S TakÃ¡cs

List of Publications by Year
in descending order

102 papers	943 citations	516710 16 h-index	552781 26 g-index
102 all docs	102 docs citations	102 times ranked	168 citing authors

#	Article	IF	Citations
1	Properties of superconducting NbTi superfine filament composites with diameters â‰²0.1 Î¼m. Cryogenics, 1985, 25, 558-565.	1.7	93
2	Coupling losses in finite length of superconducting cables and in long cables partially in magnetic field. IEEE Transactions on Magnetics, 1981, 17, 2281-2284.	2.1	50
3	Hysteresis losses in superconductors with very fine filaments. Superconductor Science and Technology, 1988, 1, 53-56.	3.5	49
4	AC losses in superconducting cables and their expected values in magnetic systems. Superconductor Science and Technology, 1997, 10, 733-748.	3.5	44
5	Coupling losses in cables in spatially changing ac fields. Cryogenics, 1982, 22, 661-665.	1.7	42
6	Irreversibility line and non-linearity in the AC response caused by flux pinning in high-Tc superconductors. Physica C: Superconductivity and Its Applications, 1993, 217, 297-312.	1.2	33
7	Pinning of Flux Lines in Superconducting Niobium due to Point Defects. Physica Status Solidi (B): Basic Research, 1970, 41, 671-679.	1.5	32
8	Size effect in AC losses of superconducting cables. IEEE Transactions on Applied Superconductivity, 1995, 5, 2-6.	1.7	29
9	Influence of viscous flux flow on AC magnetisation of high-Tcsuperconductors. Superconductor Science and Technology, 1990, 3, 94-99.	3.5	24
10	The flux line lattice in superconducting slabs. European Physical Journal D, 1983, 33, 1248-1261.	0.4	22
11	AC magnetization of high Tc superconductors at low superimposed DC magnetic fields. Physica C: Superconductivity and Its Applications, 1989, 160, 1-7.	1.2	21
12	Properties of superfine superconducting filaments embedded in normal matrix. European Physical Journal D, 1986, 36, 524-536.	0.4	20
13	Frequency dependence of AC susceptibility due to the viscous motion of flux lines. IEEE Transactions on Magnetics, 1991, 27, 1057-1060.	2.1	20
14	New conception of the critical-velocity model in superconductors. Physics Letters, Section A: General, Atomic and Solid State Physics, 1973, 46, 121-122.	2.1	17
15	Critical currents of NbTi tapes with differently oriented anisotropic defects. Cryogenics, 1983, 23, 153-159.	1.7	17
16	The Defect Structure of Superconductors and the Critical Current in Non-Transversal Magnetic Fields. Physica Status Solidi A, 1975, 32, 485-488.	1.7	16
17	Some problems of coupling loss calculations, in superconducting cables. IEEE Transactions on Magnetics, 1991, 27, 2206-2209.	2.1	16
18	Time constants of normal metals and superconductors at different ramp rates during a cycle. Cryogenics, 1994, 34, 679-684.	1.7	16

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19	The similarities in loss creation in LTS and HTS cables. Physica C: Superconductivity and Its Applications, 1998, 310, 218-224.	1.2	16
20	Resistive state of inhomogeneous superconducting composites. Cryogenics, 1988, 28, 374-380.	1.7	15
21	Influence of gas impurities on the angular dependence of the critical currents in Nb3Sn vapour-deposited tapes. Physica Status Solidi A, 1976, 33, 85-90.	1.7	14
22	The critical parameters of thin type II superconductor cylinder coated with normal metal. Physics Letters, Section A: General, Atomic and Solid State Physics, 1968, 28, 349-350.	2.1	13
23	Coupling losses in inhomogeneous cores of superconducting cables. Cryogenics, 1992, 32, 258-264.	1.7	13
24	Der Einfluss der Metallbedeckung auf die Supraleitenden Eigenschaften von DÃ¼nnen Zylindern. European Physical Journal D, 1969, 19, 1366-1378.	0.4	12
25	Coupling losses of finite superconducting cables. Cryogenics, 1984, 24, 237-244.	1.7	12
26	Pinning in superconductors with attractive and repulsive interaction defect-flux line. European Physical Journal D, 1975, 25, 1155-1175.	0.4	11
27	The Summation of Pinning Forces in Superconductors with Small Defect Densities. Physica Status Solidi A, 1982, 74, 437-444.	1.7	11
28	Measurement of time constants for superconducting cables with Hall probes. Cryogenics, 1997, 37, 783-788.	1.7	11
29	The effect of resistive filament interconnections on coupling losses in filamentary YBa₂Cu₃O₇coated conductors. Superconductor Science and Technology, 2009, 22, 025016.	3.5	11
30	Energy gap in superconductors with singular asymmetric density of states. Physical Review B, 1992, 46, 3145-3146.	3.2	10
31	Dependence of the pinning of fluxoids on grain boundaries on the direction of magnetic field. European Physical Journal D, 1973, 23, 636-643.	0.4	9
32	The angular dependence of Nb3Sn critical currents in transverse magnetic fields. European Physical Journal D, 1973, 23, 644-651.	0.4	9
33	AC losses and time constants of flat superconducting cables in inhomogeneous magnetic fields. Superconductor Science and Technology, 1996, 9, 137-140.	3.5	9
34	Low coupling losses in YBa2Cu3O7 coated conductors with current sharing between the superconducting stripes. Applied Physics Letters, 2007, 90, 242505.	3.3	9
35	Time Constants of Flat Superconducting Cables. , 1996, , 1233-1240.		9
36	Der FluÃŸeintritt in Supraleiter II. Art. Physica Status Solidi (B): Basic Research, 1967, 21, 709-716.	1.5	8

