Research

◇Grants-in-Aid for Scientific Research

Identification of missing data mechanisms peculiar to software development data
Development of a Bunraku Robot which can be Operated by One Person
Mathematical Deepening of Audio Source Separation Based on Independence and Amplitude/Phase Modeling and Development of Multimodal Hearing-Aid system
Fundamental study of continuous blood pressure measurement using a wearable sensor attached to nail surface
Research to realize a practical satellite development curriculum using a general-purpose satellite model starting from high school students
Investigation of optimum arrangement of small-vertical-axis-wind-turbine clusters with interaction between the pairs and trios of turbines
Formation of double roughness structures on surface of polymer blend film using atmospheric pressure low temperature plasma
Application to Smart Machining Systems using Compression of Skill Data for Inheritance of Excellent Technician's Skills
Development of a portable fishway system suitable for the upstream migration of salmon and trout
Semiconductor Device Foundry Achieved at a Nano-tech Platform Established on an Average Science Lab
Interview dialogue system for augmenting awareness opportunity
Basic study on recycling method of ITO transparent conductive substrate using pulsed arc discharge
Perception and recognition of tactile texture through integrated silicon sensory hairs accessible to micro and constricted areas
Quantitative Evaluation of Radiation trapping by a New Method Using Forbidden Line/Resonance Line Intensity Ratio and X-ray Optical Elements
Development of resource recycling artificial geomaterial and application to geohazards prevention measures
Development of assessment methods of both children's independent mobility and safety
Thermocell using redox-active ionic liquid based electrolyte
Development of criteria and decision-making measures for the continuation of local railways
Study on optimal energizing conditions of 500 kHz current for apical periodontitis treatment
A free boundary problem of the Navier-Stokes equations in unbounded domains
Higher spin duality and superstring theory with Wilson lines
Development of a Method to Ensure Segregation Resistance of Concrete Using Unutilized Aggregates with Various Particle Shapes and Sizes
Demonstration of a Simple and Low-cost Recirculating Aquaculture Systems (RAS) for Developing Countries
Evaluation of building damage at inland area caused by low water depth tsunami overtopping due to different seawall configurations
Development of transparent puzzle teaching devices that make EEG external lectures adjustable for individuals
Exploration of New Pharmaceutical Lead Compounds Based on Catalytic Palladium Enolate Umpolung
Elucidation of deterioration mechanisms of repair materials and development of technologies to prevent re-deterioration
Development and Improvement of a Radiactive Decay Learning Tool Using Minecraft
Gauge/gravity correspondence and quantum gravity for expanding universe

12 another research study, Number of Research Studies 41 , Total Funds 40,221,000Yen

◇Commissioned Research

Acquisition of test data and technical evaluation for CubeSat for innovative satellite technology demonstration experiments
Installation test of a portable fishway for the upstream migration of Oncorhynchus keta and Oncorhynchus gorbuscha

1 another research study, Number of Research Studies 3, Total Funds 5,823,400Yen

◇Cooperative Research with Private Sector

Feasibility of industrial methane production in the subsurface environment via microbial activities
Development of High-Performance Lead-Acid Batteries
Extraction Technology of Metal from Abandoned Coated Wires
On Share Cyber Security Information
Development of RFID antenna at 920MHz band
Analysis and decomposition of audio mixtures utilizing spatial information
AI Image Recognition System for Assisting Manual Tasks
Development of active phased array antenna using printing technology on stratospheric balloon surface
Study on durability life prediction method of cable conductor/shield wire for moving parts.
Research on anomaly detection using image classification algorithms for thermal power plants
Spatial information analysis and mixture signal separation utilizing spatial information
Research on next-generation fundamental technologies for multichannel audio signal processing
A Study on the Relationship Between Children's Independent Mobility and Land Use in the Suburbs of Regional Cities
Improvement of production line process under "mechasolutions"
Relation between evaluation of permeability and high precision about in-situ investigation of the pond's dike
A Study on the Influence of Regional Characteristics on Children's Independent Mobility
Development of a Fecal Detection Method for Automatic Cat Toilet Cleaning
Digital Transformation in Infrastructure Management and Maintenance

15 another research studies, Number of Research Studies 33, Total Funds 9,577,610Yen

◇Other Competitive Funds and Grants

Wide-band AC Servo System Based on Based on Discrete-state Feedback Considering Local Linearization and Successive Discretization
Development of technology to realize a highly profitable cultivation system in horticulture facilities
Influence of various parameters such as electrode configuration on hydrogen production from water using pulsed discharge plasma
Development of high-durability artificial geomaterial utilized waste rubber fiber
Wide-band Force Control of Robot Arm Considering Sampling Clock Synchronization of Servo Motor

2 another research studies, Number of Research Studies 7, Total Funds 7,559,199Yen