

DOCTORAL DISSERTATIONS

(1995.4.1 – 1996.3.31)

Applied Chemistry

Name	Title	Diss. No.	Date
Kitano, Sigeyuki	Conformational and fine-structural studies of oligomers and related polymers	R1236	1995.5.24
Suzuki, Atsuo	Crystal structure and inhibition mechanism of Bowman-Birk protease inhibitor (in Japanese)	R1237	1995.5.24
Yonemori, Shigeaki	Material analysis of fluorochemical engineering materials by spectroscopic and other analytical methods (in Japanese)	R1256	1995.12.7
Katada, Naonobu	Silica monolayer solid acid catalyst prepared by chemical vapor deposition method	R1272	1996.3.1
Shinoda, Tomotaka	<i>meso</i> -Substituted porphyrin synthesis developed by mesoporous solid acids	K975	1996.3.25
Yamamoto, Yoshihiko	Highly selective synthesis of polyfunctionalized carbo- and heterocyclic compounds from squaric acid	K977	1996.3.25

Applied Chemistry II

Name	Title	Diss. No.	Date
Nonaka, Toshihisa	Preparation and characterization of highly oriented thin films (in Japanese)	R1232	1995.5.15
Lin, Hong	A Study on the crystallization processes at inorganic-organic interfaces	K978	1996.3.25

Chemical Engineering

Name	Title	Diss. No.	Date
Nakashimada, Yutaka	A Study on application of plant hairy roots to useful metabolites and artificial seed production	K939	1995.9.29
Sawada, Yosiaki	A Study on preparation and properties of ultrafine iron particles prepared by pyrolysis of $\text{Fe}(\text{CO})_5$ (in Japanese)	R1247	1995.10.5
Akita, Shigehito	Novel separation methods based on sorption and extraction	R1274	1996.3.1
Kinugasa, Takumi	Sophisticated separation methods using macro- and micro-emulsions formed by surfactants	R1275	1996.3.1
Ito, Mutsuhiro	Studies on low-temperature level heat generation by adsorption heat pump (in Japanese)	K985	1996.3.25
Suzuki, Motoshi	Applications of magnetic particles to bioseparation and cancer diagnosis and therapy	K986	1996.3.25
Takano, Akira	Carbon dioxide reforming of methane on supported nickel catalysts	K987	1996.3.25
Deguchi, Seiichi	Studies on preparation of functional fine metal-oxide particles by spray pyrolysis techniques	K988	1996.3.25
Hanai, Taizo	Quality control of Ginjo making process using knowledge information processing (in Japanese)	K989	1996.3.25
Al-Shawabkeh, Ali	High-temperature, dry fluegas desulfurization using ca-based sorbents	K990	1996.3.25
Arunwanich, Patthra	A Study on efficient production of useful enzyme and antibody from recombinant microorganisms	K991	1996.3.25
Mondal, Harandra Nath	Analysis and evaluation of electromagnetically driven processes	K1037	1996.3.25

Biotechnology

Name	Title	Diss. No.	Date
Nomura, Takao	Development of super olefin polymer by the control of nano-order structure (in Japanese)	R1233	1995.5.15
Yu, Yang	Synthesis of polycyclo-type nitrogen heterocycles	K950	1996.2.28
Hanaki, Naoyuki	Development of highly selective organic transformation based on practical Lewis acid catalyst	K976	1996.3.25

Materials Science & Engineering

Name	Title	Diss. No.	Date
Saeki, Masao	Study on development of rapid analytical methods using spectrophotometric techniques for control of steelmaking processes (in Japanese)	R1257	1995.12.7
Tanaka, Tomokazu	Study on atomic emission and mass spectrometry with the inductively coupled plasma as an excitation source (in Japanese)	R1258	1995.12.7
Kuroda, Kensuke	Fundamental study on the purification of rare earth metals by solid state electrotransport (in Japanese)	K981	1996.3.25
Huang, Xianming	High temperature physical chemistry on the utilization of boric oxide bearing iron ore	K983	1996.3.25
Chen, Zushen	Coprecipitation and graphite-furnace atomic absorption spectrometry for the determination of trace elements in natural waters (in Japanese)	K984	1996.3.25

