



3rd Pacific International Conference on Applications of Lasers and Optics

PICALO

APRIL 16-18, 2008 • CAPITAL HOTEL • BEIJING, CHINA



CALL FOR PAPERS

PICALO General Conference Chair: Minlin Zhong, Tsinghua University, Beijing, People's Republic of China

PICALO Laser Materials Processing Conference Chairs:

Hau-Chung Man, Hong Kong Polytechnic University, Hung Hom, Kowloon, Hong Kong

Lin Li, The University of Manchester, Manchester, UK

PICALO Micro, Nano & Ultrafast Fabrication Conference Chairs:

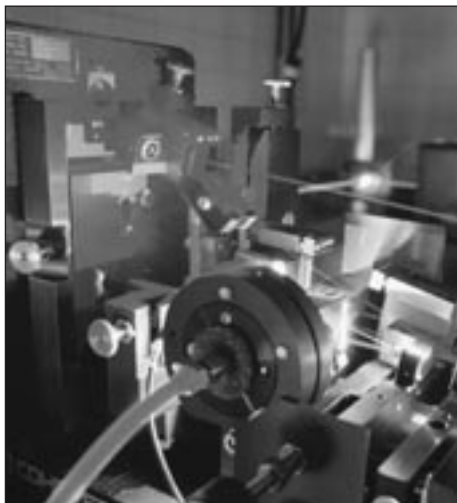
Xiaoyan Zeng, Huazhong University of Science & Technology, Wuhan, People's Republic of China

Yongfeng Lu, University of Nebraska-Lincoln, Lincoln, NE, USA

PICALO International Enterprise Summit - NEW FOR 2008!

Globalization: Opportunities & Challenges for Laser Companies in China & the World

Chairs: Bo Gu, GSI Group, Inc., Wilmington, MA, USA • **Rangda Wu**, Chutianlaser, Wuhan, People's Republic of China



FEATURING

Laser Materials Processing Conference

Micro, Nano & Ultrafast Fabrication Conference

PICALO International Enterprise Summit - NEW FOR 2008!

Globalization: Opportunities & Challenges for Laser Companies in China & the World

*Presented by Laser Institute of America in cooperation with
Laser Processing Committee of China Optical Society (LPC-COS) and Tsinghua University*



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



Submit and Register on the Web: www.laserinstitute.org/conferences/picalo

PACIFIC INTERNATIONAL CONFERENCE ON APPLICATIONS OF LASERS AND OPTICS 2008

April 16 - 18 • Capital Hotel • Beijing, China

PICALO General Conference Chair: Minlin Zhong, Tsinghua University, Beijing, People's Republic of China

Invitation from the General Conference Chair

Welcome to PICALO 2008 and Beijing - "The Olympics" for international laser materials processing. PICALO 2008 is the third conference focusing on the growth of industrial lasers and applications in the Pacific region. The general aim of PICALO is to bring together researchers, engineers, equipment suppliers and industry personnel to hear the latest developments and progress in lasers and applications and to share knowledge, experiences and visions. PICALO 2008 will feature an exciting laser macro/micro processing program, a unique international enterprise summit and a charming post-conference excursion in Beijing. You will feel the rapid development of the country, the fantastic Chinese culture and long history, the dynamic and modern metropolitan activities and also the Olympic atmosphere - one world, one dream! The organizing committee will ensure that you get the maximum benefit from the technical program while having a great time during the conference. I would encourage you to take this opportunity to spend time here and enjoy this great country, her great culture, the Great Wall and the delicious Chinese food.

PICALO 2008 is presented by Laser Institute of America in cooperation with the Laser Processing Committee of China Optical Society (LPC-COS) and Tsinghua University. LIA will handle all abstract submissions and conference registrations. On behalf of the organizing committee and conference chairs, I would like to formally invite you to attend PICALO in April 2008 in Beijing and be a part of this great event!

Minlin Zhong

PICALO 2008 Industry Sessions

Laser Materials Processing Sessions

PICALO 2008 Laser Materials Processing Conference Chairs:

Hau-Chung Man, Hong Kong Polytechnic University, Hung Hom, Kowloon, Hong Kong

Lin Li, The University of Manchester, Manchester, UK

Program Committee:

Woong-Seong Chang, RIST, Pohang, South Korea

Yanbin Chen, Harbin Institute of Technology, Harbin, People's Republic of China

Paul Hilton, TWI Ltd., Great Abington, Cambridge, UK

Weidong Huang, Northwestern Polytechnic University, Xian, People's Republic of China

Takashi Ishide, Mitsubishi Heavy Industries, Ltd., Takasago, Hyogo, Japan

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Kenneth Watkins, The University of Liverpool, Liverpool, UK

Lijue Xue, National Research Council Canada, London, ON, Canada

Y. Lawrence Yao, Columbia University, New York, NY, USA

Qingmao Zhang, South China Normal University, Guangzhou, People's Republic of China

Yongkang Zhang, Jiangsu University, Zhenjiang, People's Republic of China

Norman Zhou, University of Waterloo, Waterloo, Canada

Xiao Zhu, Huazhong University of Science & Technology, Wuhan, People's Republic of China

