

Curriculum Vitae

Takasada SHIBAUCHI

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Born: July 7, 1967 (Osaka, Japan). Citizenship: Japanese.

EDUCATION

- Ph. D., Department of Applied Physics, School of Engineering, University of Tokyo, February 12, 1999.
Thesis topic: “Microwave Surface Impedance of High- T_c Cuprates in the Superconducting State”
Advisor: Prof. K. Uchinokura
- M. Eng., Department of Superconductivity, School of Engineering, University of Tokyo, March 30, 1992.
- B. Eng., Department of Applied Physics, Faculty of Engineering, University of Tokyo, March 28, 1990.

EXPERIENCE

- Associate Professor, Department of Electronic Science and Engineering, Kyoto University, August 2001 – Present.
- Oppenheimer Fellow, Los Alamos National Laboratory, January 2001 – July 2001.
- Visiting Scientist, IBM Thomas J. Watson Research Center, May 1999 – July 2001.
- Postdoctoral Fellow, Los Alamos National Laboratory, April 1999 – December 2000.
- Research Associate, Department of Applied Physics, University of Tokyo, April 1993 – July 2001 (On leave from September 1999 to July 2001).

RESEARCH INTERESTS

- Electronic structure of strongly correlated systems.
- Magneto-transport properties of layered materials.
- Physical properties of mesoscopic structures.
- Dynamics of domain walls in ferromagnetic materials.
- Vortex physics of layered superconductors.
- Microwave properties of high- T_c cuprates and Kondo insulator materials.
- Single crystal growth of transition metal oxides using floating-zone technique and flux method.

GRANTS

- FY 1997-1998 Grant-in-Aid for Encouragement of Young Scientists by Ministry of Education, Science, Sports, and Culture, Japan (# 09740267), ¥ 2,000,000.
- FY 1996 Grant-in-Aid for Encouragement of Young Scientists by Ministry of Education, Science, Sports, and Culture, Japan (# 08750010), ¥ 1,000,000.
- FY 1995-1996 Grant-in-Aid for Developmental Scientific Research by Ministry of Education, Science, Sports, and Culture, Japan (# 07555002), ¥ 7,000,000.

- FY 1995 Grant-in-Aid for Encouragement of Young Scientists by Ministry of Education, Science, Sports, and Culture, Japan (# 07750008), ¥ 1,100,000.
- FY 1995 Grant-in-Aid of Scientific Research by Kawakami Foundation (# 816), ¥ 1,808,000.

HONORS AND AWARDS

- J. Robert Oppenheimer Fellowship, Los Alamos National Laboratory, December 2000.
- Postdoctoral Fellowship (director's funding), Los Alamos National Laboratory, March 1999.

PROFESSIONAL ACTIVITIES

- Member, The American Physical Society.
- Member, The Physical Society of Japan.
- Member, The Japan Society of Applied Physics.
- Co-organizer, *5th Tanaka Symposium – New Materials and New Physics –*, Hamanako, Japan, May 28-30, 1998.

PATENTS

- “Reducing Microwave Losses in High Temperature Superconductors by Introducing Disorder”, IBM Invention Disclosure, Docket #YOR820010741, US Patent Pending (2001).
- “Enhancing Superconducting Transition Temperature in MgB_2 Using Field-Effect Transistor Device Structures”, IBM Invention Disclosure, Docket #YOR820010737, US Patent Pending (2001).
- “Smoothing and Stabilization of Domain Walls in Perpendicularly Polarized Magnetic Films”, IBM Invention Disclosure, Docket #YOR920000716, US Patent Pending (2000).

INVITED TALKS

American Physical Society

1. “Closing the Pseudogap by Zeeman Splitting in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+y}$ at High Magnetic Fields”, The March Meeting of the American Physical Society, Seattle, Washington, USA, March 2001.

