



Kathryn Moler

Marvin Chodorow Professor and Professor of Applied Physics, of Physics and of Energy Science Engineering

 Curriculum Vitae available Online

CONTACT INFORMATION

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Bio

ACADEMIC APPOINTMENTS

- Professor, Applied Physics
- Professor, Physics
- Professor, Energy Science & Engineering
- Member, Bio-X
- Principal Investigator, Stanford Institute for Materials and Energy Sciences
- Member, Wu Tsai Neurosciences Institute

ADMINISTRATIVE APPOINTMENTS

- Transition Dean, Stanford Doerr School of Sustainability, (2022-2022)
- Vice Provost and Dean of Research, VPDoR, (2018- present)
- Senior Associate Dean for the Natural Sciences, Humanities and Sciences Deans Office, (2016-2018)
- Chair of the Faculty Senate, 47th Senate of the Academic Council, (2015-2016)
- Director, Stanford Nano Shared Facilities, (2008-2016)
- Co-Founder and Director, Center for Probing the Nanoscale, an NSF Nanoscale Science and Engineering Center, (2004-2011)

HONORS AND AWARDS

- Sapp Family University Fellow in Undergraduate Education, Stanford University (2014-)
- Richtmyer Award for "Outstanding Leadership in Physics Education", American Association of Physics Teachers (2011)
- APS Fellow, American Physical Society (2008-)
- SIAM Stanford Student Chapter Professorial Award, Society of Industrial and Applied Mathematicians (2004)
- Packard Fellow, Packard Foundation (2001-2006)
- Presidential Early Career Award for Scientists and Engineers, United States government (2000)
- CAREER Award, National Science Foundation (1999-2003)

- Alfred P. Sloan Research Fellow, Alfred P. Sloan Foundation (1999-2001)
- William L. McMillan Award, UIUC (1999)
- Frederick E. Terman Fellow, Stanford University (1998-2001)
- R.H. Dicke Postdoctoral Fellow, Princeton University (1995-1998)

Teaching

COURSES

2023-24

- Sustainable Energy for Future Presidents: SUSTAIN 101A (Win)

2022-23

- Decision Making for Sustainable Energy: SUSTAIN 101A (Win)

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Eli Fox, Jesse Hoke, Praveen Sriram

Postdoctoral Faculty Sponsor

Nabhanila Nandi

Doctoral Dissertation Advisor (AC)

Logan Bishop-Van Horn, Eli Mueller, Ruby Shi

Publications

PUBLICATIONS

- **Current-phase relations of InAs nanowire Josephson junctions: From interacting to multimode regimes** *PHYSICAL REVIEW B*
Hart, S., Cui, Z., Menard, G., Deng, M., Antipov, A. E., Lutchyn, R. M., Krogstrup, P., Marcus, C. M., Moler, K. A.
2019; 100 (6)
- **Imaging anisotropic vortex dynamics in FeSe** *PHYSICAL REVIEW B*
Zhang, I. P., Palmstrom, J. C., Noad, H., Bishop-Van Horn, L., Iguchi, Y., Cui, Z., Mueller, E., Kirtley, J. R., Fisher, I. R., Moler, K. A.
2019; 100 (2)
- **Modulation of Superconducting Transition Temperature in LaAlO₃/SrTiO₃ by SrTiO₃ Structural Domains** *JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM*
Noad, H., Wittlich, P., Mannhart, J., Moler, K. A.
2019; 32 (4): 821–25
- **Cryogen-free variable temperature scanning SQUID microscope.** *The Review of scientific instruments*
Bishop-Van Horn, L. n., Cui, Z. n., Kirtley, J. R., Moler, K. A.
2019; 90 (6): 063705
- **Micron-scale measurements of low anisotropic strain response of local T-c in Sr₂RuO₄** *PHYSICAL REVIEW B*
Watson, C. A., Gibbs, A. S., Mackenzie, A. P., Hicks, C. W., Moler, K. A.
2018; 98 (9)
- **Observation of signatures of subresolution defects in two-dimensional superconductors with a scanning SQUID** *PHYSICAL REVIEW B*
Noad, H., Watson, C. A., Inoue, H., Kim, M., Sato, H. K., Bell, C., Hwang, H. Y., Kirtley, J. R., Moler, K. A.
2018; 98 (6)
- **Spatially modulated susceptibility in thin film La_{2-x}BaxCuO₄** *PHYSICAL REVIEW B*

