

DOCTORAL DISSERTATIONS

(2000.4.1 – 2001.3.31)

Applied Chemistry

Name	Title	Diss. No.	Date
Yabutani, Tomoki	Multielement profiling analysis of trace metals in seawater as studied by inductively coupled plasma mass spectrometry	K1477	2000.10.31
Ito, Akinori	Long-term evolution and regional characteristics of greenhouse gases in urban atmosphere	K1483	2001.03.26
Shichi, Akira	Selective catalytic reduction of NO by hydrocarbon in unique reaction fields of zeolite micropore	K1484	2001.03.26
Baraki, Hideo	Stereocontrol in polymerization of α -substituted acrylates bearing various functional groups	K1485	2001.03.26
Wang, Lili	Characterization of industrially utilized natural organic materials by pyrolysis in the presence of reactive reagent (in Japanese)	K1486	2001.03.26
Sakamoto, Wataru	Chemical processing and characterization of ferroelectric tungsten bronze niobate thin films	R1464	2000.04.28
Yamada, Noriko	Processing and characterization of methylsiloxane-based inorganic-organic hybrids	R1491	2001.01.31

Applied Chemistry II

Name	Title	Diss.No.	Date
Fukuta, Yukimasa	The rhodium-catalyzed cyclocarbonylation of alkyne derivatives	K1487	2001.03.26
Nakamura, Tomoyuki	Study on initiation mechanisms for radical polymerization with t-alkyl peroxyphthalates using the nitroxide radical-trapping technique	R1467	2000.05.31
Osaki, Toshihiko	Design of carbon-free nickel catalysts for the CO ₂ -reforming of methane	R1471	2000.06.30

Chemical Engineering

Name	Title	Diss. No.	Date
Ito, Mitsunobu	Selective oxidation of methane in molten carbonate fuel cell reactor	K1488	2001.03.26
Kachi, Takeshi	A study on the degradation process of c/c composites and the effect of coating layers on oxidation resistance in combusting fields (in Japanese)	K1489	2001.03.26
Otsuka, Akihiko	Studies on corrosion of advanced materials and oxidation-resistive coatings for the next generation of high temperature gas turbine (in Japanese)	K1552	2001.03.26

Biotechnology

Name	Title	Diss.No.	Date
Ohara, Suguru	Catalytic direct condensation of carboxylic acids	K1490	2001.03.26
Kano, Taichi	Development of efficient methods for the synthesis of axially chiral compounds	K1491	2001.03.26
Kondo, Shoichi	Chiral boron lewis acid catalysts for asymmetric carbon-carbon bond-forming reactions	K1492	2001.03.26
Hoshino, Yujiro	Design of optically active hydroxamic acid ligands for vanadium-catalyzed asymmetric epoxidation	K1493	2001.03.26
Machida, Yuichi	Molecular and cellular approaches to neural development	K1494	2001.03.26
Mizuarai, Shinji	Development of efficient methods for gene transfer and transgenic avian	K1495	2001.03.26
Nagamori, Eiji	Study on reduction of shearing stress in plant cell culture (in Japanese)	K1553	2001.03.26
Hibino, Shin	Analysis of biomedical information using knowledge information processing methods (in Japanese)	K1554	2001.03.26
Kuroki, Yoshichika	Catalytic and stereoselective synthesis of biologically important substrates using organometallic reagents	R1468	2000.05.31

Name	Title	Diss.No.	Date
Hayakawa, Kiro	Study on the concentration process of vegetable and fruit juice in food engineering (in Japanese)	R1469	2000.05.31

Materials Science and Engineering

Name	Title	Diss.No.	Date
Beysen, Sadeh	Magnetic properties of fe-based epitaxial multilayers and ultra-fine particles of fe ₃ o ₄ as pseudo-low dimensional magnets (in Japanese)	K1496	2001.03.26
Matsuda, Akira	Study of parallelization and acceleration methods for rigid-plastic finite element analysis (in Japanese)	R1465	2000.04.28

