John Kirtley

List of Publications by Year in descending order

38 papers	3,084 citations	361388 20 h-index	315719 38 g-index
39 all docs	39 docs citations	39 times ranked	2567 citing authors

#	Article	IF	Citations
1	Pairing Symmetry and Flux Quantization in a Tricrystal Superconducting Ring ofYBa2Cu3O7â^Î´. Physical Review Letters, 1994, 73, 593-596.	7.8	953
2	Highâ€resolution scanning SQUID microscope. Applied Physics Letters, 1995, 66, 1138-1140.	3.3	346
3	Imaging currents in HgTe quantum wells in the quantum spin Hall regime. Nature Materials, 2013, 12, 787-791.	27.5	230
4	Upper limit on spontaneous supercurrents in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mi mathvariant="normal">Sr</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mi mathvariant="normal">Ru</mml:mi><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>4</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2007, 73, .	3.2	194
5	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Sr</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml:msub><mml:mrow><mml:mtext>PrOs</mml:mtext></mml:mrow><mml:mn>4</mml:mn></mml:mrow></mml:math>. Physical Review B, 2010, 81, .	3.2	146
6	SCANNING SQUID MICROSCOPY. Annual Review of Materials Research, 1999, 29, 117-148.	5.5	145
7	Fundamental studies of superconductors using scanning magnetic imaging. Reports on Progress in Physics, 2010, 73, 126501.	20.1	125
8	Nonsinusoidal Current-Phase Relationship in Josephson Junctions from the 3D Topological Insulator HgTe. Physical Review Letters, 2015, 114, 066801.	7.8	99
9	Gate-tuned superfluid density at the superconducting LaAlO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>/SrTiO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>interface. Physical Review B, 2012, 86, .	3.2	94
10	Point-contact spectroscopy of superconductingURu2Si2. Physical Review B, 1992, 46, 5826-5829.	3.2	89
11	Scanning SQUID susceptometers with sub-micron spatial resolution. Review of Scientific Instruments, 2016, 87, 093702.	1.3	86
12	Stripes of increased diamagnetic susceptibility in underdoped superconducting<mml:math 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> Physical Review B, 2010, 81, .	3.2	65
13	Scanning superconducting quantum interference device susceptometry. Review of Scientific Instruments, 2001, 72, 2361-2364.	1.3	64
14	Direct Measurement of Current-Phase Relations in Superconductor/Topological Insulator/Superconductor Junctions. Nano Letters, 2013, 13, 3086-3092.	9.1	55
15	Variable sample temperature scanning superconducting quantum interference device microscope. Applied Physics Letters, 1999, 74, 4011-4013.	3.3	52
16	Ultrathin two-dimensional superconductivity with strong spinâ€“orbit coupling. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 10513-10517.	7.1	48
17	Scanning SQUID susceptometry of a paramagnetic superconductor. Physical Review B, 2012, 85, .	3.2	46
18	Magnetic Imaging of Pearl Vortices in Artificially Layered(Ba0.9Nd0.1CuO2+x)m/(CaCuO2)nSystems. Physical Review Letters, 2004, 92, 157006.	7.8	38

#	Article	IF	Citations
19	Symmetry of the gap in superconductingURu2Si2. Physical Review B, 1993, 47, 509-512.	3.2	29
20	Scanning superconducting quantum interference device microscope in a dilution refrigerator. Review of Scientific Instruments, 2001, 72, 4153-4158.	1.3	26
21	Magnetic fields above the superconducting ferromagnet UCoGe. Physical Review B, 2014, 90, .	3.2	18
22	Observation of chiral currents at the magnetic domain boundary of a topological insulator. Science, 2015, 349, 948-952.	12.6	15
23	A micro-SQUID with dispersive readout for magnetic scanning microscopy. Applied Physics Letters, 2018, 112, .	3.3	15
24	Imaging anisotropic vortex dynamics in FeSe. Physical Review B, 2019, 100, .	3.2	15
25	Scanning SQUID sampler with 40-ps time resolution. Review of Scientific Instruments, 2017, 88, 083703.	1.3	13
26	Cryogen-free variable temperature scanning SQUID microscope. Review of Scientific Instruments, 2019, 90, 063705.	1.3	13
27	The response of small SQUID pickup loops to magnetic fields. Superconductor Science and Technology, 2016, 29, 124001.	3.5	12
28	Moment switching in nanotube magnetic force probes. Nanotechnology, 2007, 18, 465506.	2.6	10
29	Determining the vibrations between sensor and sample in SQUID microscopy. Applied Physics Letters, 2016, 109, .	3.3	9
30	Local observation of linear- <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>T</mml:mi></mml:math> superfluid density and anomalous vortex dynamics in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">U</mml:mi><mml:msub><mml:mi>Ru</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi>Si< Physical Review B, 2021, 103, .	3.2	8
31	Influence of Resonances on the Noise Performance of SQUID Susceptometers. Sensors, 2020, 20, 204.	3.8	7
32	Spatially modulated susceptibility in thin film <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>La</mml:mi><mml:mrow><mml:mn>2 <mml:mn>2</mml:mn></mml:mrow></mml:msub><mml:msub><mml:mi>Cu</mml:mi><mml:mn>O</mml:mn></mml:msub><mml:msub><mml:mi>Sr</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi>TaO</mml:mi><mml:mn>6</mml:mn></mml:msub></mml:mrow></mml:math> Physical Review B, 2018, 98, .	3.2	5
33	Determining the vortex tilt relative to a superconductor surface. Physical Review B, 2017, 96, .	3.2	3
34	Spatially modulated magnetic structure of EuS due to the tetragonal domain structure of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>SrTiO</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:math> Physical Review Materials, 2017, 1, .	2.4	3
35	Observation of signatures of subresolution defects in two-dimensional superconductors with a scanning SQUID. Physical Review B, 2018, 98, .	3.2	2
36	Observation of high-Tc superconductivity in inhomogeneous combinatorial ceramics. Solid State Sciences, 2019, 88, 6-12.	3.2	1

#	Article	IF	Citations
37	Pearl vortices in anisotropic superconducting films. Physical Review B, 2021, 104, .	3.2	1
38	Vortex Trapping and Expulsion in Thin-Film Type-II Superconducting Strips. IEEE Transactions on Applied Superconductivity, 2009, 19, 3537-3540.	1.7	0