

DOCTORAL DISSERTATIONS

(1999.4.1 – 2000.3.31)

Applied Chemistry

| Name | Title | Diss. No. | Date |
|-------------------|---|-----------|------------|
| Uno, Takahiro | Stereospecific polymerization of α -substituted acrylates | K1365 | 1999.10.29 |
| Inagaki, Kazumi | Multielement correlation analysis and chemical speciation of trace elements in human blood serum as studied by analytical atomic spectrometry | K1376 | 1999.3.27 |
| Ji, Shan | Multielement profiling analyses of the elemental distributions between seawater and natural salt as studied by analytical plasma spectrometry (in Japanese) | K1377 | 1999.3.27 |
| Kojima, Takashi | Study on creation of Zirconia-based composite with fracture sensing capability (in Japanese) | K1378 | 1999.3.27 |
| Shimizu, Ken-ichi | Molecular bases for the design of metal oxide De-Nox catalysts | K1379 | 1999.3.27 |
| Suzuki, Kazuyuki | Synthesis and evaluation of ferroelectric K(Ta,Nb)O ₃ thin film (in Japanese) | K1380 | 1999.3.27 |
| Ishida, Yasuyuki | Characterization of polymeric materials and natural organic compounds by reactive pyrolysis-gas chromatography (in Japanese) | R1420 | 1999.4.30 |
| Takaku, Yuichi | Development of high-sensitive analytical methods for environmental and biological samples by inductively coupled plasma mass spectromerty | R1426 | 1999.6.30 |
| Sakai, Takenobu | Study on improvement in durability of piezoelectric ceramics (in Japanese) | R1430 | 1999.7.30 |

Applied Chemistry II

| Name | Title | Diss. No. | Date |
|--------------------|--|-----------|------------|
| Yamazaki, Shinichi | Effects of steric hindrance and charge on local dynamics of polymer chains (in Japanese) | K1366 | 1999.10.29 |

Chemical Engineering

| Name | Title | Diss. No. | Date |
|--------------------|---|-----------|-----------|
| Yamamoto, Tsuyoshi | Analysis of combustion process in advanced energy conversion systems (in Japanese) | K1361 | 1999.9.30 |
| Quitain, Armando | Reactive distillation for ethyl tert-butyl ether synthesis from bioethanol and tert-butyl alcohol | K1381 | 1999.3.27 |
| Jin, Gong | Effective use of third phase in phase transfer catalytic system | K1382 | 1999.3.27 |
| Tatemoto, Yuji | Biological and thermal problems for treatment of municipal solid waste (in Japanese) | K1383 | 1999.3.27 |
| Tani, Koji | Study of separation and removal of trace components dissolved in water (in Japanese) | K1384 | 1999.3.27 |
| Piao, Gulim | A study on combustion test of refuse derived fuel in fluidized bed (in Japanese) | K1385 | 1999.3.27 |
| Kondoh, Motohiro | Properties of energy recycle by combustion of waste (in Japanese) | K1443 | 1999.3.27 |
| Yamada, Hiroshi | Development of gas-liquid-liquid-solid four-phase reactor | R1452 | 1999.1.31 |

Biotechnology

| Name | Title | Diss. No. | Date |
|------------------|--|-----------|-----------|
| Saito, Ikuo | A study of valuable microorganism in culture engineering with the aim of industrialization (in Japanese) | K1386 | 1999.3.27 |
| Nakamura, Shingo | Proton-induced enantioselective reactions using chiral LBA reagents | K1387 | 1999.3.27 |
| Murai, Kiyohito | A study on denitrification process by genetic engineering or improvement of wastewater treatment | K1388 | 1999.3.27 |
| Moon, Kwanhoon | Development of culture system suitable for micropropagation of rice via somatic embryogenesis | K1389 | 1999.3.27 |
| Yamada, Keisuke | A tissue engineering approach for construction of hybrid-type artificial liver | K1390 | 1999.3.27 |