- Davis, S. I., Ullah, R. R., Adamo, C., Watson, C. A., Kirtley, J. R., Beasley, M. R., Kivelson, S. A., Moler, K. A.
2018; 98 (1)
- **Spatially modulated magnetic structure of EuS due to the tetragonal domain structure of SrTiO₃** *PHYSICAL REVIEW MATERIALS*
Rosenberg, A. J., Katmis, F., Kirtley, J. R., Gedik, N., Moodera, J. S., Moler, K. A.
2017; 1 (7)
 - **Current-phase relations of few-mode InAs nanowire Josephson junctions** *NATURE PHYSICS*
Spanton, E. M., Deng, M., Vaitiekėnas, S., Krogstrup, P., Nygard, J., Marcus, C. M., Moler, K. A.
2017; 13 (12): 1177-+
 - **Imaging quantum materials** *NATURE MATERIALS*
Moler, K.
2017; 16 (11): 1049-52
 - **Scanning SQUID sampler with 40-ps time resolution** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Cui, Z., Kirtley, J. R., Wang, Y., Kratz, P. A., Rosenberg, A. J., Watson, C. A., Gibson, G. W., Ketchen, M. B., Moler, K. A.
2017; 88 (8): 083703
 - **Determining the vibrations between sensor and sample in SQUID microscopy** *APPLIED PHYSICS LETTERS*
Schiessl, D., Kirtley, J. R., Paulius, L., Rosenberg, A. J., Palmstrom, J. C., Ullah, R. R., Holland, C. M., Fung, Y. K., Ketchen, M. B., Gibson, G. W., Moler, K. A.
2016; 109 (23)
 - **The response of small SQUID pickup loops to magnetic fields** *SUPERCONDUCTOR SCIENCE & TECHNOLOGY*
Kirtley, J. R., Paulius, L., Rosenberg, A. J., Palmstrom, J. C., Schiessl, D., Jermain, C. L., Gibbons, J., Holland, C. M., Fung, Y., Huber, M. E., Ketchen, M. B., Ralph, D. C., Gibson, et al
2016; 29 (12)
 - **Variation in superconducting transition temperature due to tetragonal domains in two-dimensionally doped SrTiO₃** *PHYSICAL REVIEW B*
Noad, H., Spanton, E. M., Nowack, K. C., Inoue, H., Kim, M., Merz, T. A., Bell, C., Hikita, Y., Xu, R., Liu, W., Vailionis, A., Hwang, H. Y., Moler, et al
2016; 94 (17)
 - **Ultrathin two-dimensional superconductivity with strong spin-orbit coupling** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Nam, H., Chen, H., Liu, T., Kim, J., Zhang, C., Yong, J., Lemberger, T. R., Kratz, P. A., Kirtley, J. R., Moler, K., Adams, P. W., MacDonald, A. H., Shih, et al
2016; 113 (38): 10513-10517
 - **Scanning SQUID susceptometers with sub-micron spatial resolution** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Kirtley, J. R., Paulius, L., Rosenberg, A. J., Palmstrom, J. C., Holland, C. M., Spanton, E. M., Schiessl, D., Jermain, C. L., Gibbons, J., Fung, Y. K., Huber, M. E., Ralph, D. C., Ketchen, et al
2016; 87 (9)
 - **Edge transport in the trivial phase of InAs/GaSb** *NEW JOURNAL OF PHYSICS*
Nichele, F., Suominen, H. J., Kjaergaard, M., Marcus, C. M., Sajadi, E., Folk, J. A., Qu, F., Beukman, A. J., de Vries, F. K., van Veen, J., Nadj-Perge, S., Kouwenhoven, L. P., Binh-Minh Nguyen, et al
2016; 18
 - **Magnetic coupling at rare earth ferromagnet/transition metal ferromagnet interfaces: A comprehensive study of Gd/Ni** *SCIENTIFIC REPORTS*
Higgs, T. D., Bonetti, S., Ohldag, H., Banerjee, N., Wang, X. L., Rosenberg, A. J., Cai, Z., Zhao, J. H., Moler, K. A., Robinson, J. W.
2016; 6
 - **Depth resolved domain mapping in tetragonal SrTiO₃ by micro-Laue diffraction** *APPLIED PHYSICS LETTERS*
Merz, T. A., Noad, H., Xu, R., Inoue, H., Liu, W., Hikita, Y., Vailionis, A., Moler, K. A., Hwang, H. Y.
2016; 108 (18)
 - **TOPOLOGICAL MATTER Observation of chiral currents at the magnetic domain boundary of a topological insulator** *SCIENCE*
Wang, Y. H., Kirtley, J. R., Katmis, F., Jarillo-Herrero, P., Moodera, J. S., Moler, K. A.
2015; 349 (6251): 948-952
 - **Nonsinusoidal Current-Phase Relationship in Josephson Junctions from the 3D Topological Insulator HgTe.** *Physical review letters*
Sochnikov, I., Maier, L., Watson, C. A., Kirtley, J. R., Gould, C., Tkachov, G., Hankiewicz, E. M., Brüne, C., Buhmann, H., Molenkamp, L. W., Moler, K. A.