Materials Processing Engineering

Name	Title	Diss.No.	Date
Su, Zhijian	Study on control of flow and oscillation in a liquid metal using quasi-sinusoidal magnetic field (in Japanese)	K1463	2000.05.25
Li, Jinqi	Surface modification processes using frictional phenomena (in Japanese)	K1478	2000.10.31
Kume, Shoichi	Study on pressure sintering of diamond/ ceramics composites (in Japanese)	K1497	2001.03.26
Sugiyama, Satoshi	Research and development on ferromagnetic property of composite magnetic material during press working (in Japanese)	K1498	2001.03.26
Wang, Quiang	Study on generation of magneto-acoustic waves in a liquid metal by using high frequency electromagnetic forces and their characteristics (in Japanese)	K1499	2001.03.26
Kwon, Yong-Jai	Fabrication of metal matrix composites and simultaneous bonding with metal by combustion synthesis (in Japanese)	K1500	2001.03.26
Yamada, Hiroshi	Development of fe-ni lead frame alloy and study of its punchability (in Japanese)	K1555	2001.03.26

Name	Title	Diss.No.	Date
Oishi, Toshiyuki	Ultra-fine trench isolation and MOSFETs for ULSI (in Japanese)	R1472	2000.06.30
Yamauchi, Shiro	Studies on solid state protonic conductors and their application to a humidity regulating device	R1473	2000.06.30
Kaneco, Satoshi	Electrochemical or photocatalytic reduction of carbon dioxide released to the environment, and atomic spectrometry for environmental sample analysis (in Japanese)	R1484	2000.10.31

Applied Physics

Name	Title	Diss.No.	Date
Ikeda, Tomohiro	The analysis of valence electron densities based on experimental electron densities (in Japanese)	K1501	2001.03.26
Yoshida, Nobukatsu	Theory of transport properties in unconventional superconducting junctions (in Japanese)	K1502	2001.03.26
Oka, Hideyuki	A level set approach to computing 3-d multifluid flows	K1559	2001.03.26

Nuclear Engineering

Name	Title	Diss.No.	Date
Nada, Marnada	Precise measurement of γ -ray emission probabilities for ^{76}As , ^{159}Gd , ^{187}W and ^{193}Os by a $4\pi\beta\text{-}\gamma$ coincidence system	K1503	2001.03.26
Mardiyanto	Advanced pulse shape analysis for nuclear radiation detector based on digital-analog signal fusion	K1504	2001.03.26
Suzuki, Atsuo	The study on the radionuclide concentrations in concrete materials in Japan (in Japanese)	K1505	2001.03.26
Zhou, Weihai	Studies on indoor ^{222}Rn , ^{220}Rn and their progeny concentrations for dose assessment	K1556	2001.03.26

Electrical Engineering

Name	Title	Diss.No.	Date
Imaizumi, Kaname	Study on carries behavior and light emitting mechanism in organic el device (in Japanese)	K1506	2001.03.26
Iwasaki, Masahiro	A study on automatic feature extraction for pattern recognition (in Japanese)	K1507	2001.03.26
Kaneiwa, Hiroshi	Study on partial discharge degradation by using artificial simulated tree channel (in Japanese)	K1508	2001.03.26
Takahashi, Toshihiro	Space charge behavior and partial discharge mechanism in sf6 gas	K1509	2001.03.26
Hasegawa, Masaru	A study on vector control of induction motor using robust control (in Japanese)	K1510	2001.03.26
Fujii, Makoto	A study on rule discovery utilizing fuzzy classifier system (in Japanese)	K1511	2001.03.26
Yamashita, Koichi	Study for the application of organic light-emitting-diodes (in Japanese)	K1512	2001.03.26
Wakazono, Yoshitsugu	Optimum introduction of cascade use of energy in industrial and residential sectors : heat cascading among major energy intensive industries and home micro co-generation system (in Japanese)	K1513	2001.03.26
Cho, Don-Chan	Study on the relation between morphology and high-field phenomena of low-density polyethylene prepared using blend method or using metallocene catalyst	K1514	2001.03.26
Chen, Zhiqian	Observer based sensorless control of synchronous motors	K1515	2001.03.26
Kozawa, Takahiro	Crystal growth and field emission study of nitride semiconductors (in Japanese)	K1516	2001.03.26
Takahashi, Koyata	Study on superresolution and domain expansion readout in multi-layered magneto-optical media (in Japanese)	K1517	2001.03.26
Yamada, Tatsuji	Partial discharge phenomena in new dielectric gases with low environmental impact (in Japanese)	K1557	2001.03.26

Name	Title	Diss.No.	Date
Guo, Yuhong	A study on performance characteristics of superconducting fault current limiter and its introduction effects in electric power system (in Japanese)	K1560	2001.03.26