| Name | Title | Diss. No. | Date |
|----------------------|---|-----------|-----------|
| Yamamoto, Shin | A study on bacterial glycoengineering : application for novel drug discovery | K1391 | 1999.3.27 |
| Watanabe, Tsuyoshi | Catalytic enantioselective protonation of enolates using chiral proton donors | K1392 | 1999.3.27 |
| Noguchi, Hideki | Analysis of biological and KANSEI information based on knowledge information processing (in Japanese) | K1444 | 1999.3.27 |
| Araki, Yoshitaka | Development of asymmetric reactions directed for the preparation of enantiopure pharmaceuticals | R1427 | 1999.6.30 |
| Kuribayashi, Takeshi | Aryl C-Glycosides as sialyl lewis X mimetics | R1428 | 1999.6.30 |

Materials Science and Engineering

| Name | Title | Diss. No. | Date |
|----------------------|--|-----------|------------|
| Yamamoto, Hiroaki | Formation of hydrogen absorption alloy film by molten salts electrolysis (in Japanese) | K1445 | 1999.3.27 |
| Matsumoto, Yoshihisa | Study on deformation and fracture behavior and electronic state of solute atoms in chromium (in Japanese) | R1424 | 1999.5.31 |
| Kakehi, Koji | Study on high-temperature strength of single-Crystal Nickel-based superalloys (in Japanese) | R1449 | 1999.12.28 |
| Nonogaki, Youichi | Study on InGaAs dots grown on InP substrate by droplet heteroepitaxy (in Japanese) | R1453 | 1999.1.31 |
| Kawai, Hisataka | Study on the material properties after long-term heating and improvement in material strength of gas turbine superalloys (in Japanese) | R1458 | 2000.2.29 |
| Takatsuji, Hiroshi | Reliability improvement of interconnect materials for TFT-LCD and their deposition processes (in Japanese) | R1459 | 2000.2.29 |

Materials Processing Engineering

| Name | Title | Diss. No. | Date |
|--------------------|--|-----------|------------|
| Chino, Yasumasa | Study on control of free surface shape on a liquid metal using intermittent alternating magnetic field (in Japanese) | K1368 | 1999.11.30 |
| Wang, Zhe | Predictions of microstructure and mechanical property in hot forging of vanadium microalloyed steels (in Japanese) | K1393 | 1999.3.27 |
| Peiqi, Qiu | Study on semi-solid processing for cast iron (in Japanese) | K1394 | 1999.3.27 |
| Sanga, Manabu | Study on influence of chemical composition and deformation condition on deformation-induced martensitic transformation in austenitic stainless steel (in Japanese) | K1395 | 1999.3.27 |
| Shi, Wen | Interfacial behavior between molten magnesium and solid substrates and its application on the fabrication of magnesium matrix composites (in Japanese) | K1396 | 1999.3.27 |
| Zhou, Yueming | Study on Utilization of electromagnetic force in a continuous casting of steel (in Japanese) | K1397 | 1999.3.27 |
| Tajima, Nobuhiro | Preparation of hard amorphous carbon and amorphous carbon nitride thin films by shielded arc ion plating, and their structural and mechanical properties (in Japanese) | K1398 | 1999.3.27 |
| Hatanaka, Shinichi | Fundamental study on design of ultrasonic fields in liquid in materials processing (in Japanese) | K1454 | 1999.3.27 |
| Sonoda, Tsutomu | On surface treatment of functional Titanium-base alloy by coating technique using sputtering for improving its biocompatibility (in Japanese) | R1439 | 1999.10.29 |
| Inoue, Yasushi | Study on spectroscopic process monitoring in low-temperature plasma CVD of silicon dioxide films (in Japanese) | R1457 | 2000.2.29 |

Applied Physics

| Name | Title | Diss. No. | Date |
|-------------------|---|-----------|-----------|
| Yamane, Tsuneyuki | Measurement of thermal diffusivities of advanced materials (in Japanese) | R1431 | 1999.7.30 |
| Kubota, Yoshiki | Accurate charge density analyses of laves phase intermetallic compounds (in Japanese) | R1434 | 1999.9.30 |

