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Seiji Maruyama, President and Chief Executive Officer, NTT QONOQ

▼ Abstract

NTT QONOQ was created by NTT DOCOMO, which focuses on communication between people. NTT QONOQ aims to create new experiences that zigzag between real and digital spaces with the hopes to enrich people's minds and energize society, going beyond distance, time, and imagination. We interviewed Seiji Maruyama, president and chief executive officer of NTT QONOQ, who is working toward creating a market for extended reality (XR), about the status of the company's business and his mindset as a top executive.



Front-line Researchers

Hideki Yamamoto, Senior Distinguished Researcher, NTT Basic Research Laboratories

▼ Abstract

A newly developed elemental source-sequencing technique has further advanced NTT's world-leading complex-oxide-thin-film growth technology, which allows for synthesis of artificial materials consisting of alternating layers of different materials with molecular-layer thicknesses, culminated in the discovery of a new superconductor. Synergetic integration of the thin-film growth technology and process informatics has enabled efficient preparation of the world's highest-quality thin films of oxides in existence, which has led to the observation of new physical properties in an oxide previously unsubstantiated. We interviewed Hideki Yamamoto, a senior distinguished researcher at NTT Basic Research Laboratories, who is conducting research on new materials synthesis and on their physical properties, about the above achievements, his thoughts on superconductors, which are expected to be used in the environmental and energy-related fields, and his attitude as a leader of a world-class research team.



Feature Articles

Efforts to Speed Up Practical Application of Quantum Computers

Toward Creation of a System Architecture for Quantum Computers

▼ Abstract

To achieve innovations in the era of the Innovative Optical and Wireless Network (IOWN), for example, predicting the future by Digital Twin Computing, a computing infrastructure that supports ultra-high-speed and ultra-large-scale computing is needed. This need has led to a growing interest in quantum computers, which execute operations in a completely different way than conventional computers. NTT Computer and Data Science Laboratories is engaged in both (i) theoretical research to create system architectures that maximize the capabilities of quantum computers and (ii) development of system and software technology for practical applications of quantum computers.