Physical Society of Japan

2. “Closing the Pseudogap in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+y}$ at High Magnetic Fields”, The Fall Meeting of the Physical Society of Japan, Tokushima, Japan, September 2001 (to be presented).

International Conferences and Workshops

3. “Closing the Pseudogap by Zeeman Splitting in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+y}$ at High Magnetic Fields”, Workshop on Excitations in Unconventionally Ordered Metals, Santa Fe, New Mexico, USA, October 2001 (to be presented).
4. “Closing the Pseudogap by Zeeman Splitting in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+y}$ at High Magnetic Fields”, The International Workshop on Novel Quantum Phenomena in Transition Metal Oxides –Recent Advances in High- T_c Superconductors and Related Systems–, Sendai, Japan, November 2000.
5. “High-Field Probe for Quasiparticles in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+y}$ ”, The Joint Vortex Physics and ESF-Vortex Matter Workshop, Lunteren, the Netherlands, August 2000.

6. “Interaction between Columnar Defects and Pancake Vortices in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+y}$ Studied by Josephson Plasma Resonance”, 6th International Conference on Materials and Mechanisms of Superconductivity High-Temperature Superconductors ($\text{M}^2\text{S-HTSC VI}$), Houston, Texas, USA, February 2000.
7. “Loss of Interlayer Phase Coherence at the Vortex Lattice Transition in Layered Superconductors”, International Workshop on Vortex Dynamics of High- T_c Superconductors, Hachimantai, Iwate, Japan, June 1998.
8. “Surface Impedance Study of Crossover from Heavy Fermion to Gapped State in CeNiSn ”, Workshop on Millimeter Wave Spectroscopy of Solids, UCLA, Los Angeles, California, USA, March 1996.

Domestic Workshops

9. “Vortex Phase Transitions and the Josephson Plasma Resonance in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+y}$ ”, the 10th Symposium of High- T_c superconductors, JAERI, Tokai-mura, Japan, December 1998.
10. “Recoupling of Vortex Liquid by Columnar Defects in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+y}$ ”, the 9th Symposium of High- T_c superconductors, JAERI, Tokai-mura, Japan, December 1997.
11. “Microwave Study of High- T_c Superconductivity”, Superconductivity and Magnetism Workshop, SRL, Tokyo, Japan, July 1995.
12. “Local Magnetic-Field Profile in $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$ Single Crystals”, the 6th Symposium of High- T_c superconductors, JAERI, Tokai-mura, Japan, December 1994.
13. “Anisotropic Penetration Depth in $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$ ”, the 5th Symposium of High- T_c superconductors, JAERI, Tokai-mura, Japan, December 1993.

Seminars and Colloquia

14. “Closing the Pseudogap by Zeeman Splitting in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+y}$ at High Magnetic Fields”, Theoretical Division Seminar at Los Alamos National Laboratory, New Mexico, USA, March 2001.
15. “Closing the Pseudogap by Zeeman Splitting in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+y}$ at High Magnetic Fields”, Superconductivity Technology Center Seminar at Los Alamos National Laboratory, New Mexico, USA, December 2000.
16. “Closing the Pseudogap by Zeeman Splitting in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+y}$ at High Magnetic Fields”, ISSP Colloquium at Institute for Solid State Physics, University of Tokyo, Chiba, Japan, November 2000.
17. “On the Spin Origin of the Pseudogap in High- T_c Superconductors”, Novel Physical Systems and Materials Group Seminar at IBM T. J. Watson Research Center, New York, USA, October 2000.
18. “Closing the Pseudogap by Zeeman Splitting in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+y}$ at High Magnetic Fields”, Condensed Matter Physics Seminar at Institute for Theoretical Physics in ETH Zurich, Switzerland, September 2000.
19. “Interlayer Phase Coherence in the Vortex States of Layered Superconductors”, Novel Physical Systems and Materials Group Seminar at IBM T. J. Watson Research Center, New York, USA, August 1999.
20. “Decoupling Transition in the Vortex State of Layered Superconductors”, 32nd Theoretical Physics and Applied Mathematics Seminar at the University of Tokyo, Tokyo, Japan, June 1998.
21. “Microwave Response of Condensed Matter with Energy Gap \sim High- T_c Superconductors and Kondo Semiconductors \sim ”, ISTEC Seminar at Superconductivity Research Laboratory, Tokyo, Japan, September 1995.