Nuclear Engineering

| Name | Title | Diss. No. | Date |
|--------------------|---|-----------|------------|
| Kashibe, Shinji | Fission gas release and bubble swelling of light water reactor fuels | R1425 | 1999.5.31 |
| Ito, Takahiro | Study on thermal hydraulic phenomena in advanced light water reactors with passive safety features (in Japanese) | K1370 | 1999.12.28 |
| Igarashi, Hiroo | Study on water chemistry control for dose reduction based on anomalous diagnosis using BWR water chemistry data (in Japanese) | K1371 | 1999.12.28 |
| Sugiyama, Takahiko | Separative analyses of packed water distillation column for hydrogen isotope separation (in Japanese) | K1399 | 1999.3.27 |
| Yamakawa, Hiroshi | Separative characteristics of polyatomic gas mixture by thermal diffusion column for isotope separation (in Japanese) | K1400 | 1999.3.27 |

Electrical Engineering

| Name | Title | Diss. No. | Date |
|-----------------|---|-----------|-----------|
| Itabashi, Kaiji | A study on development of assembly motion controller including contact phenomenon (in Japanese) | K1401 | 1999.3.27 |
| Kokura, Hikaru | Studies on thin films processing in high-density microwave plasmas (in Japanese) | K1402 | 1999.3.27 |
| Zanma, Tadanao | Study on design method of assembly/disassembly task system based on discret event system theory (in Japanese) | K1403 | 1999.3.27 |

| Name | Title | Diss. No. | Date |
|-------------------|--|-----------|------------|
| Takeuchi, Ichiro | A study on fuzzy modeling of nonlinear dynamic systems (in Japanese) | K1446 | 1999.3.27 |
| Chigusa, Shunji | Investigation on systematization of insulation performance of cryogenic liquids under quench conditions of superconducting power apparatus (in Japanese) | K1447 | 1999.3.27 |
| Shen, Li Ping | Thesis on the stress-impedance effect in amorphous magnetostrictive wires and sensitive stress sensors using CMOS IC circuit (in Japanese) | K1448 | 1999.3.27 |
| Yamano, Yasushi | Investigation on charging and discharging phenomena on dielectric surface in vacuum (in Japanese) | K1449 | 1999.3.27 |
| Yubai, Kazuhiro | Study on identification and motion control of mechanical system with uncertainty (in Japanese) | K1450 | 1999.3.27 |
| Inaba , Akio | Planning and control of assembly processes based on discrete event models (in Japanese) | R1421 | 1999.4.30 |
| Matsushima, Isao | Laser-plasma interaction research and laser-irradiation uniformity improvement technique development for short-wavelength laser nuclear fusion (in Japanese) | R1443 | 1999.11.30 |
| Iwata, Mikimasa | Study on decrease of electrode erosion in AC plasma torch and stabilization of AC arc plasma (in Japanese) | R1460 | 2000.2.29 |
| Miyazaki, Akinobu | Development of long-distance gas insulated transmission line (GIL) and study of on-site testing and monitoring techniques (in Japanese) | R1461 | 2000.2.29 |

Electronics

| Name | Title | Diss. No. | Date |
|----------------------|---|-----------|-----------|
| Kawaguchi, Yasutoshi | Crystal growth of nitride semiconductors by metalorganic vapor phase epitaxy (in Japanese) | K1404 | 1999.3.27 |
| Yamamoto, Kazuo | Development and applications of highly precise phase measurement technique by electron holography (in Japanese) | K1405 | 1999.3.27 |

| Name | Title | Diss. No. | Date |
|-----------------|--|-----------|-----------|
| Hayakawa, Shoji | Studies of advances in speaker recognition technology (in Japanese) | K1457 | 1999.3.27 |
| Sugiura, Touko | Raman scattering study of compositional fluctuation in InGaAsP quaternary alloys (in Japanese) | R1422 | 1999.4.30 |