Electronics

Name	Title	Diss.No.	Date
Iiyoshi, Ryo	Studies on point cathode electron gun using electron bombardment for cathode tip heating (in Japanese)	R1492	2001.01.31

Information Electronics

Name	Title	Diss.No.	Date
Kamiya, Yukihiro	A study on adaptive antenna technology for mobile communication systems (in Japanese)	K1481	2000.12.28
Saito, Masato	A study on quasi-synchronous cdma packet communication systems (in Japanese)	K1518	2001.03.26
Ban, Koichiro	Wireless communication systems with multiple transmit and receive antennas	K1519	2001.03.26
Matsuzaki, Motoaki	Autonomous progressive evolution and search performance improvement in genetic algorithms (in Japanese)	K1520	2001.03.26
Sandouk, Abbas	A study on throughput and outage probability of wireless packet cdma systems in multimedia environment	K1521	2001.03.26

Information Engineering

Name	Title	Diss.No.	Date
Kageyama, Yasuo	Approximation method by a generalization of the Bernstein polynomial and its applications	K1464	2000.05.31
Ogawa, Yasuhiro	A derivational grammar approach to Japanese language processing and its applications (in Japanese)	K1473	2000.09.29

Name	Title	Diss.No.	Date
Zhou, Xiang Rong	Vision expert system for three dimensional images and its application to medical images (in Japanese)	K1476	2000.10.31
Tamaki, Toru	A study on extraction method of object and human regions in a scene (in Japanese)	K1522	2001.03.26
Horiuchi, Hiroki	Research on integrated network management system based on conversion of protocol and information base (in Japanese)	R1474	2000.06.30
Hori, Osamu	Line-drawing interpretation and its applications	R1475	2000.07.31
Yamamoto, Shuichiro	WWW information system development method based on 3 tiered client server architecture (in Japanese)	R1483	2000.09.29

Mechanical Engineering

Name	Title	Diss.No.	Date
Ohta, Hiroyuki	Study on dislocation generation mechanisms in semiconductor devices (in Japanese)	R1486	2000.11.27

Mechano-Informatics and systems

Name	Title	Diss.No.	Date
Okada, Yoshihiro	An experimental study on mass diffusion in an axisymmetric turbulent jet (in Japanese)	K1523	2001.03.26
Toyoda, Tetsuya	Structural optimization using cellular automata (in Japanese)	K1524	2001.03.26

Electronic-Mechanical Engineering

Name	Title	Diss.No.	Date
Sano, Shigenori	Studies on parameter identification considering uncertainties (in Japanese)	K1472	2000.09.29
Inoue, Tsuyoshi	Internal resonance phenomena in rotor systems (in Japanese)	R1476	2000.07.31
Suzuki, Ryosuke	A study on chatter vibrations in an automotive wiper assembly (in Japanese)	R1477	2000.07.31

Aerospace Engineering

Name	Title	Diss.No.	Date
Tsubouchi, Osamu	Study on catalytic combustor (in Japanese)	K1465	2000.05.31
Nakai, Hideo	Development and testing of gain-scheduling control methods for suspension systems (in Japanese)	K1525	2001.03.26
Shiraishi, Hiroyuki	Numerical analysis of generation and propagation mechanism of laser-supported detonation in argon gas (in Japanese)	R1466	2000.04.28
Nakamori, Ichiro	Research on numerical method of compressible turbulent flows in large eddy simulation (in Japanese)	R1487	2000.11.27

Civil Engineering

Name	Title	Diss.No.	Date
Salamy, Mohammad Reza	Localized failure of reinforced concrete elements subjected to in-plane stresses (in Japanese)	K1467	2000.09.26
Zheng, Yi	A seismic design methodology for thin-walled steel structures through the pushover analysis	K1468	2000.09.26
Truong, Tien	Displacement of residual oil from porous media by brine/surfactant/alcohol solutions	K1469	2000.09.26
HUR, Dong-Soo	Breaking of multi-directional random waves over a submerged breakwater and wave forces on a structure on it (in Japanese)	K1470	2000.09.26
Dziadziuszko, Piotr	Inverse analysis procedures for nonlinear and time-dependent constitutive models in geotechnics	K1471	2000.09.26
Inokuchi, Hiroaki	Traffic assignment model by using fuzzy neural network (in Japanese)	K1526	2001.03.26
Kitahara, Takeshi	Aseismic design method considering periodic and phase characteristics of earthquake motions (in Japanese)	K1527	2001.03.26
Mizobuchi, Toshiaki	Evaluation of the effect of heat elimination and control of thermal cracking by pipe-cooling system in mass concrete structures (in Japanese)	R1478	2000.07.31