PUBLICATION LIST

Journal Articles

1. T. Shibauchi, L. Krusin-Elbaum, G. Blatter, and C. H. Mielke,
“Quantum Melting of a Two-Dimensional Vortex Solid at Ultrahigh Magnetic Fields”,
(submitted).
2. T. Shibauchi, L. Krusin-Elbaum, V. M. Vinokur, B. Argyle, D. Weller, and B. D. Terris,
“Deroughening of a 1D Domain Wall in an Ultrathin Magnetic Film by a Correlated Defect”,
(submitted).
3. T. Shibauchi, L. Krusin-Elbaum, M. Li, M. P. Maley, and P. H. Kes,
“Closing the Pseudogap by Zeeman Splitting in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+y}$ at High Magnetic Fields”,
Phys. Rev. Lett. **86**, 5763–5766 (2001).
4. K. Itaka, T. Shibauchi, M. Yasugaki, T. Tamegai, and S. Okayasu,
“Asymmetric Field Profile in Bose Glass Phase of Irradiated $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$: Loss of Interlayer Coherence
around 1/3 of Matching Field”,
Phys. Rev. Lett. **86**, 5144–5147 (2001).
5. T. Shibauchi, Y. Matsuda, M. B. Gaifullin, and T. Tamegai,
“Comment on ‘Millimeter-Wave Magneto-Optical Determination of the Anisotropy of the Superconducting
Order Parameter in the Molecular Superconductor κ -(BEDT-TTF) $_2\text{Cu}(\text{NCS})_2$ ’”,
Phys. Rev. Lett. **86**, 3452 (2001).
6. L. Krusin-Elbaum*, T. Shibauchi*, B. Argyle, L. Gignac, and D. Weller (**These authors contributed
equally to this work*),
“Stable Ultrahigh-Density Magneto-Optical Recordings Using Introduced Linear Defects”,
Nature **410**, 444–446 (2001).
7. S. Ooi, T. Shibauchi, K. Itaka, N. Okuda, and T. Tamegai,
“Vortex Matter Transition in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+y}$ under Tilted Fields”,
Phys. Rev. B **63**, 020501(R) [Rapid Commun.] (2001).
8. T. Thurn-Albrecht, J. Schotter, G. A. Kästle, N. Emley, T. Shibauchi, L. Krusin-Elbaum, K. Guarini, C.
T. Black, M. T. Tuominen, and T. P. Russell,
“Ultrahigh-Density Nanowire Arrays Grown in Self-Assembled Diblock Copolymer Templates”,
Science **290**, 2126–2129 (2000).
9. N. Morozov, L. Krusin-Elbaum, T. Shibauchi, L. N. Bulaevskii, M. P. Maley, Yu. I. Latyshev, and T.
Yamashita,
“High Field Quasiparticle Tunneling in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+\delta}$: Negative Magnetoresistance in the Supercon-
ducting State”,
Phys. Rev. Lett. **84**, 1784–1787 (2000).
10. K. Itaka, H. Taoka, S. Ooi, T. Shibauchi, and T. Tamegai,
“Evidence for Planar Pinning in Heavily Pb-substituted $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+y}$ Single Crystals”,
Phys. Rev. B **60**, R9951–R9954 [Rapid Commun.] (1999).
11. T. Shibauchi, T. Nakano, M. Sato, T. Kisu, N. Kameda, N. Okuda, S. Ooi, and T. Tamegai,
“Interlayer Phase Coherence in the Vortex Matter Phases of $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+y}$ ”,
Phys. Rev. Lett. **83**, 1010–1013 (1999).
12. S. Ooi, T. Shibauchi, N. Okuda, and T. Tamegai,
“Novel Angular Scaling of Vortex Phase Transitions in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+y}$ ”,
Phys. Rev. Lett. **82**, 4308–4311 (1999).
13. S. Ooi, T. Shibauchi, and T. Tamegai,
“Evolution of Vortex Phase Diagram with Oxygen-Doping in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+y}$ Single Crystals”,
Physica C **302**, 339–345 (1998).

