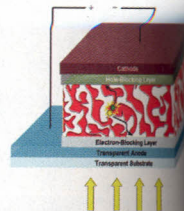
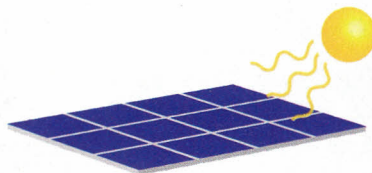
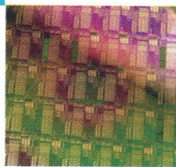


Quantum Communications: Ready for Its Close-Up

Waveguides Need
Characterization, Too

Power Distribution for
Industrial Lasers



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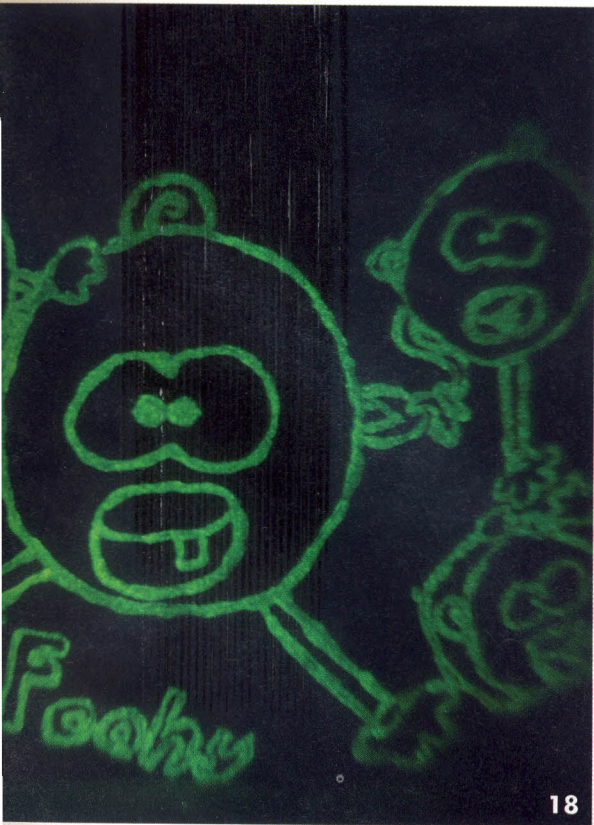
Photonics Spectra editors curate the most significant photonics research and technology headlines of the month – and take you deeper inside the news. Featured stories include:

- Carbon nanotube “forest” hides 3-D objects
- Probing microscopy technique produces green solar cells
- Material glows in NIR for two weeks

36 | FASTTRACK *Business and Markets*

Funding reauthorization will stabilize SBIR programs
Optical engineering grabs the spotlight in Israel
Edmund Optics’ founder dies

43 | GREENLIGHT *by Marie Freebody, Contributing Editor* “Fool’s gold” is pretty smart for solar cells

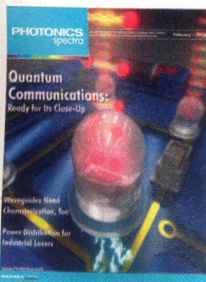


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Watch what you eat – automatically



THE COVER
Featured is Contributing Editor Hank Hogan’s article on quantum communications, which begins on page 44.

FEATURES

44 | QUANTUM COMMUNICATION IS READY FOR ITS CLOSE-UP

by Hank Hogan, Contributing Editor

Poised for deployment, it has some technical issues that must be resolved. Meanwhile, commercial viability is sought for quantum key distribution.

50 | LASERS EVOLVE TO MEET THE DEMANDS OF OPTICAL COMMUNICATIONS

by Marie Freebody, Contributing Editor

To keep up with demand, can manufacturers increase laser speeds while simultaneously decreasing component sizes?

54 | POWER DISTRIBUTION IMPROVES INDUSTRIAL LASER SYSTEMS

by Dave Proli, Marway Power Solutions

The quality, availability and distribution of electrical power are fundamental to laser performance, longevity and uptime.

58 | WAVEGUIDES NEED CHARACTERIZATION, TOO

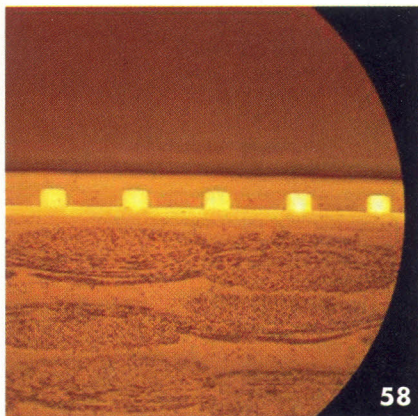
by Robert Ferguson, National Physical Laboratory, UK

Meticulous attenuation and isolation measurements are crucial to the development of optical printed circuit boards.

61 | THE COMING MARKET FOR OPTICAL FIBER AND CABLE

by C. David Chaffee

The author explores the history and growth potential of this sector as the demand for broadband intensifies.

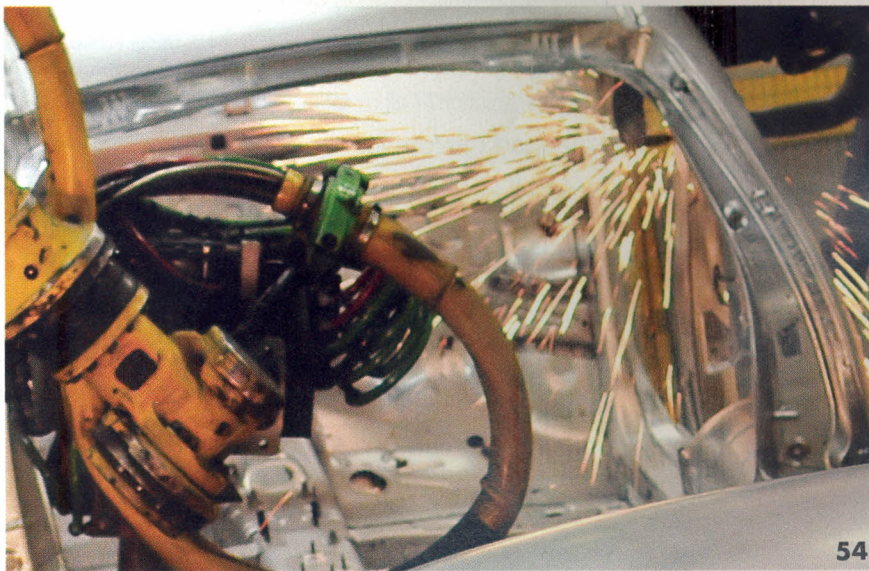


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