2015; 114 (6): 066801-?

- **Nonsinusoidal Current-Phase Relationship in Josephson Junctions from the 3D Topological Insulator HgTe** *PHYSICAL REVIEW LETTERS*
Sochnikov, I., Maier, L., Watson, C. A., Kirtley, J. R., Gould, C., Tkachov, G., Hankiewicz, E. M., Bruene, C., Buhmann, H., Molenkamp, L. W., Moler, K. A.
2015; 114 (6)
- **Images of Edge Current in InAs/GaSb Quantum Wells.** *Physical review letters*
Spanton, E. M., Nowack, K. C., Du, L., Sullivan, G., Du, R., Moler, K. A.
2014; 113 (2): 026804-?
- **Direct measurement of internal magnetic fields in natural sands using scanning SQUID microscopy.** *Journal of magnetic resonance*
Walbrecker, J. O., Kalisky, B., Grombacher, D., Kirtley, J., Moler, K. A., Knight, R.
2014; 242: 10-17
- **Locally enhanced conductivity due to the tetragonal domain structure in LaAlO₃/SrTiO₃ heterointerfaces.** *Nature materials*
Kalisky, B., Spanton, E. M., Noad, H., Kirtley, J. R., Nowack, K. C., Bell, C., Sato, H. K., Hosoda, M., Xie, Y., Hikita, Y., Woltmann, C., Pfanzelt, G., Jany, et al
2013; 12 (12): 1091-1095
- **Imaging currents in HgTe quantum wells in the quantum spin Hall regime.** *Nature materials*
Nowack, K. C., Spanton, E. M., Baenninger, M., König, M., Kirtley, J. R., Kalisky, B., Ames, C., Leubner, P., Brüne, C., Buhmann, H., Molenkamp, L. W., Goldhaber-Gordon, D., Moler, et al
2013; 12 (9): 787-791
- **Imaging currents in HgTe quantum wells in the quantum spin Hall regime.** *Nature materials*
Nowack, K. C., Spanton, E. M., Baenninger, M., König, M., Kirtley, J. R., Kalisky, B., Ames, C., Leubner, P., Brüne, C., Buhmann, H., Molenkamp, L. W., Goldhaber-Gordon, D., Moler, et al
2013; 12 (9): 787-791
- **Direct measurement of current-phase relations in superconductor/topological insulator/superconductor junctions.** *Nano letters*
Sochnikov, I., Bestwick, A. J., Williams, J. R., Lippman, T. M., Fisher, I. R., Goldhaber-Gordon, D., Kirtley, J. R., Moler, K. A.
2013; 13 (7): 3086-3092