14. T. Shibauchi, M. Sato, S. Ooi, and T. Tamegai,
“Vortex Phase Transition with Decoupling of the Adjacent Layers in the Organic Superconductor κ -(BEDT-TTF)₂Cu[N(CN)₂]Br”,
Phys. Rev. B **57**, R5622–R5625 [Rapid Commun.] (1998).
15. M. Sato, T. Shibauchi, S. Ooi, T. Tamegai, and M. Konczykowski,
“Recoupling of Decoupled Vortex Liquid by Columnar Defects in Bi₂Sr₂CaCu₂O_{8+y}”,
Phys. Rev. Lett. **79**, 3759–3762 (1997).
16. T. Shibauchi, N. Katase, T. Tamegai, K. Uchinokura, T. Takabatake, G. Nakamoto, and A. A. Menovsky,
“Strong Reduction of Quasiparticle Scattering Rate with Gap Formation in CeNiSn”,
Phys. Rev. B **56**, 8277–8281 (1997).
17. T. Shibauchi, M. Sato, A. Mashio, T. Tamegai, H. Mori, S. Tajima, and S. Tanaka,
“Josephson Plasma Resonance in the Mixed State of the Organic Superconductor κ -(BEDT-TTF)₂Cu(NCS)₂”,
Phys. Rev. B **55**, R11977–R11980 [Rapid Commun.] (1997).
18. S. Ooi, T. Tamegai, and T. Shibauchi,
“Anomalous Temperature Dependence of the Peak Effect in Iodine-Intercalated Bi₂Sr₂CaCu₂O_{8+y} Single Crystals”,
Physica C **259**, 280–286 (1996).
19. T. Shibauchi, H. Kitano, A. Maeda, H. Asaoka, H. Takei, I. Shigaki, T. Kimura, K. Kishio, K. Izumi, T. Suzuki, and K. Uchinokura,
“In-Plane Microwave Conductivity and Quasiparticle Scattering Rate of Superconducting High- T_c Cuprates”,
J. Phys. Soc. Jpn. **65**, 3266–3273 (1996).
20. T. Shibauchi, N. Katase, T. Tamegai, and K. Uchinokura,
“Temperature Dependence of Anisotropic Penetration Depth in Under- and Overdoped Bi₂Sr₂CaCu₂O_{8+y}”,
Physica C **264**, 227–232 (1996).
21. H. Kitano, T. Shibauchi, K. Uchinokura, A. Maeda, H. Asaoka, and H. Takei,
“ c -Axis Microwave Conductivity of YBa₂Cu₃O_{7- δ} ”,
Phys. Rev. B **51**, 1401–1404 [Rapid Commun.] (1995).
22. T. Shibauchi, H. Kitano, K. Uchinokura, A. Maeda, T. Kimura, and K. Kishio,
“Anisotropic Penetration Depth in La_{2-x}Sr_xCuO₄”,
Phys. Rev. Lett. **72**, 2263–2266 (1994).
23. T. Shibauchi, A. Maeda, H. Kitano, T. Honda, and K. Uchinokura,
“Microwave Complex Conductivity in Single Crystals of YBa₂Cu₃O₇ and Bi₂Sr₂CaCu₂O_y”,
Physica C **203**, 315–319 (1992).
24. A. Maeda, T. Shibauchi, N. Kondo, K. Uchinokura, and M. Kobayashi,
“Magnetic-Field Penetration Depth and the Lower Critical Field of the Quasi-Two-Dimensional Superconductor Bi₂Sr₂CaCu₂O_y”,
Phys. Rev. B **46**, 14234–14237 (1992).
25. A. Maeda, Y. Kato, T. Shibauchi, Y. Nakajima, H. Watanabe, and K. Uchinokura,
“Tetragonal-to-Orthorhombic Transition and Disappearance of Superconductivity in the Pb-Doped Bi₂Sr₂CuO_y”,
Jpn. J. Appl. Phys. **28**, L1549–L1551 (1989).