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37	The angular dependence of critical currents in superconductors with long narrow defects. Physica Status Solidi A, 1977, 41, K175-K179.	1.7	8
38	Magnetic irreversibility in superconductors characterised by shielding current density. Physica C: Superconductivity and Its Applications, 1994, 235-240, 2753-2754.	1.2	8
39	Acceptable coupling losses in coated conductors at industrial frequencies without twisting the superconducting stripes. Journal of Applied Physics, 2008, 103, .	2.5	8
40	Tunneling spectroscopy in thin films YBCO/Pb tunnel structures. IEEE Transactions on Magnetics, 1989, 25, 2583-2586.	2.1	7
41	Dependence of the critical temperature and energy gap of superconductors on a singularity in the density of states. Physical Review B, 1993, 48, 13127-13128.	3.2	7
42	Coupling Losses in Superconductors With Twisted Filaments, Stripes, or Striations. IEEE Transactions on Applied Superconductivity, 2007, 17, 3151-3154.	1.7	7
43	The angular dependence of critical currents in Nb3Sn â€" Effect of some preparation conditions I. Experimental and structural investigations. European Physical Journal D, 1977, 27, 468-476.	0.4	6
44	Losses in transformer-like coils wound from a very fine filament Nbî—¸Ti superconductor. Cryogenics, 1988, 28, 386-393.	1.7	6
45	Hysteresis losses of fine filamentary superconductors including field dependent critical current density. European Physical Journal D, 1988, 38, 899-909.	0.4	6
46	Direct summation of elementary pinning forces for Nb-Ti superconductors with a field-dependent probability function. Superconductor Science and Technology, 1992, 5, S97-S100.	3.5	6
47	Hysteresis and coupling losses of superconducting cables at additional change of the applied magnetic field. Superconductor Science and Technology, 2005, 18, 340-345.	3.5	6
48	Current transfer between superconductor and normal layer in coated conductors. Superconductor Science and Technology, 2007, 20, 180-185.	3.5	6
49	Possible Restriction of the Critical Current Density in High Temperature Super conductors. Physica Status Solidi (B): Basic Research, 1987, 144, K125.	1.5	5
50	Pinning force in thin superconductors with small number of flux line rows. European Physical Journal D, 1988, 38, 1050-1056.	0.4	5
51	Influence of field dependent critical current density on flux profiles in highT c superconductors. European Physical Journal D, 1990, 40, 1040-1053.	0.4	5
52	A theory of the resistive state of extremely inhomogeneous type II superconductors and the electron band model. European Physical Journal D, 1970, 20, 21-31.	0.4	4
53	The influence of viscous flux flow on AC losses of high Tc superconductors. Physica B: Condensed Matter, 1990, 165-166, 1399-1400.	2.7	4
54	A.c. susceptibility of melt-processed high Tc superconductors. Cryogenics, 1993, 33, 133-137.	1.7	4

