

# Beena Kalisky

## List of Publications by Year in descending order

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73  
papers

2,430  
citations

394421

19  
h-index

197818

49  
g-index

75  
all docs

75  
docs citations

75  
times ranked

2983  
citing authors

#	ARTICLE	IF	CITATIONS
1	Nanopatterning of oxide 2-dimensional electron systems using low-temperature ion milling. Nanotechnology, 2022, 33, 085301.	2.6	3
2	Visualizing Current in Superconducting Networks. Physical Review Applied, 2022, 17, .	3.8	0
3	Studying Quantum Materials with Scanning SQUID Microscopy. Annual Review of Condensed Matter Physics, 2022, 13, 385-405.	14.5	17
4	Anomalous transport in high-mobility superconducting SrTiO <sub>3</sub> thin films. Science Advances, 2022, 8, .	10.3	5
5	Current Mapping of Amorphous LaAlO <sub>3</sub> /SrTiO <sub>3</sub> near the Metal-Insulator Transition. ACS Applied Electronic Materials, 2022, 4, 3421-3427.	4.3	1
6	Quasi-two-dimensional electron gas at the oxide interfaces for topological quantum physics. Europhysics Letters, 2021, 133, 17001.	2.0	10
7	Non-universal current flow near the metal-insulator transition in an oxide interface. Nature Communications, 2021, 12, 3311.	12.8	9
8	Unveiling unconventional magnetism at the surface of Sr <sub>2</sub> RuO <sub>4</sub> . Nature Communications, 2021, 12, 5792.	12.8	11
9	Magnetism and Conductivity Along Structural Domain Walls of SrTiO <sub>3</sub> . Journal of Superconductivity and Novel Magnetism, 2020, 33, 195-197.	1.8	1
10	Ferroelectric Exchange Bias Affects Interfacial Electronic States. Advanced Materials, 2020, 32, e2000216.	21.0	10
11	dc SQUID Design with Femtotesla Sensitivity for Quantum-Ready Readouts. Physical Review Applied, 2020, 14, .	3.8	4
12	Sensitive Readout for Microfluidic High-Throughput Applications using Scanning SQUID Microscopy. Scientific Reports, 2020, 10, 1573.	3.3	9
13	Scanning SQUID microscopy in a cryogen-free cooler. Review of Scientific Instruments, 2019, 90, 053702.	1.3	14
14	Strain-tunable magnetism at oxide domain walls. Nature Physics, 2019, 15, 269-274.	16.7	65
15	Scanning SQUID View of Oxide Interfaces. Advanced Materials, 2018, 30, e1706653.	21.0	12
16	Electron Mobility in $\text{AlO}_3/\text{AlO}_x/\text{AlO}_3$ Heterostructures. Physical Review Applied, 2018, 9, .	3.8	39
17	Improving the sensitivity of scanning probe microscopy with mechanical vibrations. Applied Physics Letters, 2018, 113, 173101.	3.3	1
18	Scanning SQUID measurements of oxide interfaces. , 2018, , 225-242.		0

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19	Local view of superconducting fluctuations. Applied Physics Letters, 2018, 112, .	3.3	9
20	Imaging quantum fluctuations near criticality. Nature Physics, 2018, 14, 1205-1210.	16.7	14
21	Large-scale modulation in the superconducting properties of thin films due to domains in the SrTiO <sub>3</sub> substrate. Physical Review B, 2017, 95, .	3.2	8
22	Imaging and tuning polarity at SrTiO <sub>3</sub> domain walls. Nature Materials, 2017, 16, 1203-1208.	27.5	68
23	Scanning SQUID Study of Vortex Manipulation by Local Contact. Journal of Visualized Experiments, 2017, .	0.3	0
24	Current-induced nonuniform enhancement of sheet resistance in Ar <sup>+</sup> -irradiated SrTiO <sub>3</sub> . Physical Review B, 2017, 95, .	3.2	3
25	Vortex configuration in the presence of local magnetic field and locally applied stress. Physica C: Superconductivity and Its Applications, 2017, 533, 114-117.	1.2	1
26	Anisotropic Transport at the LaAlO <sub>3</sub> /SrTiO <sub>3</sub> Interface Explained by Microscopic Imaging of Channel-Flow over SrTiO <sub>3</sub> Domains. ACS Applied Materials & Interfaces, 2016, 8, 12514-12519.	8.0	42
27	The response of an individual vortex to local mechanical contact. Novel Superconducting Materials, 2016, 2, .	0.8	0
28	Mechanical Control of Individual Superconducting Vortices. Nano Letters, 2016, 16, 1626-1630.	9.1	56
29	Defect-Free Carbon Nanotube Coils. Nano Letters, 2016, 16, 2152-2158.	9.1	20
30	Optical Study of Tetragonal Domains in LaAlO <sub>3</sub> /SrTiO <sub>3</sub> . Journal of Superconductivity and Novel Magnetism, 2015, 28, 1017-1020.	1.8	16
31	Direct measurement of internal magnetic fields in natural sands using scanning SQUID microscopy. Journal of Magnetic Resonance, 2014, 242, 10-17.	2.1	10
32	Locally enhanced conductivity due to the tetragonal domain structure in LaAlO <sub>3</sub> /SrTiO <sub>3</sub> heterointerfaces. Nature Materials, 2013, 12, 1091-1095.	27.5	172
33	Imaging currents in HgTe quantum wells in the quantum spin Hall regime. Nature Materials, 2013, 12, 787-791.	27.5	230
34	Gate-tuned superfluid density at the superconducting LaAlO <sub>3</sub> /SrTiO <sub>3</sub> interface. Physical Review B, 2012, 86, .	3.2	94
35	Scanning Probe Manipulation of Magnetism at the LaAlO <sub>3</sub> /SrTiO <sub>3</sub> Heterointerface. Nano Letters, 2012, 12, 4055-4059.	9.1	43
36	Agreement between local and global measurements of the London penetration depth. Physica C: Superconductivity and Its Applications, 2012, 483, 91-93.	1.2	7