Architecture

Name	Title	Diss.No.	Date
Mukaiguchi, Takeshi	A study of the master plan of park and open space in Nagoya before world war 2 (in Japanese)	K1474	2000.09.29
Tanaka, Hideki	Study on seasonal thermal storage system using solar energy and exhaust heat from heating and cooling for residence (in Japanese)	K1479	2000.10.31
Takagi, Toshiyuki	A study on activation of public cultural facilities consisting of hall function (in Japanese)	K1482	2000.12.28
Mishima, Naoki	Study on construction and quantification of rheological model of dense suspension by considering dilatancy and flocculation (in Japanese)	K1528	2001.03.26
Nagai, Satoko	The modernization of the theatre in japan : a study of teikoku gekijyo, thukiji sho gekijyo, tokyo takarazuka gekijyo (in Japanese)	K1561	2001.03.26
Takada, Toyofumi	Study on allocation design of shear walls by discrete optimization techniques (in Japanese)	R1479	2000.07.31
Sako, Yuji	Nonlinear earthquake response of pile foundation (in Japanese)	R1485	2000.10.31
Edagawa, Akitoshi	Study on of culturally oriented policies and cultural facilities in view of regional development (in Japanese)	R1489	2000.12.28
Koike, Sachio	Study on size effect of strength and plastic deformation behavior of concrete and reinforced concrete member (in Japanese)	R1493	2001.02.28
Hiraiwa, Takashi	Study on failure behavior of confined concrete by visco-elasto-plastic suspension element method (in Japanese)	R1494	2001.02.28

Crystalline Materials Science

Name	Title	Diss.No.	Date
Rogatchev, Andrei	Metal-insulator transition in amorphous Tix Si100-x alloy system	K1475	2000.09.29

Name	Title	Diss.No.	Date
Katahira, Koji	Studies on protonic-conduction in perovskite-type oxides solid solution and solid electrolyte hydrogen and steam sensors using an electrochemical hydrogen pump (in Japanese)	K1529	2001.03.26
Matsushita, Daisuke	Study on nitride film formation processes and electric properties on si(100) by radical nitrogen (in Japanese)	K1530	2001.03.26
Iwata, Hiroshi	Development of device technology for ultra low power ulsis (in Japanese)	K1558	2001.03.26
Hashimoto, Shinichi	Studies on the synthesis and characterization of new electrochemical materials for sofcs (in Japanese)	K1562	2001.03.26
Yoshida, Tomoyuki	Study of electromigration lifetime improvement in Al-alloy interconnects for LSI applications (in Japanese)	R1470	2000.05.31
Ueno, Mitsushi	Studirs of characteristics of cathode materials for high performance phosphoric acid fuel cells (in Japanese)	R1480	2000.07.31
Kobayashi, Tetsuro	Study on the new method for reducing nitrogen oxides by proton conduction solid electrolytes (in Japanese)	R1488	2000.11.27
Okuyama, Ryoichi	Studies of high temperature ion-conducting ceramics and their applications to energy conversion and storage (in Japanese)	R1490	2000.12.28

Geotechnical and Environmental Engineering

Name	Title	Diss.No.	Date
Imazu, Masanori	Study on establishment of the effective supporting system for tunnel work in mountain and urban area (in Japanese)	K1531	2001.03.26
Mizuno, Kazunori	A soil-water coupled analysis on the effect of improvement of a natural deposited clay by cylindrical cavity expansion (in Japanese)	K1532	2001.03.26
Takahashi, Wataru	Study on design fire source to evaluate fire safety performance of building (in Japanese)	R1481	2000.07.31
Tanaka, Tadashi	Study on the significance for urban underground space utilization (in Japanese)	R1495	2001.02.28

