

## 付録 発表論文

### 本研究に関する論文

#### (1) Ion Irradiation Effects in EuBa<sub>2</sub>Cu<sub>3</sub>O<sub>y</sub> Thin Film

N. Ishikawa, A. Iwase, T. Iwata, H. Maeta, K. Tsuru, and O. Michikami, *J. of Supercond.*, Vol.7, No.1(1994) 241-242.

#### (2) Ion Irradiation Effects of EuBa<sub>2</sub>Cu<sub>3</sub>O<sub>y</sub> Thin Film

N. Ishikawa, A. Iwase, T. Iwata, H. Maeta, K. Tsuru, and O. Michikami, *Advanced Materials '93, VI / A:Superconductors, Surfaces and Superlattices*, edited by H. Sasaki et al., *Trans. Mat. Res. Soc. Jpn.*, Volume 19A (1994) 537-540.

#### (3) Lattice Expansion in EuBa<sub>2</sub>Cu<sub>3</sub>O<sub>y</sub> irradiated with Energetic Ions

N. Ishikawa, A. Iwase, Y. Chimi, H. Maeta, K. Tsuru, O. Michikami, *Physica C* 259(1996) 54-60.

#### (4) Electronic Excitation Effects in Ion-Irradiated High-T<sub>c</sub> Superconductors

N. Ishikawa, Y. Chimi, A. Iwase, H. Maeta, K. Tsuru, O. Michikami, T. Kambara, T. Mitamura, Y. Awaya, and M.Terasawa, *Nucl. Instr. Meth. B* 135(1998) 184-189.

#### (5) Defect Production and Recovery in High-T<sub>c</sub> Superconductors Irradiated with Electrons and Ions at Low Temperature

N. Ishikawa, Y. Chimi, A. Iwase, K. Tsuru, O. Michikami, *J. Nucl. Mater.* 258-263 (1998) 1924-1928.

#### (6) High Energy Heavy Ion Irradiation Damage in Oxide Superconductor EuBa<sub>2</sub>Cu<sub>3</sub>O<sub>y</sub>

A. Iwase, N. Ishikawa, Y. Chimi, K. Tsuru, H. Wakana, O. Michikami, T. Kambara, *Nucl Instr. Meth. B* 146 (1998) 557-564.

#### (7) Ion-Velocity Effects on Defect Production in High-T<sub>c</sub> Superconductors and Metals

N. Ishikawa, Y. Chimi, N. Kuroda, A. Iwase, T. Kambara, *Physica Scripta*,

Vol.T80(1999)559-561.

(8) Defect Production and Annealing in High-T<sub>c</sub> Superconductor EuBa<sub>2</sub>Cu<sub>3</sub>O<sub>y</sub> Irradiated with Energetic Ions at Low-Temperature

N. Ishikawa, Y. Chimi, A. Iwase, K. Tsuru, and O. Michikami, Mat. Res. Soc. Symp. Proc. Vol.504 (1998) 171-175.

(9) Transport Characteristics near the Glass-Liquid Transition Temperature Before and After Heavy-Ion Irradiation in a YBa<sub>2</sub>Cu<sub>3</sub>O<sub>y-δ</sub> Thin Film

T. Sueyoshi, N. Ishikawa, A. Iwase, Y. Chimi, T. Kiss, T. Fujiyoshi, and K. Miyahara, Physica C, 309 (1998) 79-88.

(10) Optical Response and Transport Properties of Epitaxial YBa<sub>2</sub>Cu<sub>3</sub>O<sub>y-δ</sub> Thin Films with Columnar Defects

T. Fujiyoshi, T. Sueyoshi, N. Ishikawa, A. Iwase, Y. Chimi, T. Kiss, and K. Miyahara, Advances in Superconductivity XI (1998) 597-600.

(11) Critical Scaling Analysis of Transport Characteristics before and after Heavy-Ion Irradiation in a YBa<sub>2</sub>Cu<sub>3</sub>O<sub>y-δ</sub> Thin Film

T. Sueyoshi, N. Ishikawa, A. Iwase, Y. Chimi, T. Kiss, T. Fujiyoshi, and K. Miyahara, Advances in Superconductivity XI (1998) 593-596.