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37	Critical thickness for ferromagnetism in LaAlO <sub>3</sub> /SrTiO <sub>3</sub> heterostructures. Nature Communications, 2012, 3, 922.	12.8	186
38	Scanning SQUID susceptometry of a paramagnetic superconductor. Physical Review B, 2012, 85, . Behavior of vortices near twin boundaries in underdoped Ba(Fe<math>x</math>Tl)O<math>Q</math>. 1.0.784314 rgBT /Overlock 10 Tf 50 687 Td (xm	3.2	46
39		3.2	71
40	Direct imaging of the coexistence of ferromagnetism and superconductivity at the LaAlO <sub>3</sub> /SrTiO <sub>3</sub> interface. Nature Physics, 2011, 7, 767-771.	16.7	765
41	Publisher's Note: Meissner response of a bulk superconductor with an embedded sheet of reduced penetration depth [Phys. Rev. B, 184514 (2010)]. Physical Review B, 2010, 81, .	3.2	0
42	Meissner response of a bulk superconductor with an embedded sheet of reduced penetration depth. Physical Review B, 2010, 81, .	3.2	17
43	Stripes of increased diamagnetic susceptibility in underdoped superconducting xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mtext>Ba</mml:mtext><mml:msub><mml:mrow><mml:mrow><mml:mo>( </mml:mo><mml:mrow>	3.2	65
44	Local measurement of the penetration depth in the pnictide superconductor xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mtext>Ba</mml:mtext><mml:msub><mml:mrow><mml:mrow><mml:mo>( </mml:mo><mml:mrow>	3.2	82
45	Dynamics of single vortices in grain boundaries: I-V characteristics on the femtovolt scale. Applied Physics Letters, 2009, 94, .	3.3	25
46	Oscillatory magnetic relaxation in Bi <sub>2</sub> Sr <sub>2</sub> CaCu <sub>2</sub> O <sub>8</sub> + $\delta$ . Physica C: Superconductivity and Its Applications, 2008, 468, 280-283.	1.2	4
47	Spatiotemporal Vortex Matter Oscillations in Bi <sub>2</sub> Sr <sub>2</sub> CaCu <sub>2</sub> O <sub>8</sub> + $\delta$ Crystals. Physical Review Letters, 2007, 98, 017001.	7.8	8
48	Dynamic Order-to-Metastable-Disorder Vortex Matter Transition in Bi <sub>2</sub> Sr <sub>2</sub> CaCu <sub>2</sub> O <sub>8</sub> + $\delta$ . Physical Review Letters, 2007, 98, 107001.	7.8	12
49	Distributed injection of transient vortex states in a prism-shaped Bi <sub>2</sub> Sr <sub>2</sub> CaCu <sub>2</sub> O <sub>8</sub> + $\delta$ crystal. Physica C: Superconductivity and Its Applications, 2007, 460-462, 1210-1212.	1.2	0
50	Oscillating flux instability in vortex matter. Physica C: Superconductivity and Its Applications, 2007, 460-462, 1247-1248.	1.2	1
51	"Flux Waves"™ in Bi <sub>2</sub> Sr <sub>2</sub> CaCu <sub>2</sub> O <sub>8</sub> + $\delta$ . AIP Conference Proceedings, 2006, , .	0.4	0
52	Effects of sample size on the second magnetization peak in Bi <sub>2</sub> Sr <sub>2</sub> CaCu <sub>2</sub> O <sub>8</sub> + $\delta$ at low temperatures. Pramana - Journal of Physics, 2006, 66, 141-147.	1.8	2
53	Time dependent electric field and E-I curves in Bi-2223 tapes carrying DC currents and exposed to perpendicular AC magnetic fields. Journal of Physics: Conference Series, 2006, 43, 572-575.	0.4	3
54	Flux-Flow Resistivity Anisotropy in the Instability Regime of the a-b Plane of Epitaxial Superconducting YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7</sub> - $\delta$ Thin Films. Physical Review Letters, 2006, 97, 067003.	7.8	15

