Tsuyoshi Tamegai

List of Publications by Year
in descending order

95 papers	2,904 citations	172457 29 h-index	175258 52 g-index
95 all docs	95 docs citations	95 times ranked	2041 citing authors

#	Article	IF	Citations
1	Trapping a magnetic field of 17.89 T in stacked coated conductors by suppression of flux jumps. Superconductor Science and Technology, 2022, 35, 02LT01.	3.5	9
2	High-Frequency ac Susceptibility of Iron-Based Superconductors. Materials, 2022, 15, 1079.	2.9	4
3	Complex vortex-antivortex dynamics in the magnetic superconductor <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow><mml:mi>EuFe</mml:mi></mml:mrow><mml:mn>2</mml:mn> Physical Review B, 2022, 105, .	3.2	3
4	Suppression of Superconductivity in Heavy-ion Irradiated 2H-NbSe₂ Caused by Negative Pressure. Journal of the Physical Society of Japan, 2022, 91, .	1.6	5
5	Elucidating the origin of planar defects that enhance critical current density in CaKFe₄As₄ single crystals. Superconductor Science and Technology, 2021, 34, 034003.	3.5	10
6	Scaling laws for ion irradiation effects in iron-based superconductors. Scientific Reports, 2021, 11, 5818.	3.3	17
7	Electronic transport properties and hydrostatic pressure effect of FeSe_{0.67}Te_{0.33} single crystals free of phase separation. Superconductor Science and Technology, 2021, 34, 055006.	3.5	12
8	Trapping a magnetic field of 14.8 T using stacked coated conductors of 12 mm width. Superconductor Science and Technology, 2021, 34, 065004.	3.5	6
9	Effect of Controlled Artificial Disorder on the Magnetic Properties of EuFe2(As1â^'xPx)2 Ferromagnetic Superconductor. Materials, 2021, 14, 3267.	2.9	4
10	Comparative study of superconducting and normal-state anisotropy in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Fe</mml:mi><mml:mrow><mml:mn>1</mml:mn> superconductors with controlled amounts of interstitial excess Fe. Physical Review B, 2021, 103, .	3.2	8
11	Fabrication and Characterization of (Ba,Na)Fe2As2 Wires and Tapes. IEEE Transactions on Applied Superconductivity, 2021, 31, 1-5.	1.7	5
12	Fabrication of small superconducting coils using (Ba,A)Fe₂As₂ (A: Na, K) round wires with large critical current densities. Superconductor Science and Technology, 2021, 34, 105008.	3.5	21
13	Critical Current Density and Vortex Dynamics in Pristine and Irradiated KCa2Fe4As4F2. Materials, 2021, 14, 5283.	2.9	2
14	Fabrications and evaluations of critical current density of (Ba,Na)Fe2As2 HIP round wires. Physica C: Superconductivity and Its Applications, 2020, 568, 1353580.	1.2	6
15	Fully gapped superconductivity without sign reversal in the topological superconductor PbTaSe2. Physical Review B, 2020, 102, .	3.2	2
16	Imaging the effect of drive on the low-field vortex melting phenomenon in a Ba0.6K0.4Fe2As2 single crystal. Physical Review B, 2020, 101, .	3.2	1
17	Effects of 6 MeV proton irradiation on the vortex ensemble in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>BaFe</mml:mi><mml:mn>2</mml:mn></mml:mrow> revealed through m. Physical Review B, 2020, 101, .	3.2	4
18	Achieving the depairing limit along the c axis in Fe1+yTe1â^'xSex single crystals. Physical Review B, 2020, 101, .	3.2	10