- **Direct Measurement of Current-Phase Relations in Superconductor/Topological Insulator/Superconductor Junctions** *NANO LETTERS*
Sochnikov, I., Bestwick, A. J., Williams, J. R., Lippman, T. M., Fisher, I. R., Godhaber-Gordon, D., Kirtley, J. R., Moler, K. A.
2013; 13 (7): 3086-3092
- **Advanced sensors for scanning SQUID microscopy** *IEEE 14th International Superconductive Electronics Conference (ISEC)*
Kirtley, J. R., Gibson, G. W., Fung, Y. K., KLOPFER, B., Nowack, K., Kratz, P. A., Mol, J., Arpes, J., Forooghi, F., Huber, M. E., Bluhm, H., Moler, K. A.
IEEE.2013
- **Agreement between local and global measurements of the London penetration depth** *PHYSICA C-SUPERCONDUCTIVITY AND ITS APPLICATIONS*
Lippman, T. M., Kalisky, B., Kim, H., Tanatar, M. A., Bud'ko, S. L., Canfield, P. C., Prozorov, R., Moler, K. A.
2012; 483: 91-93
- **Gate-tuned superfluid density at the superconducting LaAlO₃/SrTiO₃ interface** *PHYSICAL REVIEW B*
Bert, J. A., Nowack, K. C., Kalisky, B., Noad, H., Kirtley, J. R., Bell, C., Sato, H. K., Hosoda, M., Hikita, Y., Hwang, H. Y., Moler, K. A.
2012; 86 (6)
- **Scanning Probe Manipulation of Magnetism at the LaAlO₃/SrTiO₃ Heterointerface** *NANO LETTERS*
Kalisky, B., Bert, J. A., Bell, C., Xie, Y., Sato, H. K., Hosoda, M., Hikita, Y., Hwang, H. Y., Moler, K. A.
2012; 12 (8): 4055-4059
- **Scanning SQUID susceptometry of a paramagnetic superconductor** *PHYSICAL REVIEW B*
Kirtley, J. R., Kalisky, B., Bert, J. A., Bell, C., Kim, M., Hikita, Y., Hwang, H. Y., Ngai, J. H., Segal, Y., Walker, F. J., Ahn, C. H., Moler, K. A.
2012; 85 (22)
- **Critical thickness for ferromagnetism in LaAlO₃/SrTiO₃ heterostructures** *NATURE COMMUNICATIONS*
Kalisky, B., Bert, J. A., Klopfer, B. B., Bell, C., Sato, H. K., Hosoda, M., Hikita, Y., Hwang, H. Y., Moler, K. A.
2012; 3
- **Calculation of the effect of random superfluid density on the temperature dependence of the penetration depth** *PHYSICAL REVIEW B*

