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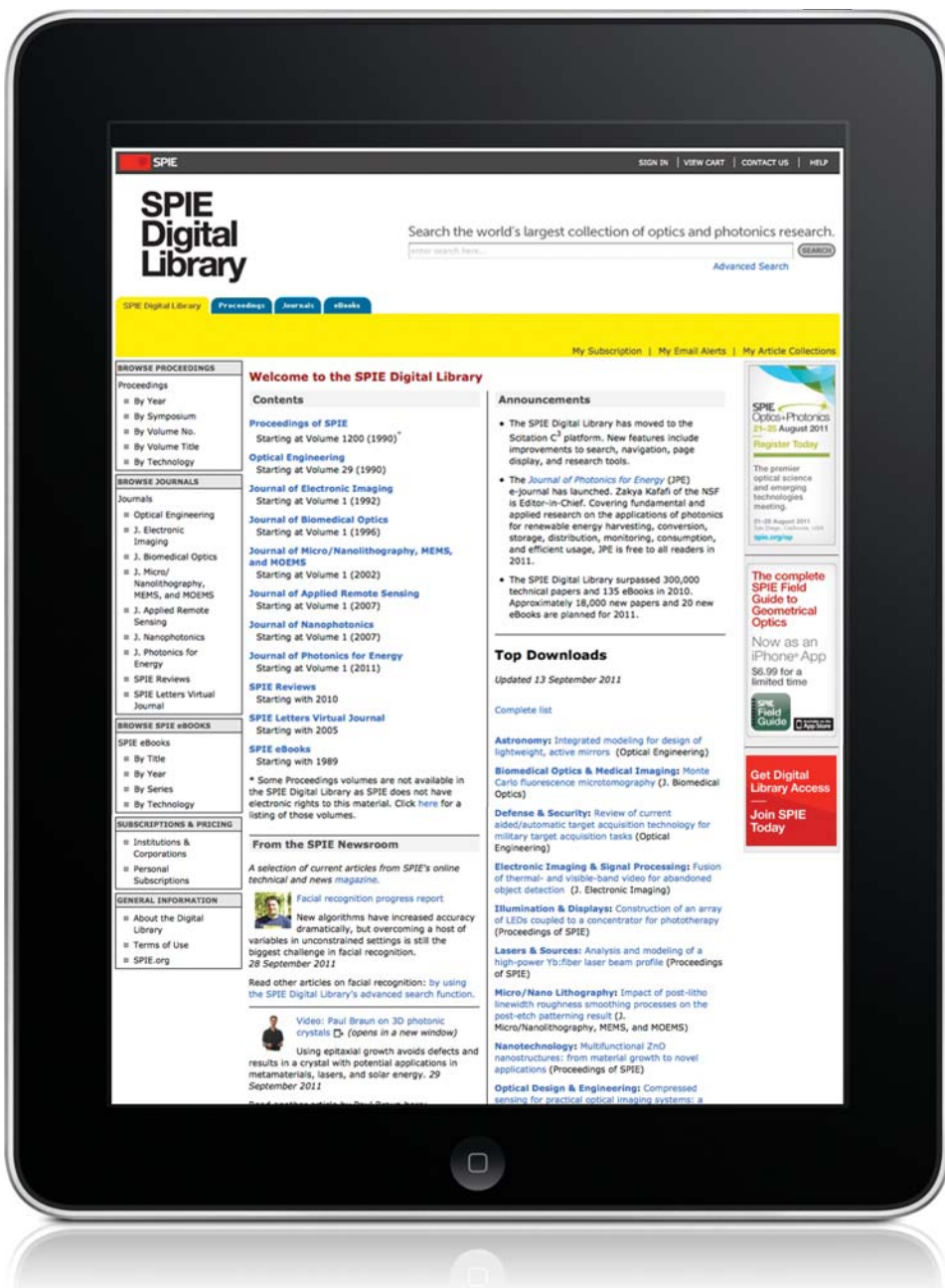
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
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
A selection of current articles from SPIE's online technical and news magazine.