Materials Processing Engineering

Name	Title	Diss. No.	Date
Kobashi, Makoto	Development of novel processing technique for composite materials with the help of the analysis of matrix-reinforcement interaction (in Japanese)	R1241	1995.7.10
Kishida, Yutaka	Control of hydrodynamics instabilities in materials processing by using static magnetic field (in Japanese)	K940	1995.10.5
Okumura, Keiji	Kinetic study of inclusion removal from molten metal under mechanical stirring and gas injection stirring conditions (in Japanese)	R1261	1995.12.27
Sasai, Katsuhiro	Study on reaction between continuous casting immersion nozzle and molten steel (in Japanese)	R1267	1996.1.31
Watanabe, Akio	Studies on preparation of molybdenum films and tantalum oxide films by laser CVD (in Japanese)	R1273	1996.3.1
Kaneko, Yasushi	The Composition and temperature dependence of stacking-fault energy in austenitic stainless steels (in Japanese)	K979	1996.3.25
Kaneda, Hiromitsu	Development and analysis of fabrication process of magnesium matrix composites by spontaneous infiltration method (in Japanese)	K980	1996.3.25
Mohri, Takeshi	Fabrication of particulate composites and experimental and theoretical evaluation of the mechanical property (in Japanese)	K982	1996.3.25

Applied Physics

Name	Title	Diss. No.	Date
Tomari, Tsutomu	Dynamics of volume transition of gels	K948	1996.1.31
Tsutsui, Kenji	Theory of electronic states in Kondo insulators (in Japanese)	K997	1996.3.25
Nakazawa, Hatsumi	Pattern formation in one-dimensional nonlinear systems (in Japanese)	K998	1996.3.25

Name	Title	Diss. No.	Date
Yunoki, Seiji	Theoretical study of one-dimensional electron systems with long-range interaction (in Japanese)	K999	1996.3.25

Nuclear Engineering

Name	Title	Diss. No.	Date
Yus Rusdian Akhmad	Passive methods for separating elevated photon dose from environmental background in the vicinity of nuclear facility	K936	1995.5.10
Hashimoto, Kengo	Decoupling-phenomena analyses of large nuclear reactor cores by the method of spatial higher harmonics (in Japanese)	R1234	1995.5.15
Yamasaki, Tadashi	Study on thoron progeny in living space (in Japanese)	K944	1995.11.7
Nakamura, Hideo	Slug flow transitions in horizontal gas/liquid two-phase flows	K947	1995.12.27
Yamaguchi, Yasuhiro	Study on dosimetry for external radiations using computational simulation techniques (in Japanese)	R1263	1995.12.27
Osa, Akihiko	Measurement of β^+ -ray maximum energy with an HPGe detector (in Japanese)	K954	1996.2.28
Ezure, Hideo	Study on detailed and efficient evaluation method of isotope production and depletion (in Japanese)	R1280	1996.3.25

Electrical Engineering

Name	Title	Diss. No.	Date
Ota, Hiroji	Research on system stability control of large scale electric power system (in Japanese)	R1239	1995.7.10
Kageyama, Katsuhiro	Vacuum switch pressure measuring method employing crossed field discharges (in Japanese)	R1250	1995.11.7
Katsukawa, Hiroyuki	Study on an air insulated optical current transducer with a bulk type Faraday sensor (in Japanese)	R1260	1995.12.27

Name	Title	Diss. No.	Date
Muto, Hiroataka	Study on the deterioration of insulating films in semiconductor manufacturing processes (in Japanese)	R1271	1996.3.1
Kato, Takeyoshi	Impact of superconducting power transmission system on future metropolitan electric power system (in Japanese)	K960	1996.3.25
Hayakawa, Soichiro	Trajectory control of robotic manipulator with learning (in Japanese)	K967	1996.3.25
Mitsuoka, Yoshihito	Studies on low-energy collision scattering of molecular ions on solid surfaces (in Japanese)	K968	1996.3.25
Suwarno	Study on electrical treeing and partial discharge in polymeric insulating materials	K972	1996.3.25
Tang, Yuejin	Study on quench phenomena and protection in superconducting power transmission system (in Japanese)	K973	1996.3.25
Kato, Tatsuro	Partical discharge measurement for insulation diagnosis and breakdown prediction in GIS (in Japanese)	K1034	1996.3.25
Goshima, Hisashi	Insulation performance of cryogenic liquids and high voltage insulation of superconducting power apparatus (in Japanese)	K1035	1996.3.25

Electronics

Name	Title	Diss. No.	Date
Kamiyama, Satoshi	Theoretical study of high performance AlGaInP strained quantum well lasers (in Japanese)	R1246	1995.10.5
Hayashi, Masahiro	Development of the reliability evaluation method for telecommunication computer networks (in Japanese)	R1251	1995.11.7
Sumi, Satoshi	Study on high density magneto-optical disks using Pt/Co multilayered films (in Japanese)	R1270	1996.3.1