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- Lippman, T. M., Moler, K. A.
2012; 85 (10)
- **Fluxoid fluctuations in mesoscopic superconducting rings** *PHYSICAL REVIEW B*
Bert, J. A., Koshnick, N. C., Bluhm, H., Moler, K. A.
2011; 84 (13)
 - **Pattern-Free Growth of Carbon Nanotube Tips for Scanning Probe Microscopy** *NANOSCIENCE AND NANOTECHNOLOGY LETTERS*
Yenilmez, E., Zhang, H., Zhang, L., Deng, Z., Moler, K. A.
2011; 3 (5): 669-673
 - **Direct imaging of the coexistence of ferromagnetism and superconductivity at the LaAlO₃/SrTiO₃ interface** *NATURE PHYSICS*
Bert, J. A., Kalisky, B., Bell, C., Kim, M., Hikita, Y., Hwang, H. Y., Moler, K. A.
2011; 7 (10): 767-771
 - **Behavior of vortices near twin boundaries in underdoped Ba(Fe_{1-x}Cox)(₂)As-₂** *PHYSICAL REVIEW B*
Kalisky, B., Kirtley, J. R., Analytis, J. G., Chu, J., Fisher, I. R., Moler, K. A.
2011; 83 (6)
 - **Local Measurement of the Superfluid Density in the Pnictide Superconductor Ba(Fe_{1-x}Cox)(₂)As-₂ across the Superconducting Dome** *PHYSICAL REVIEW LETTERS*
Luan, L., Lippman, T. M., Hicks, C. W., Bert, J. A., Auslaender, O. M., Chu, J., Analytis, J. G., Fisher, I. R., Moler, K. A.
2011; 106 (6)
 - **HIGH-TEMPERATURE SUPERCONDUCTIVITY How the cuprates hid their stripes** *NATURE*
Moler, K. A.
2010; 468 (7324): 643-644
 - **Limits on superconductivity-related magnetization in Sr₂RuO₄ and PrOs₄Sb₁₂ from scanning SQUID microscopy** *PHYSICAL REVIEW B*
Hicks, C. W., Kirtley, J. R., Lippman, T. M., Koshnick, N. C., Huber, M. E., Maeno, Y., Yuhasz, W. M., Maple, M. B., Moler, K. A.
2010; 81 (21)
 - **Meissner response of a bulk superconductor with an embedded sheet of reduced penetration depth** *PHYSICAL REVIEW B*
Kirtley, J. R., Kalisky, B., Luan, L., Moler, K. A.
2010; 81 (18)
 - **Stripes of increased diamagnetic susceptibility in underdoped superconducting Ba(Fe(1-x)Cox)(₂)As-₂ single crystals: Evidence for an enhanced superfluid density at twin boundaries** *PHYSICAL REVIEW B*
Kalisky, B., Kirtley, J. R., Analytis, J. G., Chu, J., Vailionis, A., Fisher, I. R., Moler, K. A.
2010; 81 (18)
 - **Local measurement of the penetration depth in the pnictide superconductor Ba(Fe_{0.95}Co_{0.05})(₂)As-₂** *PHYSICAL REVIEW B*
Luan, L., Auslaender, O. M., Lippman, T. M., Hicks, C. W., Kalisky, B., Chu, J., Analytis, J. G., Fisher, I. R., Kirtley, J. R., Moler, K. A.
2010; 81 (10)
 - **Sequential vortex hopping in an array of artificial pinning centers** *PHYSICAL REVIEW B*
Keay, J. C., Larson, P. R., Hobbs, K. L., Johnson, M. B., Kirtley, J. R., Auslaender, O. M., Moler, K. A.
2009; 80 (16)
 - **Evidence for a Nodal Energy Gap in the Iron-Pnictide Superconductor LaFePO from Penetration Depth Measurements by Scanning SQUID Susceptometry** *PHYSICAL REVIEW LETTERS*
Hicks, C. W., Lippman, T. M., Huber, M. E., Analytis, J. G., Chu, J., Erickson, A. S., Fisher, I. R., Moler, K. A.
2009; 103 (12)
 - **Spinlike Susceptibility of Metallic and Insulating Thin Films at Low Temperature** *PHYSICAL REVIEW LETTERS*
Bluhm, H., Bert, J. A., Koshnick, N. C., Huber, M. E., Moler, K. A.
2009; 103 (2)
 - **Magnetic force microscopy study of interlayer kinks in individual vortices in the underdoped cuprate superconductor YBa₂Cu₃O_{6+x}** *PHYSICAL REVIEW B*
Luan, L., Auslaender, O. M., Bonn, D. A., Liang, R., Hardy, W. N., Moler, K. A.

2009; 79 (21)

