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Hiramichi Shinohara, Senior Executive Vice President and Head of R&D Strategy Department, NTT

▼Overview

The NTT Group has taken up the challenge of self-transformation toward growth in profits as declared in its Medium-Term Management Strategy "Towards the Next Stage 2.0." There are high expectations of the NTT Group for technological development and social contributions in fields of great global interest such as artificial intelligence, Internet of Things, and cybersecurity. At the dawn of a new year, we asked Senior Executive Vice President Hiramichi Shinohara to tell us about NTT Group plans for 2016 and specific initiatives for creating new value.



Front-line Researchers

Shinji Matsuo, Senior Distinguished Researcher, NTT Device Technology Laboratories

▼Overview

Shinji Matsuo, Senior Distinguished Researcher at NTT Device Technology Laboratories, continues his challenging work on achieving optoelectronic integrated circuits on silicon substrates and making them into economical and low-power devices—key issues in the worldwide information technology industry. He leads a group dealing with a unique form of research, so we asked him to give us some background on the inception of this groundbreaking technology. We also asked him to describe remaining issues and to comment on his role as a researcher.



Feature Articles

Photonics-electronics Convergence Hardware Technology for Maximizing Network Performance

R&D Trends in Convergence of Photonic and Electronic Hardware for Network Innovation

▼Abstract

Network traffic will continue to increase exponentially as we get closer to deploying fifth generation mobile networks, and as the Internet of Things and big data services expand through 2020 and beyond. In these Feature Articles, we look at trends in the research and development of advanced hardware technology designed to achieve substantial increases in the capacity of communication networks with much lower capital and operating expenditures in the next 5 to 10 years. We focus in particular on technology based on new concepts and principles that involve the convergence of photonics and electronics.

