

特別推進研究 新規・継続研究課題一覧(English)

Title of Project	Term of Project
Research on Development of Legal Education Methods to Promote Creative Legal Minds - Towards the Science of Law for Law Creation	2002-2006
Comprehensive Study on Structure and Change of Social Stratification System in Contemporary Japan	2004-2007
Primate foundation of learning and thought	2004-2008
Three-Level Structure of Civil Society and Governance: A Comprehensive Comparative Study of Japan, Korea, the United States, Germany, and China	2005-2009
An Empirical Study of Life Styles, Norms and Values through the AsiaBarometer	2005-2008
Economic Analysis of Intergenerational Issues	2006-2010

Title of Project	Term of Project
Towards Extreme Field Science via Relativistic Engineering	2003-2007
Development of the 4 Spaces Access Neutron Spectrometer (4SEASONS) and Elucidation of the Mechanism of Oxide High-Tc Superconductivity	2005-2009
Study of Quantum Critical Phenomena at Micro Kelvin Temperatures	2005-2009
Strongly correlated quantum phase associated with charge fluctuation	2006-2010
Qubus Quantum Computer	2006-2010
Research on Structural Formation and Selection Rules in Turbulent Plasma	2004-2008
Atomistic Clarification, Control and Prediction of Irradiation-Induced Embrittlement and Degradation Nuclear Reactor Steels by Advanced Technology of Nano-Materials Science	2005-2009
Development of an ultra-high resolution semi-conductor PET(:next generation PET) with resolution smaller than 1mm	2005-2009
Search for new celestial objects using microlensing effect	2002-2006
Diffraction-Limited Near-Infrared Observation of Distant Universe with 8m Subaru Telescope Equipped with a Laser Guide Adaptive Optics System	2002-2006
Search for Double Hyper-nuclei	2003-2007
Research of non-thermal phenomena in the Universe by hard X-ray imaging	2003-2006
Antihydrogen Spectroscopy	2003-2007
Advanced Study of the Star-Formation Process by High Resolution Imaging with Far-Infrared Interferometer	2003-2007
Precision tests of the Standard Model based on high-energy collisions between the proton and the longitudinally-polarized electron	2004-2008
High Precision and High Sensitivity Measurements of Electron Anti-Neutrinos from Reactors and inside the Earth, and Electron Neutrinos from the Sun	2004-2008
Elucidation on the Origin of First Generation Objects by HMCS-E(Heterogeneous MultiComputer System-Embedded)	2004-2007
Observational study of the cosmic hot plasma and the development of the high performance X-ray CCD	2004-2008
Spin-isospin responses in nuclei in time-like region by means of exothermic charge-exchange reactions	2005-2009
Study of quark-gluon structure of hadrons with a large polarized target	2006-2009