- **Dynamics of single vortices in grain boundaries: I-V characteristics on the femtovolt scale** *APPLIED PHYSICS LETTERS*
Kalisky, B., Kirtley, J. R., Nowadnick, E. A., Dinner, R. B., Zeldov, E., Ariando, Wenderich, S., Hilgenkamp, H., Feldmann, D. M., Moler, K. A.
2009; 94 (20)
- **Persistent Currents in Normal Metal Rings** *PHYSICAL REVIEW LETTERS*
Bluhm, H., Koshnick, N. C., Bert, J. A., Huber, M. E., Moler, K. A.
2009; 102 (13)
- **Mott insulator phases and first-order melting in Bi₂Sr₂CaCu₂O_{8+δ} crystals with periodic surface holes** *PHYSICAL REVIEW B*
Goldberg, S., Segev, Y., Myasoedov, Y., Gutman, I., Avraham, N., Rappaport, M., Zeldov, E., Tamegai, T., Hicks, C. W., Moler, K. A.
2009; 79 (6)
- **Limits on the Superconducting Order Parameter in NdFeAsO_{1-x}F_y from Scanning SQUID Microscopy** *JOURNAL OF THE PHYSICAL SOCIETY OF JAPAN*
Hicks, C. W., Lippman, T. M., Huber, M. E., Ren, Z., Yang, J., Zhao, Z., Moler, K. A.
2009; 78 (1)
- **Mechanics of individual isolated vortices in a cuprate superconductor** *NATURE PHYSICS*
Auslaender, O. M., Luan, L., Straver, E. W., Hoffman, J. E., Koshnick, N. C., Zeldov, E., Bonn, D. A., Liang, R., Hardy, W. N., Moler, K. A.
2009; 5 (1): 35-39
- **A terraced scanning superconducting quantum interference device susceptometer with submicron pickup loops** *APPLIED PHYSICS LETTERS*
Koshnick, N. C., Huber, M. E., Bert, J. A., Hicks, C. W., Large, J., Edwards, H., Moler, K. A.
2008; 93 (24)
- **Scanning SQUID microscopy on polycrystalline SmFeAsO_{0.85} and NdFeAsO_{0.94}F_{0.06}** *JOURNAL OF THE PHYSICAL SOCIETY OF JAPAN*
Hicks, C. W., Lippman, T. M., Moler, K. A., Huber, M. E., Ren, Z., Zhao, Z.
2008; 77: 87-90
- **Controlled manipulation of individual vortices in a superconductor** *APPLIED PHYSICS LETTERS*
Straver, E. W., Hoffman, J. E., Auslaender, O. M., Rugar, D., Moler, K. A.
2008; 93 (17)
- **Gradiometric micro-SQUID susceptometer for scanning measurements of mesoscopic samples** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Huber, M. E., Koshnick, N. C., Bluhm, H., Archuleta, L. J., Azua, T., Bjornsson, P. G., Gardner, B. W., Halloran, S. T., Lucero, E. A., Moler, K. A.
2008; 79 (5)
- **Two-dimensional vortex behavior in highly underdoped YBa₂Cu₃O_{6+x} observed by scanning Hall probe microscopy** *PHYSICAL REVIEW B*
Guikema, J. W., Bluhm, H., Bonn, D. A., Liang, R., Hardy, W. N., Moler, K. A.
2008; 77 (10)
- **Dissipative cryogenic filters with zero dc resistance** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Bluhm, H., Moler, K. A.
2008; 79 (1)
- **Fluctuation superconductivity in mesoscopic aluminum rings** *SCIENCE*
Koshnick, N. C., Bluhm, H., Huber, M. E., Moler, K. A.
2007; 318 (5855): 1440-1443
- **Moment switching in nanotube magnetic force probes** *NANOTECHNOLOGY*
Kirtley, J. R., Deng, Z., Luan, L., Yenilmez, E., Dai, H., Moler, K. A.
2007; 18 (46)
- **Upper limit on spontaneous supercurrents in Sr₂RuO₄** *PHYSICAL REVIEW B*
Kirtley, J. R., Kallin, C., Hicks, C. W., Kim, E., Liu, Y., Moler, K. A., Maeno, Y., Nelson, K. D.
2007; 76 (1)
- **Enhanced current flow through meandering grain boundaries in YBa₂Cu₃O_{7-δ} films** *APPLIED PHYSICS LETTERS*
Dinner, R. B., Moler, K. A., Beasley, M. R., Feldmann, D. M.

