



Contact: Laser Institute of America
+1.407.380.1553
lia@lia.org

FOR IMMEDIATE RELEASE:

JLA to Publish Special Issue on Sub-100 Nanometer Laser Structuring

ORLANDO, FL, Aug. 24, 2011 — A year after transitioning to a completely online publication, the *Journal of Laser Applications* (JLA) (jla.aip.org) is planning a special issue that will focus on sub-100 nanometer laser structuring — a technology that has drawn significant interest and research funds within the past decade.

JLA, the official journal of the Laser Institute of America, is seeking papers from laser experts worldwide for inclusion in this special issue, which will be edited by Drs. Yongfeng Lu, Karsten Koenig and Andreas Ostendorf and is scheduled to appear in early 2012.

“The occasion for the special issue is the mid-term assessment of the German DFG-funded priority program on ‘Optically generated sub-100nm structures for technical and biomedical applications,’” says Ostendorf, a professor at Ruhr-University Bochum near Cologne, Germany. “The special issue therefore is a unique opportunity to present the latest results relevant in the field.”

The technology is worthy of closer examination because “only a decade ago, 100nm resolution seemed to be impossible by laser direct writing without the use of big, expensive lithography machines based on UV lasers,” Ostendorf notes. “Now, cheap and compact ultrafast lasers in the visible and NIR spectral region are available that can make use of nonlinear processes and allow structures far beyond the diffraction limit.”

The special issue is a significant achievement for JLA because it will feature “cutting-edge research by a number of respected authors who typically publish in more physics-oriented journals,” says LIA Executive Director Peter Baker. “It’s also worthy to note that this issue will be open access — individual papers or the entire issue can be downloaded free of charge.”

Contributions will be featured from institutions in the vanguard of sub-100 nanometer laser technology, including the Max-Born Institute, the Fraunhofer Institute for Laser Technology, University of Kassel, University of Jena, Technical University of Dresden, University of Konstanz and Laser Zentrum Hannover, among others. Submissions will be evaluated by leading international scientists, Ostendorf says. He will edit the edition along with Koenig, a professor at Saarland University in Germany, and Lu, a professor at the University of Nebraska in Lincoln, NE.

“All international groups are invited to contribute and make this a comprehensive, state-of-the-art issue,” Ostendorf notes. Besides regular contributions, those who wish to submit open-access papers can do so at a discounted rate of \$1,200.

Deadline for submission of papers is October 14th. To be considered for publication, contributions should clearly address the 100nm limit (i.e., minimum structure sizes achieved should be below 100nm), Ostendorf says. Structures can be achieved by ablation, polymerization, modification or self-organization. Accepted papers will be published in January. For further information, visit www.lia.org/subscriptions/jla.



**Laser Institute
of America**
Laser Applications and Safety

13501 Ingenuity Drive, Suite 128
Orlando, FL 32826 USA
Phone: 407.380.1553
Fax: 407.380.5588
www.lia.org

About the Journal of Laser Applications

JLA is published quarterly in partnership with the American Institute of Physics. Editor-in-chief, Dr. Reinhart Poprawe, of Fraunhofer, is LIA's incoming president. For more information, visit jla.aip.org.

About LIA

Laser Institute of America (LIA) is the professional society for laser applications and safety serving the industrial, educational, medical, research and government communities throughout the world since 1968. LIA is the secretariat and publisher of the American National Standards Institute (ANSI) Z136 series of laser safety standards. For more information, visit www.lia.org.

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