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Naoyuki Taniguchi, Director, NTT Anode Energy

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After the Great East Japan Earthquake in 2011, Japan decided to review its energy and environmental policies from scratch. Accordingly, Japan has been promoting the introduction of renewable energy to replace some of the energy demand supplied by nuclear power and energy-saving technologies to reduce overall demand. *Green growth*, namely, fostering economic growth by introducing and expanding renewable and other green energies, is a global issue. We asked Naoyuki Taniguchi, director of NTT Anode Energy, about the business strategy of the company, which was established in June 2019 as a strategic company that oversees the energy-related business of the NTT Group.



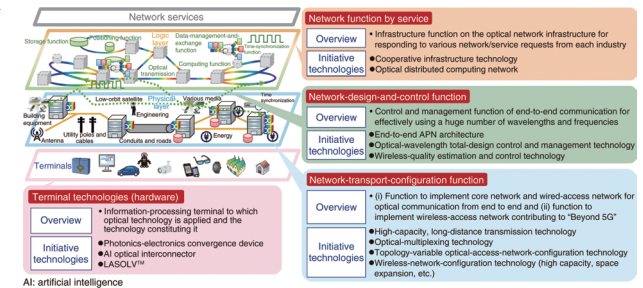
Feature Articles

All-Photonics Network for Enabling Innovative Optical and Wireless Network (IOWN)

Initiatives Concerning All-Photonics-Network-related Technologies Based on IOWN

▼Abstract

With the ongoing rapid digitization of society, various issues are expected to arise in the near future. Accordingly, NTT is advocating the Innovative Optical and Wireless Network (IOWN) and is working with partners to conduct a variety of research and development activities to bring about innovations based on IOWN. The related technologies NTT is working on to create the All-Photonics Network—one of the three components of IOWN—are introduced in this article.



Regular Articles

Advances in PPLN-waveguide-based Monolithic-integration Technology for High-performance Phase-sensitive Amplifiers

▼Abstract

Phase-sensitive amplifiers (PSAs) are attracting a great deal of interest because they can break the quantum-limited noise figure of conventional optical amplifiers such as erbium-doped fiber amplifiers. We have been developing a PSA using periodically poled lithium niobate (PPLN) waveguides. This article introduces our recent progress in PPLN-waveguide-based monolithic-integration technology as a promising approach for the practical use of a highly functional PSA.