Name	Title	Diss. No.	Date
Kusunoki, Masanobu	A Study on submicron patterning technique for high critical temperature superconducting films and the application to superconducting devices (in Japanese)	K961	1996.3.25
Terai, Hiroataka	A Study of stacked Josephson junction using oxide high-temperature superconductor $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ (in Japanese)	K964	1996.3.25
Yamaguchi, Atsushi	Magneto-optical effect of Au-Co and Au-Fe systems in multilayers and non-equilibrium alloy films (in Japanese)	K969	1996.3.25
Detchprohm, Theeradetch	HVPE growth of GaN bulk single crystal	K974	1996.3.25
Suzuki, Takamasa	Optical and Electrical properties of atomic-layer doped GaAs (in Japanese)	K1028	1996.3.25

Information Electronics

Name	Title	Diss. No.	Date
Shimeki, Yasuharu	Study on learning of neural networks and its application to pattern recognition (in Japanese)	R1240	1995.7.10
Oguchi, Kimio	Study on passive optical star networks technologies (in Japanese)	R1245	1995.10.5
Kitoh, Tsutomu	Ti-diffused lithium niobate optical modulators (in Japanese)	R1266	1996.1.31
Iwata, Akira	Studies on the propagation characteristics of LF whistler-mode signals through magnetosphere (in Japanese)	R1269	1996.3.1
Sato, Kazuo	A Study of small antennas for mobile communications (in Japanese)	K963	1996.3.25
Nomura, Hideshi	Studies on gas phase kinetics of the SiH_x radicals in an RF SiH_4 plasma	K965	1996.3.25
Yukimatsu, Toru	A Study on construction of fuzzy expert systems for electronic instrument design (in Japanese)	K970	1996.3.25

Name	Title	Diss. No.	Date
Jamalipour, Abbas	A Study on personal communication networks with low earth orbit satellites	K971	1996.3.25

Information Engineering

Name	Title	Diss. No.	Date
Shimizu, Akinobu	Design and performance evaluation of automated diagnosis system for medical X-ray images (in Japanese)	K938	1995.7.4
Yamamoto, Shinichirou	Design and implementation of parallel execution algorithm of term rewriting systems (in Japanese)	R1243	1995.8.14
Ito, Hideaki	Studies on integrating knowledgebase and database based on conceptual structure (in Japanese)	R1249	1995.10.5
Takeshita, Tetsuo	Design and evaluation of statistical pattern classifier basing upon finite size of design sample sets (in Japanese)	R1254	1995.11.7
Wakamatsu, Masatoshi	Reconstruction of lightning channel from thunder at rocket-triggered lightning (in Japanese)	R1255	1995.12.7
Ueda, Kouji	Studies on image processing for measurement and monitoring of road traffic and its application (in Japanese)	R1277	1996.3.1
Kudo, Hiroaki	A Study on binocular fixation positions and a Saccade mechanism while gazing at the rim of a cylinder (in Japanese)	K962	1996.3.25
Hashiyama, Tomonori	A Study on fuzzy models of decision making process	K966	1996.3.25
Kitagawa, Eiji	Implementation of interactive manipulation of three dimensional images and surgical simulation system (in Japanese)	K1008	1996.3.25
Tokai, Shogo	Study of method for rendering natural objects and natural phenomena in computer graphics (in Japanese)	K1009	1996.3.25

Name	Title	Diss. No.	Date
Mekada, Yoshito	A Study of features for analyzing line figures and their applications to computer aided diagnosis of X-ray images (in Japanese)	K1010	1996.3.25
Miyazaki, Shin-ya	A Study of interactive manipulation of non-rigid objects in virtual space (in Japanese)	K1032	1996.3.25
Yan, Chenmin	Motion control for robot manipulators with flexible joints	K1033	1996.3.25

Mechanical Engineering

Name	Title	Diss. No.	Date
Egami, Noboru	Propagation threshold of fatigue cracks in plates under mixed mode loading (in Japanese)	R1230	1995.5.15
Nakamura, Shin-ichiro	On the vibrations of a shaft passing through its critical speed (in Japanese)	K949	1996.2.28
Ohmi, Yasuaki	Cyclic hardening behavior and inelastic constitutive modeling of high temperature structural steel (in Japanese)	K955	1996.3.25
Imamura, Hiroshi	Studies on flows around a horizontal axis wind turbine rotor (in Japanese)	K956	1996.3.25
Suzuki, Katsuya	A Study for the characteristics of hydraulic pressure valve and the torque converter in automatic transmission (in Japanese)	K957	1996.3.25
Hayakawa, Kunio	Study on continuum damage mechanics based on irreversible thermodynamics theory (in Japanese)	K958	1996.3.25
Mitsumoto, Naoki	Swarm control of distributed autonomous micro robotic system (in Japanese)	K959	1996.3.25