2007; 90 (21)

- **Imaging ac losses in superconducting films via scanning Hall probe microscopy** *PHYSICAL REVIEW B*
Dinner, R. B., Moler, K. A., Feldmann, D. M., Beasley, M. R.
2007; 75 (14)
- **Noise characteristics of 100 nm scale GaAs/AlxGa1-xAs scanning Hall probes** *APPLIED PHYSICS LETTERS*
Hicks, C. W., Luan, L., Moler, K. A., Zeldov, E., Shtrikman, H.
2007; 90 (13)
- **Magnetic response of mesoscopic superconducting rings with two order parameters** *PHYSICAL REVIEW LETTERS*
Bluhm, H., Koshnick, N. C., Huber, M. E., Moler, K. A.
2006; 97 (23)
- **Power law resistivity behavior in 2D superconductors across the magnetic field-tuned superconductor-insulator transition** *EUROPHYSICS LETTERS*
Sambandamurthy, G., Johansson, A., Peled, E., Shahar, D., Bjoernsson, P. G., Moler, K. A.
2006; 75 (4): 611-617
- **Nanotube manipulation with focused ion beam** *APPLIED PHYSICS LETTERS*
Deng, Z. F., Yenilmez, E., Reilein, A., Leu, J., DAI, H. J., Moler, K. A.
2006; 88 (2)
- **Scanning Hall probe imaging of ErNi2B2C** *PHYSICAL REVIEW B*
Bluhm, H., Sebastian, S. E., Guikema, J. W., Fisher, I. R., Moler, K. A.
2006; 73 (1)
- **Cryogenic scanning Hall-probe microscope with centimeter scan range and submicron resolution** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Dinner, R. B., Beasley, M. R., Moler, K. A.
2005; 76 (10)
- **Scanning magnetic imaging of Sr2RuO4** *PHYSICAL REVIEW B*
Bjornsson, P. G., Maeno, Y., Huber, M. E., Moler, K. A.
2005; 72 (1)
- **Metal-coated carbon nanotube tips for magnetic force microscopy** *APPLIED PHYSICS LETTERS*
Deng, Z. F., Yenilmez, E., Leu, J., Hoffman, J. E., Straver, E. W., DAI, H. J., Moler, K. A.
2004; 85 (25): 6263-6265
- **A scanning SQUID microscope in a dilution refrigerator** *23rd International Conference on Low Temperature Physics (LT23)*
Bjornsson, P. G., Huber, M. E., Moler, K. A.
ELSEVIER SCIENCE BV.2003: 1491-1492
- **Vortex-antivortex annihilation in underdoped YBa2Cu3O6.354** *23rd International Conference on Low Temperature Physics (LT23)*
Gardner, B. W., Wynn, J. C., Bonn, D. A., Liang, R. X., Hardy, W. N., Moler, K. A.
ELSEVIER SCIENCE BV.2003: 725-726
- **Preparation and characterization of homogeneous YBCO single crystals with doping level near the SC-AFM boundary** *PHYSICA C-SUPERCONDUCTIVITY AND ITS APPLICATIONS*
Liang, R., Bonn, D. A., Hardy, W. N., Wynn, J. C., Moler, K. A., Lu, L., LaRochelle, S., Zhou, L., Greven, M., Lurio, L., Mochrie, S. G.
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- **Manipulation of single vortices in YBa2Cu3O6.354 with a locally applied magnetic field** *APPLIED PHYSICS LETTERS*
Gardner, B. W., Wynn, J. C., Bonn, D. A., Liang, R. X., Hardy, W. N., Kirtley, J. R., Kogan, V. G., Moler, K. A.
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- **A limit on spin-charge separation in high-T-c superconductors from the absence of a vortex-memory effect** *NATURE*
Bonn, D. A., Wynn, J. C., Gardner, B. W., Lin, Y. J., Liang, R., Hardy, W. N., Kirtley, J. R., Moler, K. A.
2001; 414 (6866): 887-889
- **Limits on spin-charge separation from h/2e fluxoids in very underdoped YBa2Cu3O6+x** *PHYSICAL REVIEW LETTERS*
Wynn, J. C., Bonn, D. A., Gardner, B. W., Lin, Y. J., Liang, R. X., Hardy, W. N., Kirtley, J. R., Moler, K. A.

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