Areas of Interest

INDUSTRY SECTORS

Aerospace	Petrochemical, Oil & Gas
Automotive	Plant Infrastructure
Biomedical Industry	Process Industry
Defense	Shipbuilding Research
Education	
Manufacturing	
Mining/Materials Handling	

LASERS & SYSTEMS

Diode Lasers
Diode-pumped Lasers
Fibre Lasers
Hybrid Systems
Laser Sources
Sensing & Monitoring
Software

TECHNICAL TOPICS

Laser Colorful Marking	Laser Producing Novel Materials (Novel Microstructure, Novel Properties)
Laser Hybrid Processing (Hybrid Welding, Cladding, Cutting)	Laser Rapid Prototyping, Forming & Additive Manufacturing
Laser Joining (Welding, Soldering)	Laser Removing (Machining, Cutting, Drilling, Cleaning, Polishing)
Laser Processing of Light Metals	

Laser Strengthening (Alloying, Cladding, Deposition)
Novel Processing Technologies & Applications
Process Simulation & Modeling

Micro, Nano & Ultrafast Fabrication

PICALO 2008 Micro, Nano, & Ultrafast Fabrication Conference Chairs:

Xiaoyan Zeng, HUST, Wuhan, People's Republic of China

Yongfeng Lu, University of Nebraska-Lincoln, Lincoln, NE, USA

Program Committee:

Craig Arnold, Princeton University, Princeton, NJ, USA

Dieter Baeuerle, Johannes-Kepler-University, Linz, Österreich, Austria

Jimin Chen, National Center of Laser Technology, Beijing University of Technology, Beijing, People's Republic of China

Jan J. Dubowski, Universite De Sherbrooke, Sherbrooke, QC, Canada

Bo Gu, GSI Group, Inc., Wilmington, MA, USA

Erol Harvey, Swinburne University of Technology, Melbourne, Australia

Wenhao Huang, University of Science and Technology of China, Hefei, People's Republic of China

Lu Li, National University of Singapore, Singapore

Xinbing Liu, Panasonic Boston Laboratory, Cambridge, MA, USA

Eric Mazur, Harvard University, Cambridge, MA, USA

Ashish Nath, IIT Kharagpur, India

Tatsuo Okada, Kyushu University, Motooka, Fukuoka, Japan

Andreas Ostendorf, Laser Zentrum Hannover e.V., Hannover, Germany

James Piper, Macquarie University, Sydney, Australia

Koji Sugioka, The Institute of Physical and Chemical Research, Saitama, Japan

Hai-Lung Tsai, University of Missouri-Rolla, Rolla, MO, USA

Kunihiko Washio, Paradigm Laser Research Limited, Machida, Tokyo, Japan

Xianfan Xu, Purdue University, West Lafayette, IN, USA

Areas of Interest

INDUSTRY SECTORS

Aerospace
Automotive
Biotechnology
Defence
Education
Electronics
Manufacturing
Medical
Photonics Research

LASERS & SYSTEMS

Laser Sources
Lasers & Synchrotron Radiation
Optical Components
Precision Laser Machines
Sensing & Monitoring

TECHNICAL TOPICS

Laser Applications in Nanophotonics, Nanoelectronics & Microelectronics
Laser-assisted Packaging
Laser Lithography
Lasers Machining of Photonic Components

Medical Device Fabrication
MEMS & MOEMS Fabrication & Lasers in Microsystems
Micro/ nano Processing by Lasers & Laser/ other Tool Hybrid Methods

Process Control & Process Modeling
Ultrafast (Picosecond & Femtosecond) & UV Fabrication

Abstract Submission Schedule

Abstracts Due: September 3, 2007

Preferred method of submission is via the web site
www.laserinstitute.org/conferences/picalo.

Abstract Submission & Notification Schedule

Close of Abstract SubmissionSeptember 3, 2007
Acceptance Notice with Instructions to Authors ...October 1, 2007
Final Manuscript, PDF formatJanuary 7, 2008
Speaker Registration & PaymentFebruary 1, 2008

- Submitted Abstracts should contain original, recent unpublished results of application research, development or implementation. Authors are encouraged to indicate the current phase of their work, i.e., research & development, engineering, or manufacturing/industrial.
- Abstracts selected for oral presentation are allotted 20 minutes; this includes the introduction and question and answer period.
- Authors are asked to secure company and/or governmental security clearance to present and publish as early as possible. This enables LIA to ensure the quality of the conference and to minimize last minute withdrawn papers.
- Please secure travel and accommodation funding through sponsoring organizations prior to submitting abstracts. We regret that travel and accommodation funding is not available.

Sponsorship Opportunities

PICALO offers various level sponsorship opportunities to give your company or organization added promotional exposure.

The PICALO Sponsorship Program is open to all companies and institutions (industrial, medical and educational) within the laser industry.

For further information, please contact Beth Cohen, LIA Director of Conferences, by phone or via e-mail: bcohen@laserinstitute.org.

Final Manuscript Submission

Manuscript due dates must be strictly observed. Late manuscripts run the risk of not being published in the proceedings. This policy enables LIA to better serve conference participants by publishing the proceedings before the conference and distributing them on-site.