Mechano-Informatics and Systems

Name	Title	Diss. No.	Date
Tokita, Masatoshi	Position and force hybrid control of robotic manipulators by application of neural networks (in Japanese)	R1231	11995.5.15
Yoshida, Takashi	Numerical studies of finite difference methods and boundary conditions for incompressible flows (in Japanese)	K945	1995.12.5
Kawamura, Kiyomi	A Study on spray characteristics of high pressure fuel injection system for diesel engines (in Japanese)	R1268	1996.3.1

Electronic-Mechanical Engineering

Name	Title	Diss. No.	Date
Hayashi, Tetsuji	Application study of an intelligent robot system for dexterous manipulation jobs (in Japanese)	R1279	1996.3.1
Abe, Tsukasa	Nanometer scale fabrication using scanning tunneling microscopy	K1013	1996.3.25
Takase, Haruhiko	Fundamental analysis of recurrent neural networks based on attractors (in Japanese)	K1014	1996.3.25
Takeuchi, Shuichi	A Study of tactile information processing using three-axis tactile sensor arrays (in Japanese)	K1015	1996.3.25
Yagi, Tohru	A Computational study on fixation mechanisms and its application towards machine vision	K1016	1996.3.25
Yamauchi, Hiroshi	Studies on identification of rotating shaft systems (in Japanese)	K1017	1996.3.25
Yokoi, Kunio	A Basic study on learning methods for recurrent neural networks (in Japanese)	K1018	1996.3.25
Deng, Zhisheng	A Study on thin film lubrication in head-medium interface (in Japanese)	K1019	1996.3.25
Yang, Xuhua	A Study on signature verification using a genetic algorithm method	K1020	1996.3.25

Aerospace Engineering

Name	Title	Diss. No.	Date
Kim, Byung-gon	Numerical study of plume flows and plume impingement on flat and concave surfaces in a vacuum	K937	1995.5.23
Kojima, Shinji	Research on abnormal combustion (autoignition) in automobile engines-detailed modeling of chemistry and its applications (in Japanese)	R1248	1995.10.5
Hishida, Manabu	Turbulent flow and flame structure generated by interaction between nonsteady multi-dimensional flame and flowfield (in Japanese)	K941	1995.10.5
Umeda, Yoshito	Physics of Methane unsteady diffusion combustion in multi-stratified vortical flowfield (in Japanese)	K942	1995.11.7
Ishiguro, Mitsuo	A Study of ionized non-equilibrium flow in arc-heated wind tunnel nozzle (in Japanese)	K946	1995.12.5
Ito, Shoichi	An Experimental study on lean combustion with excess enthalpy by near-flat wall in a stagnation flow (in Japanese)	R1259	1995.12.7
Choi, Jangsoo	Analysis of tip clearance flows in axial compressor by the panel method (in Japanese)	R1262	1995.12.27
Shinoda, Masahisa	Quantum and relativistic nature of a vortex atomic model based on classical physics: electro-dynamical analogy of interaction of vortex rings (in Japanese)	K951	1996.2.28
Ando, Yoshinori	Research on control synthesis of the singularly perturbed systems (in Japanese)	R1276	1996.3.1
Urita, Akira	A Study on aerodynamic characteristics of reentry bodies (in Japanese)	K992	1996.3.25
Ogawa, Hiroyuki	Studies on shock reflection and interaction phenomena in magnetohydrodynamics (in Japanese)	K993	1996.3.25
Sakamoto, Noboru	A Study on passivity of control systems (in Japanese)	K994	1996.3.25

Name	Title	Diss. No.	Date
Sato, Mitsumasa	A Study on robust control of flexible structures and passivity using the dissipation concept (in Japanese)	K995	1996.3.25
Leblanc, Joseph	Dynamics of reactive systems around a hypersonic vehicle-two cases: communication blackout and RAM accelerator	K996	1996.3.25
Kojima, Yoshio	Study on aeroelastic analysis of vehicle dynamics (in Japanese)	K1029	1996.3.25
Sakakita, Hajime	Study on the ablation mechanism of a solid hydrogen pellet in the Tokamak plasma (in Japanese)	K1030	1996.3.25