Information Electronics

| Name | Title | Diss. No. | Date |
|---------------------|--|-----------|------------|
| Takeo, Kohji | Study on cell configurations for CDMA cellular systems considering non-uniformity (in Japanese) | K1372 | 1999.12.28 |
| Hattori, Yoichiro | A study on construction of systems integrating patterns and symbols (in Japanese) | K1406 | 1999.3.27 |
| Saruwatari, Hiroshi | A study on nonlinear array signal processing for acoustic signals | K1451 | 1999.3.27 |
| Mori, Kazuo | A study on CDMA packet communications on cellular mobile communication systems (in Japanese) | K1453 | 1999.3.27 |
| Kurono, Masahiro | A study of communication systems by the optical fibers laid on electric power networks (in Japanese) | R1435 | 1999.9.30 |

Information Engineering

| Name | Title | Diss. No. | Date |
|-----------------|---|-----------|------------|
| Song, Chae-uk | Image recognition and its application to computer-aided diagnosis system of chest X-ray images (in Japanese) | K1350 | 1999.4.30 |
| Hirano, Yasushi | Feature extraction of three dimensional gray images and its application to computer aided diagnosis using chest X-ray CT images (in Japanese) | K1369 | 1999.11.30 |
| Fukuyasu, Naoki | CASE tool platform based on a fine grained repository and its application to software reuse (in Japanese) | K1452 | 1999.3.27 |

| Name | Title | Diss. No. | Date |
|---------------|--|-----------|-----------|
| Ueyama, Eizo | Figure-ground separation for time-varying images by reaction diffusion advection models (in Japanese) | K1458 | 1999.3.27 |
| Takada, Osamu | Methodology of building practical knowledge-based systems for design and manufacturing of products (in Japanese) | K1459 | 1999.3.27 |

Mechanical Engineering

| Name | Title | Diss. No. | Date |
|----------------------|--|-----------|------------|
| Kinoshita, Katsuhiko | Study on effects of design parameters on air-water two-phase flow performance of a radial-flow pump for offshore oil field (in Japanese) | K1353 | 1999.4.30 |
| Mizuno, Koji | The current situation of vehicle crash compatibility in Japan and its improvement | K1362 | 1999.9.30 |
| Hayashi, Toshiyuki | Preparation of hard nitride thin films by ion-beam-assisted deposition and their mechanical properties (in Japanese) | K1364 | 1999.9.30 |
| Ahmad, Syuhada | Heat (mass) transfer characteristics in rectangular serpentine channels with a sharp turn | K1407 | 1999.3.27 |
| Kimachi, Hirohisa | Meso-mechanical study on interlaminar crack in fiber-reinforced laminated composites (in Japanese) | K1408 | 1999.3.27 |
| Tanaka, Hiroshi | Fracture mechanics study on propagation of interlaminar and intralaminar cracks in carbon fiber-reinforced plastics (in Japanese) | R1432 | 1999.7.30 |
| Sato, Yutaka | Effects of a new truing and dressing method on grinding characteristics of superabrasive grinding wheels (in Japanese) | R1436 | 1999.9.30 |
| Shigematsu, Ichinori | Study of removal processing and surface modification with laser beam (in Japanese) | R1437 | 1999.9.30 |
| Saito, Toshiyuki | Investigation of tribochemical reaction in aqueous solutions (in Japanese) | R1444 | 1999.11.30 |
| Matsui, Shinsuke | Micro-Machining for optical communication devices (in Japanese) | R1445 | 1999.11.30 |

| Name | Title | Diss. No. | Date |
|------------------|--|-----------|------------|
| Kamiya, Soji | Development of the new copper alloy bearings for diesel engines to achieve longer life under higher load (in Japanese) | R1450 | 1999.12.28 |
| Ogawa, Kazuyoshi | Study on the improvement of tooth-root fatigue strength of carburized gears (in Japanese) | R1454 | 1999.1.31 |
| Shimizu, Kenichi | Fracture mechanics study on fatigue crack propagation in SiC particulate reinforced aluminum alloys (in Japanese) | R1455 | 1999.1.31 |