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A near-IR-based system for evaluating corneal tissue grafts and transplants provides a reliable alternative to ultrasound pachymetry. 7 October 2011




Read another article by Sonia Yoo here: Combining femtosecond laser ablation and diode laser welding in lamellar and endothelial corneal transplants.




Bidirectional optical data transmission over a single multimode fiber

New, low-cost transceiver chips are made by the compact, monolithic integration of a surface-emitting laser and a p-doped intrinsic n-doped photodiode. 6 October 2011




Read a related article here: Fabrication and characterization of individually addressable vertical-cavity surface-emitting laser arrays and integrated VCSEL/PIN detector arrays.



Nanostructured capacitors for renewable energy storage

Capacitive devices based on novel ceramic-glass composite dielectrics might hold potential for large-scale energy storage from wind and solar. 6 October 2011



Read another article by Douglas Chrisey here: Direct-write of sensor devices by a laser forward transfer technique.

Announcements

- "More Like This" feature launched: Every article now includes links to similar articles and related patents to make finding like content easier and faster.
- Launched in January 2011, the *Journal of Photonics for Energy* (JPE) with Zakya Kafafi as editor-in-chief, covers fundamental and applied research on the applications of photonics for renewable energy harvesting, conversion, storage, distribution, monitoring, consumption, and efficient usage. JPE offers free access through 2011.
- The SPIE Digital Library has surpassed 324,000 technical papers and 152 eBooks. Approximately 18,000 new papers and 20 new eBooks are planned for 2012.

Top Downloads

Complete list (Updated 13 October 2011)

Astronomy: Fabrication and testing of the first 8.4-m off-axis segment for the Giant Magellan Telescope (Proceedings of SPIE)

Biomedical Optics & Medical Imaging: Comparative study of the angle-resolved backscattering properties of collagen fibers in bovine tendon and cartilage (J. Biomedical Optics)

Defense & Security: Review of current aided/automatic target acquisition technology for military target acquisition tasks (Optical Engineering)

Electronic Imaging & Signal Processing: Fusion of thermal- and visible-band video for abandoned object detection (J. Electronic Imaging)

Illumination & Displays: Organic light-emitting-diode lighting overview (J. Photonics for Energy)

Lasers & Sources: Transparent ceramics for high-power solid-state lasers (Proceedings of SPIE)

Micro/Nano Lithography: Source mask polarization optimization (J. Micro/Nanolithography, MEMS, and MOEMS)

Nanotechnology: Optical properties of nanostructured materials: a review (J. Nanophotonics)

Optical Design & Engineering: Imaging system fundamentals (Optical Engineering)

Optoelectronics & Communications: Quantum well infrared photodetectors: present and future (Optical Engineering)

Remote Sensing: Characterization of the Sonoran desert as a radiometric calibration target for Earth observing sensors (J. Applied Remote Sensing)


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Search Results

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The main content area shows the search results for 'optics'. It includes a search bar with the term 'optics' and a 'New Search' button. There are options for RSS, social media, and sorting results (10) by relevance. The display is set to 25 (12) items per page. The search results are displayed in a list format, with each item having a checkbox and a 'Show/Hide Summary' (11) button. The results include:

