Main Research Topics of the Cooperative Project for Innovative Research 2018

Emergent System Research Division

1–1	Electronics-Inspired Interdisciplinary Research Institute Kowa Koida	Development of a high precision microelectrode for neuroscience

Main Research Topics of the Cooperative Project for Innovative Research 2019

Emergent System Research Division

1–1	Department of Computer Science and Engineering Michio Okada	Research Project for Social Implementation of Weak-robots Concept
1–2	Department of Electrical and Electronic Information Engineering Hirofumi Takikawa	Advanced tool Coating Technological Laboratory, OSG-TUT Collaboration (ACTO),2nd stage
1–3	Department of Architecture and Civil Engineering Taiki Saito	Development of technology to improve earthquake resistance of buildings using dynamic pulley damper mechanism
1–4	Department of Electrical and Electronic Information Engineering Kazuaki Sawada	Development of multimodal sensing technologies for visualization of physical / chemical information in micro-meter scale
1–5	Department of Computer Science and Engineering Michiteru Kitazaki	Estimation and control for human status by using physical care robot
1–6	Electronics-Inspired Interdisciplinary Research Institute Toshihiko Noda	Development of multimodal gas sensing technology for environment measurement
1–7	Department of Computer Science and Engineering Jun Miura	Next-generation Robotic Farming in Greenhouse Horticulture
1–8	Electronics-Inspired Interdisciplinary Research Institute/Department of Applied Chemistry and Life Science Saburo Tanaka	Development of Ultra-Sensitive Contaminant Detection System for Li-ion Battery Components
1–9	Research Center for Future Vehicle City Takashi Ohira	Wireless Power Transfer Serendipity That Enables Automatic Drone Charging Stations to Come True

Social System Research Division

2–1	Department of Architecture and Civil Engineering Kojiro Matsuo	Community-based Road and Traffic Management that Make Use of Big-Data: Toyohashi Model

Main Research Topics of the Cooperative Project for Innovative Research 2020

Emergent System Research Division

1–1	Department of Mechanical Engineering Takayuki Shibata	Microfluidic-based Genetic Diagnostic and Improving Technologies for Enhancing Food Safety
1–2	Department of Electrical and Electronic Information Engineering Shinji Abe	Wireless power-transfer system for small vehicles
1–3	Department of Applied Chemistry and Life Science Yuu Hirose	Production of the Functional Foods from Algal Cells
1–4	Department of Mechanical Engineering Tomoaki Mashimo	Capsule Endoscope Robot Technology using Micro Ultrasonic Motor
1–5	Department of Electrical and Electronic Information Engineering Kazuhiro Takahashi	Development of biomarker inspection system using MEMS biosensor
1–6	Department of Electrical and Electronic Information Engineering Toru Harigai	Prediction of photovoltaic generation and weather sensoring network
1–7	Research Center for Agrotechnology and Biotechnology Takahiro Yamauchi	Development of rooting in the direct planting of a cutting cultivation of the chrysanthemum and the root taking promotion technique

Social System Research Division

2–1	Institute for Global Network Innovation in Technology Education Hiroyuki Daimon	Enhancement of Compact Biogas Power Generation System to the Entire Country

Advanced Research Division

3–1	Information and Media Center Hitoshi Goto	Development of automatic optimal control technology for market-linked AI vegitable factories

Master technology, create technology
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