Mechano-Informatics and systems

| Name | Title | Diss. No. | Date |
|----------------|---|-----------|-----------|
| Nakamura, Yuji | Numerical study of gravity effects on gas-phase spontaneous ignition over thermally irradiated solid fuel (in Japanese) | K1375 | 1999.2.29 |
| Kubo, Takashi | A study on turbulent diffusion in liquid with chemical reaction (in Japanese) | K1409 | 1999.3.27 |
| Ono, Koshiro | Elucidation of neck injury mechanisms during low speed rear impacts (in Japanese) | R1462 | 2000.2.29 |

Electronic-Mechanical Engineering

| Name | Title | Diss. No. | Date |
|-------------------|--|-----------|------------|
| Odashima, Tadashi | Autonomous decentralized system design for gait pattern generation of multileged system (in Japanese) | K1410 | 1999.3.27 |
| Mori, Hideo | A study on REMPI as a measurement technique for highly rarefied gas flows (in Japanese) | K1411 | 1999.3.27 |
| Matsui, Hirokazu | A study on model driven shape reconstruction by matching synthesized images with actual images (in Japanese) | K1460 | 1999.3.27 |
| Kato, Mitsuhiro | A study on combination tones in nonlinear continuous systems (in Japanese) | R1440 | 1999.10.29 |

Aerospace Engineering

| Name | Title | Diss. No. | Date |
|----------------------|---|-----------|------------|
| Tanahashi, Yoshiharu | Study on aerodynamic interactions around high speed planes (in Japanese) | K1354 | 1999.7.30 |
| Suzuki, Tatsuo | Control of periodic discrete-time systems (in Japanese) | R1429 | 1999.6.30 |
| Kataoka, Takuya | Research on simulation of vehicle aerodynamics and thermal environment in an automobile passenger compartment (in Japanese) | R1446 | 1999.11.30 |
| Hodaka, Ichijyo | Control system design based on the theory of dissipative systems (in Japanese) | R1447 | 1999.11.30 |

Civil Engineering

| Name | Title | Diss. No. | Date |
|--------------------|---|-----------|------------|
| Sunuwar, Laxman | Evaluation of lifecycle global environmental impact of transportation infrastructures | K1355 | 1999.9.21 |
| Cao, Qiuliang | Fatigue evaluation for highway bridge components under variable amplitude loading | K1356 | 1999.9.21 |
| Liu, Qing Yun | Inelastic seismic design verification of thin-walled steel bridge piers | K1357 | 1999.9.21 |
| Murakami, Noritaka | Study on beach deformation due to coastal structures (in Japanese) | K1367 | 1999.10.29 |
| Sanada, Takeshi | Study on second order analytical solution of nonlinear diffracted waves due to offshore structures and its applications (in Japanese) | K1373 | 1999.12.28 |
| Anwar, Faisal | An investigation of non-aqueous phase liquid volatilization in porous media | K1412 | 1999.3.27 |
| Takaine, Toshihiro | Progressive failure in heavily/lightly overconsolidated ground by soil-water coupled finite deformation analysis and its applications to engineering problems (in Japanese) | R1433 | 1999.7.30 |
| Kainuma, Shigenobu | Fatigue life evaluation and retrofitting measures for fillet welded cruciform joints in welded structures (in Japanese) | R1438 | 1999.9.30 |

| Name | Title | Diss. No. | Date |
|-------------------|--|-----------|------------|
| Ishikawa, Yasuaki | Development of constitutive law for transient concrete as non-saturated porous material and its application to structural concrete (in Japanese) | R1441 | 1999.10.29 |