Proceedings

26. L. Krusin-Elbaum, T. Shibauchi, M. Li, M. P. Maley, and P. H. Kes,
“On the Spin Origin of the Pseudogap in High- T_c Superconductors” (invited),
3rd International Conference on New Theories, Discoveries, and Applications of Superconductors and
Related Materials (New³SC-3), January 2001, Honolulu, Hawaii, USA:
Physica C (to be published).
27. K. Itaka, M. Yasugaki, T. Shibauchi, T. Tamegai, and S. Okayasu,
“Reduction of Interlayer Coherence around 1/3 of Matching Field in Bose Glass Phase of $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$
with Columnar Defects”,
The 13th International Symposium on Superconductivity (ISS 2000), October 2000, Tokyo, Japan:
Physica C (to be published).
28. N. Kameda, M. Tokunaga, T. Shibauchi, S. Ooi, T. Tamegai and M. Konczykowski,
“Vortex States in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+y}$ with Tilted Columnar Defects Probed by Josephson Plasma Reso-
nance”,
2nd International Symposium on Intrinsic Josephson Effects and Plasma Oscillations in High- T_c Super-
conductors, August 2000, Sendai, Japan:
Physica C (to be published).
29. T. Shibauchi, L. Krusin-Elbaum, L. Gignac, C. T. Black, T. Thurn-Albrecht, T. P. Russell, J. Schotter,
G. A. Kästle, N. Emley, and M. T. Tuominen,
“High Coercivity of Ultra-High Density Ordered Co Nanorod Arrays”,
International Conference on Magnetism 2000 (ICM 2000), August 2000, Recife, Brazil:
J. Magn. Magn. Mater. (to be published).
30. L. Krusin-Elbaum, T. Shibauchi, B. E. Argyle, L. Gignac, T. Zabel, and D. Weller,
“Dynamics of 1D Domain Walls Interacting with Disorder Potential”,
International Conference on Magnetism 2000 (ICM 2000), August 2000, Recife, Brazil:
J. Magn. Magn. Mater. (to be published).
31. N. Morozov, L. Krusin-Elbaum, T. Shibauchi, L. N. Bulaevskii, M. P. Maley, Yu. I. Latyshev, and T.
Yamashita,
“c-Axis Tunneling in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_8$ in Magnetic Fields up to 60 T” (invited),
6th International Conference on Materials and Mechanisms of Superconductivity High-Temperature Su-
perconductors ($\text{M}^2\text{S-HTSC VI}$), February 2000, Houston, USA:
Physica C **341-348**, 1511–1514 (2000).
32. T. Shibauchi, M. Sato, N. Kameda, S. Ooi, T. Tamegai, and M. Konczykowski,
“Interaction between Columnar Defects and Pancake Vortices in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+y}$ Studied by Josephson
Plasma Resonance” (invited),
6th International Conference on Materials and Mechanisms of Superconductivity High-Temperature Su-
perconductors ($\text{M}^2\text{S-HTSC VI}$), February 2000, Houston, USA:
Physica C **341-348**, 973–976 (2000).
33. K. Itaka, H. Taoka, S. Ooi, T. Shibauchi, T. Tamegai, Z. Hiroi, and M. Takano,
“Peak Effect and Vortex Channeling in Heavily Pb-Substituted $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+y}$ with Planar Defects”,
6th International Conference on Materials and Mechanisms of Superconductivity High-Temperature Su-
perconductors ($\text{M}^2\text{S-HTSC VI}$), February 2000, Houston, USA:
Physica C **341-348**, 1265–1266 (2000).
34. T. Tamegai, S. Ooi, K. Itaka, and T. Shibauchi,
“Vortex Matter Phase Transitions under Tilted Fields in Pristine and Pb-Substituted $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+y}$ ”,
6th International Conference on Materials and Mechanisms of Superconductivity High-Temperature Su-
perconductors ($\text{M}^2\text{S-HTSC VI}$), February 2000, Houston, USA:
Physica C **341-348**, 1183–1184 (2000).
35. T. Shibauchi, T. Nakano, M. Sato, T. Kisu, N. Kameda, N. Okuda, S. Ooi, and T. Tamegai,
“Interlayer Phase Coherence in the Vortex Matter Phases of $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+y}$ ”,