(12) Irradiation Temperature Dependence of Swift Heavy Ion Induced Defects in Oxide Superconductor EuBa<sub>2</sub>Cu<sub>3</sub>O<sub>y</sub>

N. Ishikawa, Y. Chimi, A. Iwase, H. Wakana, and O. Michikami, Nucl. Instr. Meth. B 164-165 (2000) 384-390.

(13) *In-situ* Measurement of Transport Characteristics in Heavy-Ion Irradiated YBa<sub>2</sub>Cu<sub>3</sub>O<sub>y</sub> under Magnetic Field

N. Ishikawa, T. Sueyoshi, A. Iwase, Y. Chimi, T. Fujiyoshi, K. Miyahara, and T. Kiss, Physica B, in press.

(14) Defect Production Induced by Primary Ionization in Ion-Irradiated Oxide Superconductors

N. Ishikawa, A. Iwase, Y. Chimi, H. Wakana, O. Michikami and T. Kambara, to be published in J. Phys. Soc. Jpn.(2000).

## 酸化物超伝導体における磁気的測定に関する論文

(1) Superconductivity of  $(La_{1-x}Sr_x)_2CuO_4-y$  ( $0 \leq x \leq 0.03$ )

R. Yoshizaki, N. Ishikawa, M. Akamatsu, J. Fujikami, H. Kurahashi, Y. Saito, Y. Abe, and H. Ikeda, Physica C 156 (1988) 297-302.

(2) Superconductivity and Normal-State Magnetism in  $La_{2-x}Sr_xCuO_4$

R. Yoshizaki, N. Ishikawa, N. Kuroda, E. Kita, A. Tasaki, and H. Ikeda, Physica B 165&166 (1990) 1183-1184.

(3) Magnetic Susceptibility of Normal State and Superconductivity of  $La_{2-x}Sr_xCuO_4$

R. Yoshizaki, N. Ishikawa, H. Sawada, E. Kita, and A. Tasaki, Physica C 166 (1990) 417-422.

(4) Effects of Substitution for Cu in  $La_{1.82}Sr_{0.18}Cu_{1-y}M_yO_4$  (M=Co, Ni, Ga, Zn)

N. Ishikawa, N. Kuroda, H. Ikeda, and R. Yoshizaki, Physica C 185-189 (1991) 805-806.

(5) Spin-Correlation in  $La_{1.82}Sr_{0.18}Cu_{1-y}M_yO_4$  (M= Ga, Zn, Ni, Co)

N. Ishikawa, N. Kuroda, H. Ikeda, and R. Yoshizaki, Physica C 203 (1992) 284-292.

(6) Effect of Oxygen Vacancy on Magnetic and Superconducting Properties in  $La_{1.82}Sr_{0.18}CuO_4$

R. Yoshizaki, N. Kuroda, S. Nakamura, and N. Ishikawa, Physica C 199 (1992) 143-148.

## Bi 系酸化物超伝導体のイオン照射効果に関する論文

(1) Vortex Dynamics in  $Bi_{2+x}Sr_{2-(x+y)}La_yCuO_{6+\delta}$  and  $Bi_2Sr_2CaCu_2O_y$  Irradiated with Heavy-Ions: Correlation between the Bose Glass Behavior and the Coupling of Pancake Vortices.

N. Kuroda, N. Ishikawa, S. Okayasu, A. Iwase, H. Ikeda, R. Yoshizaki, T. Kambara, Nucl Instr. Meth. B 146 (1998) 572-576.

(2) Effect of Damage Morphology on the Pinning and Vortex Dynamics in  $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+\delta}$  Irradiated with GeV Heavy Ions

N. Kuroda, N. Ishikawa, Y. Chimi, A. Iwase, S. Okayasu, H. Ikeda, R. Yoshizaki, T. Kambara, Physica B, in press.

(3) Vortex Dynamics in  $\text{Bi}_2(\text{Sr},\text{La})_2\text{CuO}_{6+\delta}$  and  $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+\delta}$  Single Crystals with Columnar Defects

N. Kuroda, N. Ishikawa, Y. Chimi, A. Iwase, S. Okayasu, H. Ikeda, R. Yoshizaki, T. Kambara, Physica C 321(1999) 143-150.

### その他の照射効果に関する論文

(1) Defect Accumulation Behavior in Iron Irradiated with Energetic Ions and Electrons at  $\sim 80\text{K}$

Y. Chimi, A. Iwase, and N. Ishikawa, J. Nucl. Mater. 271&272 (1999) 236-240.

(2) Electronic Excitation Effects on Defect Production and Radiation Annealing in Fe Irradiated at  $\sim 80\text{K}$  with Energetic Particles

Y. Chimi, A. Iwase, and N. Ishikawa, Mat. Res. Soc. Symp. Proc. Vol.504 (1998) 221-226.

(3) Radiation Annealing Induced by Electronic Excitation in Iron

Y. Chimi, A. Iwase, N. Ishikawa, N. Kuroda, and T. Kambara, Nucl. Instr. Meth. B. 164-165 (2000) 408-414.

(4) Negative Magnetoresistance of Pyrolytic Carbon and Effects of Low-Temperature Electron Irradiation

A. Iwase, N. Ishikawa, T. Iwata, Y. Chimi, and T. Nihira, Phys. Rev. B60 (1999) 10811-10819.