEEE Electron Devices Society and Electro-optics Societies and the Optical Society of America (www.osa.org). It is organized by a steering committee that elects two new members each year from those that regularly attend the conference.

1ST CALL FOR PAPERS

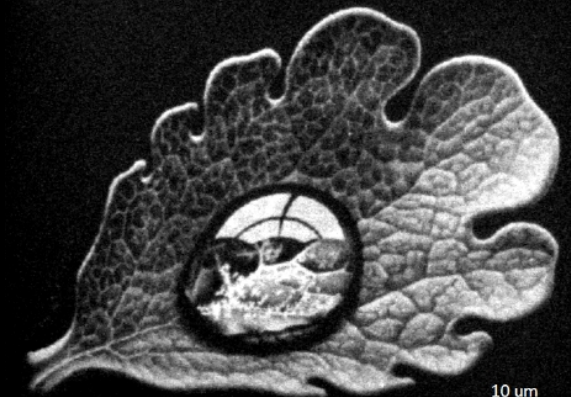


THE 56TH INTERNATIONAL CONFERENCE ON ELECTRON, ION, AND PHOTON BEAM TECHNOLOGY AND NANOFABRICATION

May 29 – June 1, 2012

Hilton Waikoloa Village Resort
Waikoloa, Hawaii (The Big Island)

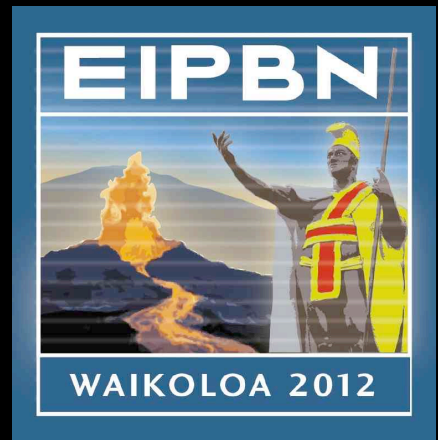
www.eipbn.org



10 um

The 56th International Conference on Electron, Ion, and Photon Beam Technology and Nanofabrication

Waikoloa, Hawaii, May 29 – June 1, 2012



CONFERENCE BACKGROUND

EIPBN — the 'THREE-BEAMS' conference — is recognized as the foremost international meeting dedicated to **lithographic sciences** and **process technologies** using electron, ion or photon beams, with special emphasis on applications for **micro- and nanofabrication** techniques. The conference brings together engineers and scientists from all over the world to discuss recent progress and future trends.

MEETING FORMAT

The conference opens on Tuesday afternoon with a special commercial session featuring vendors of equipment and materials relevant to the conference. The technical program begins with a plenary session Wednesday morning. The regular symposia are presented in three parallel sessions. The length of the presentation and discussion is 30 minutes for invited papers and 20 minutes for contributed papers.

A special feature of the technical program is the poster session that includes both invited and contributed papers. There is only one poster session but posters will be displayed for informal viewing throughout the entire conference.

Front cover micrograph is the Grand Prize Winner of the 2011 EIPBN MicroGraph contest submitted by Joel Yang of IMRE. The micrograph is an SEM image of M.C. Escher's 1948 Drop as "sketched" by e-beam lithography in such a way as to preserve the grayscale information. Medium: HSQ on Si.

CONFERENCE REGISTRATION

We strongly encourage you to register on line by using our website www.eipbn.org. Early registration rates and special student rates are available. The online registration system will be open in the fall of 2011.

CONFERENCE LOCATION

The conference will be held at the Hilton Waikoloa Village on the lovely Big Island of Hawaii. This full service resort is on 62 acres along the Kohala coast about 20 minutes north of the Kona International Airport.

Hilton Waikoloa Village

69-425 Waikoloa Beach Drive
Waikoloa, Hawaii 96738
Phone: (808) 886-1234
Fax: (808) 886-2900



Photo courtesy Hilton Waikoloa Village

TECHNICAL SCOPE

Abstracts representing high-quality original research are invited in the following areas:

Micro- and Nanolithography

- Electron-beam lithography
- Ion-beam patterning
- Optical lithography
- Nano-imprint lithography
- Extreme UV lithography
- Mask and Maskless lithography
- Directed self-assembly
- Novel or emerging lithographic techniques

Process Technologies

- Electron or ion beam technologies
- Metrology and imaging
- Resists
- Pattern transfer
- Process simulation and modeling
- Novel beam-based processing

Applications

- Nanoelectronics
- Patterned media and data storage
- Nanophotonics
- Nanobiology
- Micro- and nano-fluidics
- Novel or emerging applications
- Carbon-based nanodevices (CNTs&Graphene)
- 3DIC-enabled Nanodevices & Nanotechnology