- 6th International Conference on Materials and Mechanisms of Superconductivity High-Temperature Superconductors (M²S-HTSC VI), February 2000, Houston, USA:
Physica C **341-348**, 1315–1316 (2000).
36. T. Tamegai, N. Kameda, T. Shibauchi, S. Ooi, and M. Konczykowski,
“Angular Dependence of Josephson Plasma Resonance in Bi₂Sr₂CaCu₂O_{8+y} with Columnar Defects” (invited),
The 12th International Symposium on Superconductivity (ISS '99), October 1999, Morioka, Japan:
Advances in Superconductivity **XII**, 302–307 (2000).
 37. S. Ooi, T. Shibauchi, and T. Tamegai,
“Vortex Avalanches in the Vortex Solid Phase of Bi₂Sr₂CaCu₂O_{8+y}”,
The 22nd International Conference on Low Temperature Physics, August 1999, Espoo and Helsinki, Finland:
Physica B **284-288**, 775–776 (2000).
 38. T. Tamegai, K. Behnia, N. Okuda, S. Ooi, T. Shibauchi, Z. Mao, and Y. Maeno,
“Pairing and Vortex States in Sr₂RuO₄ Studied by Hall Probe Magnetometry”,
The 22nd International Conference on Low Temperature Physics, August 1999, Espoo and Helsinki, Finland:
Physica B **284-288**, 543–544 (2000).
 39. T. Tamegai, N. Kameda, M. Sato, T. Shibauchi, S. Ooi, and M. Konczykowski,
“Enhancement of Interlayer Phase Coherence in the Vortex Liquid State of Bi₂Sr₂CaCu₂O_{8+y} with Columnar Defects”,
International Conference on Physics and Chemistry of Molecular and Oxide Superconductors (MOS '99), July 1999, Stockholm, Sweden:
J. Low Temp. Phys. **117**, 1363–1367 (1999).
 40. K. Itaka, M. Yasugaki, T. Shibauchi, T. Tamegai, and S. Okayasu,
“Novel Asymmetric Critical State in YBa₂Cu₃O_{7-δ} with Columnar Defects”,
International Conference on Physics and Chemistry of Molecular and Oxide Superconductors (MOS '99), July 1999, Stockholm, Sweden:
J. Low Temp. Phys. **117**, 1369–1373 (1999).
 41. S. Belin, T. Shibauchi, K. Behnia, and T. Tamegai,
“Probing the Upper Critical Field of κ -(BEDT-TTF)₂Cu(NCS)₂”,
International Workshop on Exactly Aligned Magnetic Field Effects in Low-Dimensional Superconductors, November 1998, Kyoto, Japan:
J. Supercond. **12**, 497–500 (1999).
 42. T. Shibauchi, T. Nakano, M. Sato, T. Kisu, N. Kameda, N. Okuda, S. Ooi, and T. Tamegai,
“First-Order Decoupling Transition in the Vortex State of Bi₂Sr₂CaCu₂O_{8+y}”,
The 11th International Symposium on Superconductivity (ISS '98), November 1998, Fukuoka, Japan:
Advances in Superconductivity **XI**, 589–592 (1999).
 43. T. Tamegai, M. Sato, N. Kameda, T. Shibauchi, S. Ooi, and M. Konczykowski,
“Nature of Vortex Liquid in Heavy-Ion Irradiated Bi₂Sr₂CaCu₂O_{8+y}”,
The 11th International Symposium on Superconductivity (ISS '98), November 1998, Fukuoka, Japan:
Advances in Superconductivity **XI**, 571–574 (1999).
 44. K. Itaka, H. Taoka, S. Ooi, T. Shibauchi, and T. Tamegai,
“Evidence for Planar Pinning in Heavily Pb-Doped Bi₂Sr₂CaCu₂O_{8+y} Single Crystals”,
The 11th International Symposium on Superconductivity (ISS '98), November 1998, Fukuoka, Japan:
Advances in Superconductivity **XI**, 485–488 (1999).
 45. S. Ooi, T. Tamegai, and T. Shibauchi,
“Angular Dependence of Vortex Phase Diagram in Bi₂Sr₂CaCu₂O_{8+y}”,