Civil Engineering

Name	Title	Diss. No.	Date
Ohshita, Hideki	Study on the mechanism of water migration in concrete with micro and macro cracks (in Japanese)	R1238	1995.5.24
Satish Kumar, Rajaram	Inelastic seismic response Analysis of thin-walled steel bridge piers	K1000	1996.3.25
Choi, Ik-Chang	Evaluation of shear resisting mechanism in members of concrete structures (in Japanese)	K1001	1996.3.25
Ferando, Geekiyanage	Non-linear consolidation deformation analysis of soils under embankment loading	K1002	1996.3.25
Hossein Pouli Mamaghani, Iraj	Cyclic elastoplastic behavior of steel structures: theory and experiment	K1003	1996.3.25
Wang, Jian-Guo	A Homogenization theory for geomaterials: nonlinear effect and water flow	K1004	1996.3.25

Architecture

Name	Title	Diss. No.	Date
Kurimoto, Osamu	A Study on practical evaluation method of embedment effects on soil-structure interaction (in Japanese)	R1252	1995.11.7
Sugino, Noboru	A Study on development of the buildings of buddhist temples in the Edo period (in Japanese)	R1253	1995.11.7
Kim, Sunil	A Study on architecture and management of operating departments (in Japanese)	K943	1995.11.7
Kamei, Eiji	A Study on characteristics and fluctuation of landscape (in Japanese)	K952	1996.2.28
Mizoguchi, Masato	The Spatial characteristics of the aristocratic residences in the medieval ages (in Japanese)	K953	1996.2.28
Ishida, Eisuke	A Study on the application of object-oriented approach to earthquake engineering (in Japanese)	K1005	1996.3.25
Ishihara, Key	Study on shape finding analysis of original design surface for membrane structure based on theory of minimal surface (in Japanese)	K1006	1996.3.25
Kexin, Li	A Study on personal environment conditioning system in intelligent office (in Japanese)	K1007	1996.3.25
Nonogaki, Atsushi	Studies on the forms of the later Buddhist caves in India (in Japanese)	K1031	1996.3.25

Crystalline Materials Science

Name	Title	Diss. No.	Date
Shibata, Akira	Investigation on functional thin film growth by reactive sputtering using activated particles in plasma (in Japanese)	R1242	1995.7.10
Shibata, Tomohiro	Study on fabrication and characterization of semiconductor heterostructures (in Japanese)	R1244	1995.8.14

Name	Title	Diss. No.	Date
Kawamura, Tomoaki	Study of X-ray standing wave analysis for interface characterization of multilayers and semiconductors (in Japanese)	R1264	1995.12.27
Yoshii, Ichiro	Study on radiation-induced degradation of MOS device characteristics and radiation-hard CMOS technology (in Japanese)	R1265	1995.12.27
Takeuchi, Tsunehiro	Electronic structure, electron transport properties and relative stability of icosahedral quasicrystals and their approximants (in Japanese)	K1011	1996.3.25

Geotechnical & Environmental Engineering

Name	Title	Diss. No.	Date
Okuda, Takaaki	Post evaluation of national development policies applying stochastic multiregional general equilibrium models (in Japanese)	R1278	1996.3.1
Hemanta, Hazarika	Computational modeling of static and dynamic earth pressure against retaining walls based on localized deformation	K1012	1996.3.25

Quantum Engineering

Name	Title	Diss. No.	Date
Adachi, Tomohiro	Interaction mechanism between small molecule and phospholipid membrane (in Japanese)	K1021	1996.3.25
Kida, Ayumu	Magnetic properties of non-equable γ -Fe(Ni) multilayers (in Japanese)	K1022	1996.3.25
Tsuji, Satoshi	A Study on improvement of process reliability of thin-film transistors with transmission electron microscopy (in Japanese)	K1023	1996.3.25
Maruyama, Koji	Studies on CF _x ($x=1-3$) radicals in RF fluorocarbon etching plasmas	K1024	1996.3.25
Yamamori, Hirotake	A Study on Nb based multi-stacked Josephson junctions (in Japanese)	K1025	1996.3.25

Name	Title	Diss. No.	Date
Eilers, Guido Anton	Magnetic properties of Cu-In-Te based diluted magnetic semiconductors	K1026	1996.3.25
Singh, Brahm Pal	Studies on stabilization and characteristics of harmonically mode-locked erbium doped fiber ring lasers in gigahertz regime	K1027	1996.3.25
Takahashi, Kunimasa	Studies on radicals in CHF ₃ ECR etching plasma using spectroscopic technique	K1036	1996.3.25

Micro System Engineering

Name	Title	Diss. No.	Date
Hattori, Shinobu	Foundations and applications for optical and polymer actuators (in Japanese)	R1235	1995.5.15