Energy Engineering and Science

Name	Title	Diss.No.	Date
Itoh, Kazuhiro	Free-surface waves on high-speed liquid jet flowing along solid wall (in Japanese)	K1466	2000.07.31
Kubota, Mitsuhiro	Fundamental study of high temperature chemical heat pump using carbon dioxide as working fluid medium (in Japanese)	K1533	2001.03.26
Yamamoto, Eri	Study of controlling simultaneous heat and mass transfer operation in water vapor adsorption heat pump (in Japanese)	K1534	2001.03.26
Aramaki, Mitsutoshi	Characterization of one component plasma confined in toroidal high frequency trap (in Japanese)	K1563	2001.03.26
Ohkuni, Kotaro	Experimental studies on electrostatic fluctuations and fluctuation-induced particle fluxes in the chs heliotron/torsatron (in Japanese)	K1564	2001.03.26
Kuwabara, Tatsuya	Particle control and heat flow analysis in plasma-wall interaction (in Japanese)	K1565	2001.03.26

Quantum Engineering

Name	Title	Diss.No.	Date
Ohta, Hiroyuki	Studies on ultrathin silicon nitride film formation for high-k gate dielectrics using plasma enhanced chemical vapor deposition	K1535	2001.03.26
Takashima, Seigou	Studies on development of measurement technique of absolute densities of atomic species in reactive plasma process using vacuum ultraviolet absorption spectroscopy with microdischarge hollow cathode lamp	K1536	2001.03.26
Nakamura, Masayuki	Studies on spatial distribution of radicals in electron cyclotron resonance plasma	K1537	2001.03.26
Horibe, Masahiro	Study on improving the quality of high-temperature superconducting ramp-edge junctions (in Japanese)	K1538	2001.03.26

Name	Title	Diss.No.	Date
Maruyama, Michitaka	Study on c-axis oriented trilayer josephson junctions using high-temperature superconductor $YBa_2Cu_3O_{7-x}$ (in Japanese)	K1539	2001.03.26
Murata, Kazuya	Studies on microcrystalline silicon film growth in high-density silane and hydrogen plasma	K1540	2001.03.26
Suprijadi	Transmission electron microscopy study on deformation and fracture in silicon single crystals	K1541	2001.03.26
Shimaoka, Kazuhiro	Study on cryogenic packaging and measurement of high-frequency superconducting circuits (in Japanese)	K1566	2001.03.26
Matsuo, Yoshiro	Study on ultrashort pulse propagation in optical fibers	K1567	2001.03.26
Shibata, Motoshi	Formation of nanostructures by selective growth on Si substrates in ultrathin SiO_2 films and vicinal Si(111) (in Japanese)	R1496	2001.02.28

Micro System Engineering

Name	Title	Diss.No.	Date
Ando, Taeko	On-chip tensile testing and fatigue testing of thin films (in Japanese)	K1542	2001.03.26
Ooe, Katsutoshi	A new type of artificial larynx using a pzt ceramics vibrator as a sound source (in Japanese)	K1543	2001.03.26
Kaga, Tomoyuki	Cooperative multiple robot control in cellular robotic system (in Japanese)	K1544	2001.03.26
Sato, Hiroshi	Study of the sensor and the actuator using the dielectric thin film (in Japanese)	K1545	2001.03.26

Molecular Design and Engineering

Name	Title	Diss.No.	Date
Kim, Ick Soo	The fundamental study for high temperature characteristics of ferritic oxide-dispersion-strengthened (ODS) and ion irradiation damage (in Japanese)	K1480	2000.12.28

Name	Title	Diss.No.	Date
Ishida, Hiroshi	Surface modification of [60] fullerene by carbo- and heterocyclization methodology	K1546	2001.03.26
Utsumi, Ryoji	Separation of particles and evaluation of granules by sieves (in Japanese)	K1547	2001.03.26
Sugimoto, Tadimitsu	Simulation of particle network formation mechanism in suspension (in Japanese)	K1548	2001.03.26
Hasegawa, Teruaki	Syntheses and functions of glycoclusters based on helical molecular templates	K1549	2001.03.26
Cui, Jie	Study on the relationship between formation behaviors of the intermetallic compounds and strength properties in the fe-cr and fe-cr-ni alloys (in Japanese)	K1550	2001.03.26
Endo, Yoshishige	Study on generation mechanisms of ultra-fine particles by using arc energy and those applications (in Japanese)	R1482	2000.07.31

Computational Science and Engineering

Name	Title	Diss.No.	Date
Nakamura, Hiroshi	Investigation on the robot-environment interaction and the incremental evolution for the emergence of intelligence (in Japanese)	K1551	2001.03.26