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Front-line Researchers

- Hiroshi Yamaguchi, Senior Distinguished Researcher, NTT Basic Research Laboratories

Feature Articles

Digital Transformation of Urban Areas Focusing on Mobility

- Optimization of Entire Urban Areas Using IOWN
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Feature Articles

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▼ Overview

As optical communications continue to spread, the results of research on the physical properties of light, electricity, and electrons to achieve high speed and low power consumption of such communications are being put to practical use. New physical phenomena have been discovered and explained by the interaction of the physical properties of mechanical vibration and those of light, electricity, and electrons. We asked Hiroshi Yamaguchi, a senior distinguished researcher at NTT Basic Research Laboratories, who has produced several world-first results in regard to applied technologies in the relatively new research field of nanomechanics, about his research activities and his attitude as a researcher.



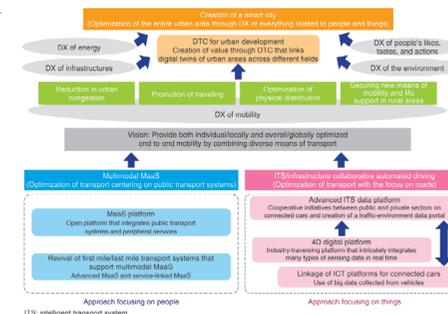
Feature Articles

Digital Transformation of Urban Areas Focusing on Mobility

Optimization of Entire Urban Areas Using IOWN

▼ Abstract

NTT is advancing the Innovative Optical and Wireless Network (IOWN), NTT's vision of creating a *smart world* using innovative technologies. The aim is to accelerate digital transformation in collaboration with its partners and solve social problems. This article introduces NTT's activities to optimize urban areas with a focus on mobility and how it can be used to address current social problems. Essentially, this will be done by achieving both individual/local and group/global optimization on the basis of various types of information using IOWN and other technologies and assets of the NTT Group.



Feature Articles

Smart Infrastructure Facility Management

Developing Smart Infrastructure Platform Based on the Smart Infra Business Concept

▼ Abstract

This article introduces the *Smart Infra Business Concept* promoted by NTT Infrastructure Network Corporation (NTT InfraNet) for using information and communication technology to *smartly* implement maintenance and management work related to the telecommunication infrastructure facilities (such as utility poles and manholes) of the NTT Group. This concept is not limited to the NTT Group's digital transformation but also forms the basis of the *Smart Infra Platform* to be implemented to solve problems faced by social-infrastructure companies. Three use cases for using the Smart Infra Platform are also introduced.