Architecture

| Name | Title | Diss. No. | Date |
|----------------------|---|-----------|------------|
| Watanabe, Hinako | A study on arrangement of regional infrastructure for performing arts (in Japanese) | K1352 | 1999.4.30 |
| Wang, Yinghua | Study on segregation in flowing process of matrix mortar in fresh concrete (in Japanese) | K1358 | 1999.9.30 |
| Xu, Guohai | A study on physiological and psychological responses to fluctuating air movement (in Japanese) | K1359 | 1999.9.30 |
| El-Shazly, Ali Essam | Colonial district of port city in the east and its conservation policy : comparative analysis of the European quarter in Alexandria, Egypt and the Waitan district in Shanghai, China | K1413 | 1999.3.27 |
| Jin, De Yin | Nonlinear wave force effects on dynamic responses of ocean structures (in Japanese) | K1414 | 1999.3.27 |
| Li, Zhuguo | Study on mechanical model of fresh mortar based on particle assembly theory (in Japanese) | K1415 | 1999.3.27 |
| Kato, Kenji | The analysis of wave-induced dynamics of floating offshore structures by hybrid integral-equation method (in Japanese) | R1442 | 1999.10.29 |
| Terano, Masaaki | Experimental study on thermal comfort when legs are heated in cool on slightly cool conditions (in Japanese) | R1456 | 1999.1.31 |

Crystalline Materials Science

| Name | Title | Diss. No. | Date |
|---------------|--|-----------|-----------|
| Ishikawa, Dai | A study on the atomic arrangements and the binding energies of binary noble metal adsorbates on the Si(111) surface by means of the ion beam analysis techniques (in Japanese) | K1416 | 1999.3.27 |

| Name | Title | Diss. No. | Date |
|------------------|--|-----------|-----------|
| Ohmori, Kenji | Study on formation and degradation of ultra-thin SiO ₂ films using scanning tunneling microscopy (in Japanese) | K1417 | 1999.3.27 |
| Nakatsuka, Osamu | Studies on solid-phase reactions and electrical properties at the interfaces of metals and group-IV semiconductors (in Japanese) | K1418 | 1999.3.27 |
| Liu, Xiaojun | Spectroscopic study on phase transitions in mixed-valence gold complexes | K1419 | 1999.3.27 |

Geotechnical and Environmental Engineering

| Name | Title | Diss. No. | Date |
|----------------|---|-----------|-----------|
| Seo, Yong-Seok | Damage process in granite : experimental observation, molecular dynamics simulation and its homogenization analysis | K1360 | 1999.9.30 |
| Sumi, Tetsuya | A study on heterogeneous flow in hillslope surface soil (in Japanese) | K1455 | 1999.3.27 |

Energy Engineering and Science

| Name | Title | Diss. No. | Date |
|---------------------|---|-----------|-----------|
| Ido, Takeshi | Observation of dynamic behaviors of space potential at L/H transition by a heavy ion beam probe (in Japanese) | K1374 | 1999.2.29 |
| Namba, Shinichi | Study on a production of a stationary high-density plasma and a population inversion in TPD-II device | K1420 | 1999.3.27 |
| Kobayashi, Masahiro | Basic study on the interaction of the externally applied helical field with tokamak plasma (in Japanese) | K1421 | 1999.3.27 |
| Nishimura, Akira | Studies on gas-solid fluidized bed with pulse flow operation (in Japanese) | K1422 | 1999.3.27 |
| Fujisawa, Ryo | Studies on cold heat energy generation from low level heat energy (in Japanese) | K1423 | 1999.3.27 |