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19	Low-field vortex melting in a single crystal of Ba0.6K0.4Fe2As2. Physical Review B, 2020, 101, .	3.2	3
20	Enhancement of critical current density in (Ba,Na)Fe₂As₂ round wires using high-pressure sintering. Superconductor Science and Technology, 2020, 33, 065001.	3.5	20
21	Twofold role of columnar defects in iron based superconductors. Superconductor Science and Technology, 2020, 33, 094012.	3.5	15
22	Effects of proton irradiation on the magnetic superconductor EuFe₂(As<sub>1â€‰âˆ’â€‰x) Tj ETQq0 0 0 rgBT /Ov	3.5	13
23	Developments of (Ba,Na)Fe₂As₂ and CaKFe₄As₄ HIP round wires. Superconductor Science and Technology, 2020, 33, 104001.	3.5	14
24	Anisotropic physical properties and large critical current density in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">K</mml:mi><mml:msub><mml:mi>Ca</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi>Fe<mml:mi mathvariant="normal">F</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math> single crystal. Physical Review Materials, 2020, 4, .	2.4	16
25	Effects of Asymmetric Splayed Columnar Defects on the Anomalous Peak Effect in Ba_{0.6}K_{0.4}Fe₂As₂. Journal of the Physical Society of Japan, 2020, 89, 094705.	1.6	5
26	Deviation from Canonical Collective Creep Behavior in Li_{0.8}Fe_{0.2}OHFeSe. Journal of the Physical Society of Japan, 2019, 88, 034703.	1.6	11
27	Review of annealing effects and superconductivity in Fe_{1+y}Te_{1â^’x}Se_x superconductors. Superconductor Science and Technology, 2019, 32, 103001.	3.5	45
28	Quasiparticle Evidence for the Nematic State above <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>T</mml:mi><mml:mi mathvariant="normal">c</mml:mi></mml:msub></mml:math> in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>Sr</mml:mi></mml:mrow><mml:mrow><mml:mi>x</mml:mi></mml:mrow>	7.8	32
29	Reemergence of superconductivity by 4d transition-metal Pd doping in over-doped 112-type iron pnictide superconductors Ca_{0.755}La_{0.245}FeAs₂. New Journal of Physics, 2019, 21, 093015.	2.9	7
30	Recent Progress of Iron-Based Superconducting Round Wires. Journal of Physics: Conference Series, 2019, 1293, 012042.	0.4	3
31	Demonstration of Excellent J _c Performance in (AE,Na)Fe₂As₂ (AE: Sr, Ba) PIT Wires. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-5.	1.7	9
32	Large and significantly anisotropic critical current density induced by planar defects in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi mathvariant="normal">CaKFe</mml:mi><mml:mn>4</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">As</mml:mi><mml:mn>4</mml:mn></mml:msub></mml:mrow></mml:math> single crystals. Physical Review B, 2019, 99, .	3.2	42
33	Multiple topological states in iron-based superconductors. Nature Physics, 2019, 15, 41-47.	16.7	170
34	Field-driven transition in the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Ba</mml:mi><mml:mrow><mml:mn>1</mml:mn></mml:mrow></mml:msub><mml:msub><mml:mi mathvariant="normal">K</mml:mi><mml:mi>x</mml:mi></mml:msub><mml:msub><mml:mi>Fe</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math> superconductor with splayed columnar defects. Physical Review B, 2018, 97, .	3.2	9
35	Manipulating superconducting phases via current-driven magnetic states in rare-earth-doped CaFe2As2. NPG Asia Materials, 2018, 10, 156-162.	7.9	2
36	Improvements of fabrication processes and enhancement of critical current densities in (Ba,K)Fe₂As₂HIP wires and tapes. Superconductor Science and Technology, 2018, 31, 055016.	3.5	59

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37	Fabrication and characterization of CaKFe₄As₄ round wires sintered at high pressure. Applied Physics Express, 2018, 11, 123101.	2.4	22
38	Promising critical current density characteristics of Ag-sheathed (Sr,Na)Fe2As2 tape. Applied Physics Express, 2018, 11, 063101.	2.4	11
39	Domain Meissner state and spontaneous vortex-antivortex generation in the ferromagnetic superconductor EuFe ₂ (As _{0.79} P _{0.21}) ₂. Science Advances, 2018, 4, eaao5931.	10.3	54
40	Quasiparticle scattering in 3 MeV proton irradiated <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi mathvariant="normal">BaFe</mml:mi><mml:mn		