**** Please Note - All authors must submit their final manuscript by January 7, 2008 to avoid being withdrawn from the program.**

Who should attend PICALO?

Anyone interested in lasers and materials processing, from the basic understanding of the interaction between a laser beam and a material, to those interested in how a process can be integrated and optimized for an application. The organizing committee's goal for PICALO is to bring both academic and industry people together who may benefit from laser technology. This includes researchers and end-users as well as engineers and technicians engaged in developing laser technology.

PICALO Registration Information

Full conference registration includes: admission to the Plenary Session and all technical sessions, all receptions, coffee breaks, buffet luncheon (3 days) and a technical digest.

Submit and Register on the Web:
www.laserinstitute.org/conferences/picalo



Register Early and Save

See Advance Program
for more details.

JOIN THE LIA!

To take advantage of member registration rates, please go to the LIA web site at www.LaserInstitute.org for membership information and an application or call 1.800.34.LASER or 407.380.1553.



PICALO 2008 International Enterprise Summit

East meets West

Executives from the Chinese Laser Industry and from leading world-class laser and optics companies come together to discuss the impact of globalization on the laser industry - opportunities and challenges for laser business in China and the world for the next decade and beyond.

This PICALO 2008 Summit will provide insight from industry experts, legal experts, and decision makers on how to do or expand business in China and on how the laser industry benefits from globalization. The forum allows face to face interaction- a great prospect for networking and relationship building.

Additionally, a pre-conference Chinese Laser Industry tour will be organized - a rare chance to understand and explore the laser market in China and to find potential partners and cooperation.

The PICALO TableTop Vendor Program gives another opportunity to showcase your company and products to an international audience.

Don't miss this innovative East meets West event!

Special Thanks To Our PICALO International Advisory Board

- Eckhard Beyer**, Fraunhofer IWS, Dresden, Germany
- Milan Brandt**, Swinburne University of Technology, Melbourne, Australia
- Friedrich Dausinger**, Institut für Strahlwerkzeuge, Stuttgart, Germany
- Shusen Deng**, Laser Processing Committee of China Optical Society, Beijing, People's Republic of China
- Walter W. Duley**, University of Waterloo, Waterloo, ON, Canada
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- Reinhart Poprawe**, Fraunhofer ILT, Aachen, Germany
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- Xi-Chen Yang**, Tianjin Polytechnic University, Tianjin, People's Republic of China
- Tiechuan Zuo**, Beijing University of Technology, Beijing, People's Republic of China



Laser Institute of America

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Orlando, Florida 32826 USA



PICALO 2008

Announcement & Call for Papers

- Laser Materials Processing Sessions
- Micro, Nano & Ultrafast Fabrication Sessions
- NEW FOR 2008!

PICALO International Enterprise Summit
Globalization: Opportunities & Challenges for
Laser Companies in China & the World

Ask about the PICALO Sponsorship Opportunities

Welcome to Beijing, China

Beijing is the nation's political, economic and cultural center and is unique in history, tradition and characteristics. Some 3000 years ago, a small city appeared on the present site southwest of Beijing. From the 10th Century to 1911, it was the capital of Jin, Yuan, Ming and Qing Dynasties. Now, it is shaping itself into a modern metropolis on the 16,800 square kilometers with a population of 10 million. A city endowed with a long history of culture and traditions, of spectacular conquests and innovation, you will find yourself captivated by its majestic icons of the ancient Great Wall, the Forbidden City, immersed in the legends of dynasties long lost in the midst of history and enriched by its numerous altars, temples, tombs and other historical and cultural sites that unfold a different character of the city at each turn. In the past 20 years, Beijing has developed rapidly in an all-round way. Now Beijing is a modern metropolis with the charm of an ancient city in the East, refreshed and rejuvenated by new architecture, yet well preserved with its rich heritage, punctuated by offerings of cultural richness and festivities amidst a grand city outlook.

The Capital Hotel Beijing, China

The Capital Hotel is in the well-known business and scenic downtown area of Beijing. Located in the central shopping and scenic downtown area, the Capital Hotel is a 10-minute walk from Tiananmen Square and the Forbidden City. Nearby are also many other historical attractions, such as Temple of Heaven, Jingshan Park, and the Museum of Chinese History. The unique location of the Capital Hotel offers a splendid opportunity to discover Beijing's history, culture and beauty.

Superb convenience and personalized service make it an ideal choice for travelers.

Average April Temperatures:

High 62°F / 17°C
Low 42°F / 7°C

Featured in PICALO

- Plenary Session
- Laser Materials Processing Sessions
- Micro, Nano & Ultrafast Fabrication Sessions
- International Enterprise Summit - NEW FOR 2008!
- Laser Industry Vendor Reception & Table Top Display - Exhibitors and attendees have the opportunity to meet and share wine, cheese, and product ideas.
- Networking Opportunities - meet colleagues from around the world!

About Laser Institute of America

LIA, founded in 1968, is the professional society dedicated to fostering lasers, laser applications, and laser safety worldwide. LIA has grown to represent hundreds of corporate and thousands of individual members in the laser industry.