Quantum Engineering

| Name | Title | Diss. No. | Date |
|-------------------|---|-----------|-----------|
| Otsuka, Jun | Study on microwave properties of Bi-Sr-Ca-Cu-O films fabricated by multitarget sputtering (in Japanese) | K1424 | 1999.3.27 |
| Ohno, Yutaka | Studies on resonant tunneling logic gates and resonant tunneling structures (in Japanese) | K1425 | 1999.3.27 |
| Goto, Ryosuke | Studies on coherence control of semiconductor laser diodes by injection locking using four-wave mixing | K1426 | 1999.3.27 |
| Sasajima, Naohiko | Radiation effect on Al_2O_3 , MgAl_2O_4 and yttria-stabilized ZrO_2 under H^{2+} , He^+ and Xe^{2+} ion irradiation | K1427 | 1999.3.27 |
| Shoji, Yoshiyuki | Vaporization study on the binary rare earth alloys and rare earth-uranium alloys by mass-spectrometry | K1428 | 1999.3.27 |
| Tsukimoto, Susumu | A study by in-situ TEM heating experiment on the structure and dynamical behavior of surface and interface at high temperatures (in Japanese) | K1429 | 1999.3.27 |
| Furuta, Futoshi | Study of high-speed logic circuit based on Josephson Junction (in Japanese) | K1430 | 1999.3.27 |
| Matsuki, Hirohisa | An investigation on fracture of a Pb-Sn solder joint on Ni-base plating (in Japanese) | K1431 | 1999.3.27 |
| Moon, Won-Jin | Transmission electron microscopy study on mechanisms of deformation and fracture in ceramics | K1432 | 1999.3.27 |
| Sasaki, Yukichi | Microstructure analysis of zeolites by low dose observation using transmission electron microscopy (in Japanese) | K1456 | 1999.3.27 |
| Nakahara, Hitoshi | Studies on molecular beam epitaxial growth control and surface reconstruction (in Japanese) | R1463 | 2000.2.29 |

Micro System Engineering

| Name | Title | Diss. No. | Date |
|---------------------|--|-----------|------------|
| Itoh, Tomotaka | A study on new design method of practical teleoperation system for human-machine collaboration : task-oriented control of telemanipulator based on passivity (in Japanese) | R1423 | 1999.4.30 |
| Kobayashi, Futoshi | A study on sensor fusion system (in Japanese) | K1351 | 1999.4.30 |
| Uematsu, Kenji | Bracing control of redundant manipulator (in Japanese) | K1433 | 1999.3.27 |
| Tanimoto, Mitsutaka | A study on a tale-medicine system for intravascular neurosurgery (in Japanese) | K1434 | 1999.3.27 |
| Nakanishi, Jun | A Brachiating robot controller | K1435 | 1999.3.27 |
| Higashi, Toshimitsu | Self-organizing AGV transportation system adapting to dynamical environment (in Japanese) | K1436 | 1999.3.27 |
| Yoshioka, Tetsuo | On-chip tensile testing of micromaterials (in Japanese) | K1437 | 1999.3.27 |
| Yoneda, Mitsunori | A study on performance improvement of crane system with interactive adaptation interface (in Japanese) | K1438 | 1999.3.27 |
| Isogai, Masahiro | Study on intelligent fault diagnosis for vibration control system of flexible structures (in Japanese) | K1461 | 1999.3.27 |
| Ohshima, Yasuji | A study on measurements of micro-tribological phenomena in head-disk interface (in Japanese) | K1462 | 1999.3.27 |
| Yamaji, Kouki | Mechatronics design and practical education : from view point of robot control and energy converter (in Japanese) | R1448 | 1999.11.30 |

Molecular Design and Engineering

| Name | Title | Diss. No. | Date |
|--------------------|---|-----------|-----------|
| Yoshida, Yoshifumi | Compression behavior of fine particle network structure in liquid (in Japanese) | K1439 | 1999.3.27 |
| Akasaka, Tsukasa | Syntheses, characterizations, and functions of DNA-carbohydrate conjugates | K1440 | 1999.3.27 |

| Name | Title | Diss. No. | Date |
|-------------------|---|-----------|-----------|
| Kojima, Yoshihiyo | Quantification of ultrasonic intensity by chemical dosimetry and its application to polymerization of styrene (in Japanese) | K1441 | 1999.3.27 |
| Yashiro, Arihiro | Molecular design of [60] fullerene glycoconjugates via [3+2] cycloaddition | K1442 | 1999.3.27 |

Computational Science and Engineering

| Name | Title | Diss. No. | Date |
|------------------|--|-----------|------------|
| Kondo, Toshiyuki | A study on evolutionary construction of adaptation mechanism for autonomous mobile robots | K1363 | 1999.9.30 |
| Yamamoto, Satoru | Study of development and application of a new simulation method for fiber and platelike particle dispersed systems (in Japanese) | R1451 | 1999.12.28 |