- 1. **Analysis and applications of accommodative lenses for vision corrections** by Jui-Teng Lin, Minshan Jiang, Chun-Lin Chang, Yu-Ling Hong, and Qishui Ren. *J. Biomed. Opt.* **16**, 018002 (2011). Full Text: Read Online (HTML) | Download PDF
- 2. **Anniversaries, Nostalgia, and the Future**. *Opt. Eng.* **36**, 977 (1997). Download PDF. Summary not available.
- 3. **Development progress of optics for extreme ultraviolet lithography at Nikon** by Katsuhiko Murakami, Tetsuya Oshino, Hiroyuki Kondo, Masayuki Shiraishi, Hiroshi Chiba, Hideki Komatsuda, Kazushi Nomura, and Jin Nishikawa. *J. Micro/Nanolith. MEMS MOEMS* **8**, 041507 (2009) | Cited 1 times. Full Text: Read Online (HTML) | Download PDF
- 4. **Plasma cleaning of lithium off of collector optics material for use in extreme ultraviolet lithography applications** by Martin J. Neumann, Reece A. DeFrees, Huatan Qiu, David N. Ruzic, Oleh Khodykin, Alex Ershov, and Robert L. Bristol. *J. Micro/Nanolith. MEMS MOEMS* **6**, 023005 (2007) | Cited 1 times. Full Text: Read Online (HTML) | Download PDF
- 5. **Guest Editorial: Special Section on Micro-Optics for Photonic Networks** by Thomas J. Suleski. *J. Microlithogr. Microfabrication, Microsyst.* **2**, 282 (2003). Full Text: Read Online (HTML) | Download PDF
- 6. **Experimental results of a MEMS-based adaptive optics system** by Sergio R. Restaino, G. Charmaine Gilbreath, Don M. Payne, and Jonathan R. Andrews. *J. Microlith., Microfab., Microsyst.* **4**, 041504 (2005) | Cited 1 times. Full Text: Read Online (HTML) | Download PDF

At the bottom of the results list, it says 'Displaying records 1 to 25 of about 490 found, out of 324915.' There is a 'Next' button.

Below the search results is a 'Your Recent History' section with a 'Recently Searched' list containing: laser projectors, speckle reduction, tomography, and angle-resolved backscattering.

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The screenshot displays the SPIE Digital Library interface for the journal 'Optical Engineering'. At the top, there is a search bar and navigation links for 'SIGN IN', 'VIEW CART', 'CONTACT US', and 'HELP'. The main header includes the 'SPIE Digital Library' logo and a search prompt: 'Search the world's largest collection of optics and photonics research.' Below this, there are tabs for 'SPE Digital Library', 'Proceedings', 'Journals', 'Optical Engineering', and 'eBooks'. The current page is for 'Optical Engineering', with sub-navigation for 'My Subscription', 'My Email Alerts', and 'My Article Collections'. A 'GENERAL INFORMATION' sidebar lists links for 'Current Issue', 'About the Journal', 'Citation Format', 'Subscriptions & Information', 'Email Alerts', 'Terms of Use', and 'Institutions & Corporations'. The main content area shows the current issue: 'October 2011, Volume 50, Issue 10 (partial)'. A 'SECTION LISTING' sidebar lists various topics like 'OE Letters', 'Special Section on Advances of Optical Metrology in the Transportation Industry', 'Imaging Systems', 'Thin Films', 'Optical Components, Detectors, and Displays', 'Lasers and Laser Optics', 'Laser Applications', 'Fiber Optics and Optical Communication', 'Interferometry', 'Ultraviolet and X-ray Applications', 'Image Processing', and 'Machine Vision, Pattern Recognition'. The main article list includes: 'OE Letters', 'Attack propagation of high-powered intrachannel crosstalk in transparent optical networks' by Zeyu Sun, Yunfeng Peng, and Keping Long, 'Special Section on Advances of Optical Metrology in the Transportation Industry', 'Laser vibrometry vibration measurements on vehicle cabins in running conditions: helicopter mock-up application' by Gian Marco Revel, Paolo Castellini, Paolo Chiarriotti, Enrico Primo Tomasini, Fausto Cenedese, and Alessandro Perazzolo, 'Shape verification using dual-wavelength holographic interferometry' by Per Bergström, Sara Rosendahl, Per Gren, and Mikael Sjö Dahl, and 'Measurement of nano/micro out-of-plane and in-plane displacements of micromechanical components by using digital holography and speckle interferometry' by Giancarlo Pedrini, João Gaspar, Marek E. Schmidt, Igor Alekseenko, Oliver Paul, and Wolfgang Osten. Each article entry includes the title, authors, issue information, and links to 'Read Online (HTML)' and 'Download PDF'. On the right side, there are promotional banners for 'SPE Optics+Photonics 21-25 August 2011', 'The complete SPIE Field Guide to Geometrical Optics', and 'Get Digital Library Access'.

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