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55	Magnetic relaxation near the order-disorder vortex phase transition in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_8+\hat{1}$ : Effects of annealing of transient vortex states. <i>Physical Review B</i> , 2006, 73, .	3.2	3
56	I-V Curves of BSCCO Tape Carrying DC Current Exposed to Perpendicular and Parallel AC Fields. <i>IEEE Transactions on Applied Superconductivity</i> , 2005, 15, 2891-2894.	1.7	6
57	Revealing the vortex order-disorder phase transition in small $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_8+\hat{1}$ crystals. <i>Physical Review B</i> , 2005, 72, .	3.2	6
58	Crossover of pinning mechanism in $\text{La}_{1.85}\text{Sr}_{0.15}\text{CuO}_4$ crystals. <i>Journal of Applied Physics</i> , 2005, 97, 10B109.	2.5	1
59	Effects of sample size on magnetic properties of $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_8+\hat{1}$ . <i>Journal of Applied Physics</i> , 2005, 97, 10B304.	2.5	0
60	Estimation of the critical current of BSCCO coils based on the field dependent $I\hat{e}V$ curves of BSCCO tapes. <i>Physica C: Superconductivity and Its Applications</i> , 2004, 401, 222-226.	1.2	12
61	$I\hat{e}V$ curves of $\text{Y}\hat{a}\hat{e}\text{Ba}\hat{e}\text{Cu}\hat{e}\text{O}$ microbridges in the flux flow regime. <i>Physica C: Superconductivity and Its Applications</i> , 2004, 401, 273-276.	1.2	5
62	Accelerated magnetic relaxation of transient disordered vortex states in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_8+\hat{1}$ . <i>Physica C: Superconductivity and Its Applications</i> , 2004, 408-410, 384-385.	1.2	1
63	Vortex order $\hat{e}$ disorder transition in relaxation and field-sweep measurements. <i>Physica C: Superconductivity and Its Applications</i> , 2004, 408-410, 382-383.	1.2	1
64	Magneto-Optical Investigation of the Vortex Order-Disorder Phase Transition in BSCCO. , 2004, , 111-118.		0
65	Magneto-Optical Measurements of the Lifetime Spectrum of Transient Vortex States in BSCCO. , 2004, , 87-94.		0
66	Dynamics of the second magnetization peak in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_8+\hat{1}$ . <i>Physica C: Superconductivity and Its Applications</i> , 2003, 388-389, 731-732.	1.2	3
67	Coexisting ordered and disordered vortex phases in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_8+\hat{1}$ . <i>Physica C: Superconductivity and Its Applications</i> , 2003, 388-389, 737-738.	1.2	2
68	Magneto-optical investigation of $\hat{e}$ supercooled $\hat{e}$ disordered vortex states in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_8+\hat{1}$ . <i>Physica C: Superconductivity and Its Applications</i> , 2003, 388-389, 695-696.	1.2	2
69	Annealing of transient vortex states near the order-disorder phase transition in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_8+\hat{1}$ . <i>Physical Review B</i> , 2003, 68, .	3.2	21
70	Nonequilibrium order-disorder vortex transitions in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_8+\hat{1}$ . <i>Physical Review B</i> , 2003, 67, .	3.2	19
71	Dynamics of transient disordered vortex states in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_8+\hat{1}$ . <i>Physical Review B</i> , 2003, 68, .	3.2	20
72	Time evolution of the second magnetization peak in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_8+\hat{1}$ . <i>Journal of Applied Physics</i> , 2003, 93, 8659-8661.	2.5	8

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73	Magneto-optical imaging of transient vortex states in superconductors. Journal of Applied Physics, 2001, 89, 7481-7483.	2.5	16