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55	Magneto-optical characterizations of FeTe_{0.5}Se_{0.5}thin films with critical current density over 1 MA cm^{â¯2}. Superconductor Science and Technology, 2015, 28, 015010.	3.5	7
56	Evolution of superconducting and transport properties in annealed FeTe_{1â¯x}Se_x(0.1 â‰¤xâ‰¤ 0.4) multiband superconductors. Superconductor Science and Technology, 2015, 28, 044002.	3.5	17
57	Critical current density and vortex dynamics in pristine and proton-irradiated Ba_{0.6}K_{0.4}Fe₂As₂. Superconductor Science and Technology, 2015, 28, 085003.	3.5	52
58	Enhancement of transport critical current density of SmFeAsO1â¯xFx tapes fabricated by an ex-situ powder-in-tube method with a Sn-presintering process. Applied Physics Letters, 2014, 104, .	3.3	15
59	Multiband effects and possible Dirac fermions in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mtext>Fe</mml:mtext><mml:mrow><mml:mn>1</mml:mn><mml:mo>â¯</mml:mo><mml:mi>x</mml:mi></mml:mrow></mml:msub></mml:math><mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mtext>Te</mml:mtext><mml:mrow><mml:mn>0.6</mml:mn></mml:mrow></mml:msub></mml:math><mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mtext>Se</mml:mtext><mml:mrow><mml:mn>0.4</mml:mn></mml:mrow></mml:msub></mml:math>. Physical Review B, 2014, 89, .	3.2	64
60	Effects of high-pressure sintering on critical current density in Co-doped BaFe2As2 wires. Physica C: Superconductivity and Its Applications, 2014, 504, 73-76.	1.2	4
61	Enhancement of critical current densities by high-pressure sintering in (Sr,K)Fe₂As₂PIT wires. Superconductor Science and Technology, 2014, 27, 095002.	3.5	34
62	Bulk Superconductivity in Fe₁₊_yTe_{0.6}Se_{0.4} Induced by Removal of Excess Fe. Journal of the Physical Society of Japan, 2014, 83, 064704.	1.6	22
63	Dynamics and mechanism of oxygen annealing in Fe1+yTe0.6Se0.4 single crystal. Scientific Reports, 2014, 4, 4585.	3.3	79
64	Evolution of Superconductivity in Fe_{1+y}Te_{1-x}Se_xAnnealed in Te Vapor. Journal of the Physical Society of Japan, 2013, 82, 093705.	1.6	25
65	Specific Heat and Upper Critical Field of Sc5Ir4Si10Superconductor. Journal of the Physical Society of Japan, 2013, 82, 074713.	1.6	4
66	Large, Homogeneous, and Isotropic Critical Current Density in Oxygen-Annealed Fe_{1+y}Te_{0.6}Se_{0.4}Single Crystal. Applied Physics Express, 2013, 6, 043101.	2.4	39
67	Enhancement of Critical Current Densities in (Ba,K)Fe₂As₂by 320 MeV Au Irradiation in Single Crystals and by High-Pressure Sintering in Powder-in-Tube Wires. Applied Physics Express, 2013, 6, 043101.	2.4	21
68	Pair-breaking effects induced by 3-MeV proton irradiation in Ba<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow /><mml:mrow><mml:mn>1</mml:mn><mml:mo>â¯</mml:mo><mml:mi>x</mml:mi></mml:mrow></mml:msub></mml:math>K<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow /><mml:mi>x</mml:mi></mml:msub></mml:math>Fe<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>As<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>	3.2	43
69	NMR Study of Two-Gap Superconductivity in Lu2Fe3Si5. Journal of the Physical Society of Japan, 2013, 82, 064705.	1.6	3
70	Bulk Superconductivity in Fe_{1+y}Te_{1-x}Se_x Induced by Annealing in Se and S Vapor. Journal of the Physical Society of Japan, 2013, 82, 115002.	1.6	17
71	Anisotropies and Homogeneities of Superconducting Properties in Ironâ€“Platinumâ€“Arsenide Ca₁₀(Pt₃As₈)(Fe_{1.79}Pt_{0.21}As₂)₅. Journal of the Physical Society of Japan, 2012, 81, 114723.	1.6	7
72	Growth and characterization of n-type electron-induced ferromagnetic semiconductor (In,Fe)As. Applied Physics Letters, 2012, 101, .	3.3	78

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73	Superconducting properties and magneto-optical imaging of Ba_{0.6}K_{0.4}Fe₂As₂PIT wires with Ag addition. Superconductor Science and Technology, 2012, 25, 035019.	3.5	24
74	Enhancement of critical current density and vortex activation energy in proton-irradiated Co-doped<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mi mathvariant="bold">BaFe</mml:mi><mml:mn mathvariant="bold">2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="bold">As</mml:mi><mml:mn mathvariant="bold">2</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2012, 86, .	3.2	62
75	Effects of particle irradiations on vortex states in iron-based superconductors. Superconductor Science and Technology, 2012, 25, 084008.	3.5	95
76	Two-band superconductivity featuring different anisotropies in the ternary iron silicide Lu<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>Fe<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>Si<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mml:	3.2	21
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91	A one-dimensional chain state of vortex matter. Nature, 2001, 414, 728-731.	27.8	169
92	'Inverse' melting of a vortex lattice. Nature, 2001, 411, 451-454.	27.8	262
93	Imaging the vortex-lattice melting process in the presence of disorder. Nature, 2000, 406, 282-287.	27.8	212
94	Transport properties governed by surface barriers in Bi2Sr2CaCu2O8. Nature, 1998, 391, 373-376.	27.8	126
95	Relation between the peak effect and the magnetization step in Bi2Sr2CaCu2Oyyy. Journal of Low Temperature Physics, 1996, 105, 1011-1016.	1.4	12