- The 10th International Symposium on Superconductivity (ISS '97), October 1997, Gifu, Japan:
Advances in Superconductivity **X**, 465–468 (1998).
46. T. Tamegai, M. Sato, T. Shibauchi, S. Ooi, and M. Konczykowski,
“Vortex Phase Diagram in Heavy-Ion Irradiated $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+y}$ Studied by Josephson Plasma Resonance”,
The 10th International Symposium on Superconductivity (ISS '97), October 1997, Gifu, Japan:
Advances in Superconductivity **X**, 473–476 (1998).
 47. T. Shibauchi, M. Sato, S. Ooi, and T. Tamegai,
“Vortex-Lattice Phase Transition in the Quasi-Two Dimensional Organic Superconductor”,
The 10th International Symposium on Superconductivity (ISS '97), October 1997, Gifu, Japan:
Advances in Superconductivity **X**, 453–456 (1998).
 48. R. Yamada, T. Tamegai, S. Ooi, T. Shibauchi, C. Murayama, and N. Môri,
“Pressure Effect on the Vortex Phase Diagram in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+y}$ ”,
The International Conference on High Pressure Science and Technology, August 1997, Kyoto, Japan:
Rev. High Pressure Sci. Tech. **7** 511–513 (1998).
 49. S. Ooi, T. Tamegai, and T. Shibauchi,
“Vortex Lattice Melting and the Peak Effect in Oblique Field in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+y}$ ”,
5th International Conference on Materials and Mechanisms of Superconductivity High-Temperature Superconductors ($\text{M}^2\text{S-HTSC V}$), February 1997, Beijin, China:
Physica C **282-287**, 1965–1966 (1997).
 50. T. Tamegai, S. Ooi, T. Shibauchi, C. Murayama, and N. Mori,
“Effects of Hydrostatic Pressure and Oxygen Doping on the Vortex Phase Diagram in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+y}$ ”,
5th International Conference on Materials and Mechanisms of Superconductivity High-Temperature Superconductors ($\text{M}^2\text{S-HTSC V}$), February 1997, Beijin, China:
Physica C **282-287**, 2029–2030 (1997).
 51. T. Shibauchi, M. Sato, S. Ooi, T. Tamegai, M. Konczykowski,
“Josephson Plasma Resonance in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+y}$ with Columnar Defects”,
5th International Conference on Materials and Mechanisms of Superconductivity High-Temperature Superconductors ($\text{M}^2\text{S-HTSC V}$), February 1997, Beijin, China:
Physica C **282-287**, 2427–2428 (1997).
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