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Development of Environment-Benign Molecular Transformation Processes Using Lewis Acid and Transition Metal Catalysts	2002-2006
High-resolution, element-specific microscope using a laser-produced-plasma soft X-ray source	2003-2007
Research on Asymmetric Autocatalysis, Chiral Recognition and Origin of Chirality	2003-2007
Development of metal complexes with antidiabetic effect	2004-2006
Formation of diffusion barrier bond coat to realize high reliable and Long life thermal barrier coating	2004-2008
Laser spectroscopic study on hydrogen-bond-network structures of water-solvated clusters.	2004-2006
The Innovative Synthesis of Bioactive Molecules on the basis of the Molecular Mechanism of Natural Products' Activity	2004-2008
Creation of a New Academic Research Field "Metallics"	2004-2006
Highly Controlled New Materials of Heavy Group-14 Elements. Creation and Development of Their Unique Functions	2005-2008
Molecular Design and Quantum Hysteresis of Polyoxometalates-based Molecular Magnets	2005-2007
Science and Technology of Concentrated Polymer Brushes	2005-2008
Basic Processes In Hydrogen Atom-Surface Reactions: Spin Effect, Reaction Dynamics, and Origin of Interstellar Hydrogen Molecules	2005-2009
Material Innovation for the Age of Life Science - Creation of Soft and Wet Materials	2006-2010
Gene Manipulation of Huge DNA by Super Artificial Restriction Enzyme	2006-2010
Development of environment-conscious synthetic reactions: construction of reaction coordinate-response catalyst	2006-2009
Establishment of novel ultrahigh-speed distortion-free optical transmission technology using time-domain optical Fourier transformation	2004-2008
Efficient Pattern Discovery from Massive Semi-Structured Data for Knowledge Infrastructure Formation on the Web	2005-2007
Establishment of Verified Numerical Computation	2005-2009
Semiconductor Nanowire Electronics by Selective-Area Metal-Organic Vapor Phase Epitaxy	2006-2010
Formation of Quark Matter and Photon Physics	2006-2010
Study of ultra-high speed and ultra low energy consumption system LSI constructed by balanced full CMOS.	2006-2008
Next Generation Super High Density Ferroelectric Data Storage Using Scanning Nonlinear Dielectric Microscopy Technique	2006-2010
Generic Methods for Knowledge-based Semantic and Contextual Processing in Natural Language Understanding	2006-2010
Role of Hydrogen in Gigacycle Fatigue Failure and Establishment of Fatigue Strength Reliability	2002-2006
Establishment of Non-Newtonian Thermal Elastohydrodynamic Lubrication Theory	2003-2007
Sub-10nm hard X-ray focusing and application to nanoscopy/spectroscopy	2006-2010
Optimization of the Innovative Asymmetric Catalysts and New Application	2003-2007
Development of Detection Methods of Dynamical Higher Order Structures of Proteins and Its Application to Elucidation of Structure-Function Relations of Proteins	2002-2006

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Title of Project	Term of Project
Molecular mechanisms of cytokine in immune response and autoimmune disease	2003-2007
Regulation of Hematopoietic Stem Cell Division in a Niche	2004-2008
Molecular mechanism and physiological role of apoptosis	2005-2009
Transcriptional regulation by mediators and its physiological role	2002-2006
Formation of the integrated insulin secretion system and its failure	2003-2007
Research on lipid mediators and lipid metabolome	2003-2007
Molecular mechanisms of oncogene-induced anchorage independent growth	2004-2008
Postnatal developmental changes in synaptic molecules underlying maturation of excitatory synaptic transmission and synaptic regulation	2005-2007
AID-dependent genetic alteration mechanism to generate antigen-specific antibodies	2005-2009
Mechanism of emergence of new influenza viruses and their control	2006-2010
Brain distributed memory network : Towards the integration of functional imaging study and single-unit neurophysiology	2002-2006
Dynamics of synapse and exocytosis studied with two-photon excitation microscope	2004-2008
Studies on molecular mechanisms that control development and function of the neural network	2005-2009
Mitochondrial membrane biogenesis and regulation of the membrane dynamics	2002-2006
The Single Molecular Design and Systemic Assembly of Protein Function	2002-2006
Molecular Mechanism of Membrane Dynamics during Autophagy	2003-2007
Cell adhesion machine-associated signaling mechanisms regulating cell behavior	2003-2006
Structural study of signal transduction through membrane proteins, channels and receptors	2004-2008
Regulatory mechanisms of meiosis	2004-2008
Elucidating mechanisms of biological molecular machines by single-molecule physiology	2004-2008
Mechanisms that lead to the difference in equational and reductional chromosome segregation	2005-2009
Chromatin Dynamics underlying Cellular Memory	2005-2007
Uncovering the mystery of molecular assembly and diversity of the proteasome	2005-2009
Studies on the mechanism of neural and behavioral sex determination by the Drosophila fruitless gene	2006-2010
The Mechanism of Intracellular Transport and Kinesin Motors, KIFs : Structure, Function, Dynamics and Regulation	2006-2010
Spatiotemporal control of cell functions by Rho GTPases; mechanisms and physiological roles	2006-2010
Molecular Clocks to Biological Rhythms	2006-2010