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55	Hysteresis losses in superconductors with an out-of-phase applied magnetic field and current: slab geometry. Superconductor Science and Technology, 2007, 20, 1093-1096.	3.5	4
56	Acceptable coupling losses in striated coated conductors or twisted cables ensuring current sharing between superconducting filaments. Superconductor Science and Technology, 2013, 26, 055022.	3.5	4
57	Statistical treatment of pinning on point defects including some correlation effects. Physica Status Solidi A, 1973, 19, K35-K38.	1.7	3
58	The angular dependence of critical currents in Nb3Sn â€" Effect of some preparation conditions. European Physical Journal D, 1977, 27, 571-576.	0.4	3
59	Effect of deposition temperature on properties of CVD prepared Nb3Ge superconductor. European Physical Journal D, 1989, 39, 196-206.	0.4	3
60	Penetration field in superconductors with considerable flux creep and flux flow. Superconductor Science and Technology, 1992, 5, S452-S455.	3.5	3
61	Current distribution in superconducting cables due to field changes at the end portions of magnetic systems. Superconductor Science and Technology, 1998, 11, 1209-1216.	3.5	3
62	The design of flat superconducting cables with considerable edge currents between the strands: coupling losses between opposite strands. Superconductor Science and Technology, 2001, 14, 496-503.	3.5	3
63	Theoretical Estimation of Electromagnetic Loss From the Movement of Superconducting Coil in the W7-X Stellarator. IEEE Transactions on Applied Superconductivity, 2006, 16, 123-126.	1.7	3
64	Change of the induced magnetic field and time constant along twisted superconducting cables with finite length. Fusion Engineering and Design, 2006, 81, 2515-2519.	1.9	3
65	Josephson effects in long superconducting bridges with variable thickness. Solid State Communications, 1977, 24, 717-720.	1.9	2
66	The volume pinning force for different shapes of the interaction potential between defects and flux lines. European Physical Journal D, 1977, 27, 336-347.	0.4	2
67	The influence of defect clustering on the volume pinning force in superconductors. European Physical Journal D, 1983, 33, 70-80.	0.4	2
68	The critical currents in superconductors with anisotropic defects by magnetization and resistive measurements. European Physical Journal D, 1983, 33, 208-220.	0.4	2
69	Voltage versus current characteristics of high Tc superconductors described by a statistical series-parallel model. Cryogenics, 1989, 29, 731-735.	1.7	2
70	Current distribution and coupling losses in superconducting cables being partially in magnetic fields. IEEE Transactions on Applied Superconductivity, 1997, 7, 258-261.	1.7	2
71	Modelling of Mâ€"H loop anomalies in synergistically pinned, heterogeneous, composite superconductors. Physica C: Superconductivity and Its Applications, 1998, 306, 300-308.	1.2	2
72	Flux pinning in the weak layers of superconducting heterogeneous structures. Physica C: Superconductivity and Its Applications, 1999, 316, 129-151.	1.2	2

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73	The contribution of edge currents to coupling losses of flat superconducting cables. Superconductor Science and Technology, 2005, 18, 187-192.	3.5	2
74	Loss contributions in superconducting magnets caused by transient magnetic fields. Fusion Engineering and Design, 2006, 81, 2509-2513.	1.9	2
75	Coupling losses in flat cables and coated conductors. Superconductor Science and Technology, 2006, 19, 738-741.	3.5	2
76	Determination of the time constant from the time development of the induced magnetic field above superconducting cables. Superconductor Science and Technology, 2011, 24, 095011.	3.5	2
77	Irreversibility Line in Superconductor as Line of Constant Shielding Current Density. , 1996, , 587-593.		2
78	The volume pinning force for periodical interaction forces between defects and the flux line lattice. European Physical Journal D, 1979, 29, 1046-1054.	0.4	1
79	On the preparation and study of Superconductors. Acta Physica Academiae Scientiarum Hungaricae, 1981, 50, 153-159.	0.1	1
80	The study of modified critical current distribution and its application to the resistive state of macroscopically inhomogeneous type II superconductors. European Physical Journal D, 1988, 38, 910-918.	0.4	1
81	The flux distribution and hysteresis losses in highT c superconductors including viscous forces on flux lines. European Physical Journal D, 1990, 40, 556-568.	0.4	1
82	Critical temperature and energy gap in superconductors with singular density of states. European Physical Journal D, 1993, 43, 1129-1136.	0.4	1
83	Some factors determining the effective resistance between strands in flat cables (or superconducting) Tj ETQq1 1 0.784314 rgBT /Ov	3.5	1
84	Time constants of flat superconducting composites determined from AC loss and relaxation measurements. Physica C: Superconductivity and Its Applications, 2001, 354, 202-208.	1.2	1
85	The effective resistance between twisted superconducting filaments in tapes. Physica C: Superconductivity and Its Applications, 2001, 354, 265-269.	1.2	1
86	Some parameters of superconductors with an extreme singularity in the density of state: (s+d) model. Solid State Communications, 2003, 128, 455-459.	1.9	1
87	Basic and higher harmonics of superconducting cylinder at applying the current below and above the critical current. Physica C: Superconductivity and Its Applications, 2004, 401, 187-190.	1.2	1
88	Frequency dependence of coupling losses in twisted superconducting structures. Superconductor Science and Technology, 2011, 24, 065018.	3.5	1
89	Determination of time constant at different positions above superconducting cables. Cryogenics, 2012, 52, 478-481.	1.7	1
90	Current distribution in superconductors. , 1998, , 79-98.		1

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91	Factors Controlling the Onset of Proximity Effect Coupling (PEC) and the Influence of Pinning-Assisted Pec on M-H Loop Asymmetry in Multifilamentary Composites. , 1998, , 1085-1092.		1
92	Critical currents of type ii superconductors in non-transversal magnetic fields. European Physical Journal D, 1977, 27, 701-710.	0.4	0
93	Statistical theory of pinning in superconductors including correlations in the defect distribution. Acta Physica Academiae Scientiarum Hungaricae, 1982, 53, 337-345.	0.1	0
94	Pinning on surfaces and large grain boundaries due to the transition from hexagonal to quadratic vortex lattice. European Physical Journal D, 1984, 34, 571-580.	0.4	0
95	Localized more-particle excitations in two- and one-dimensional fermion systems of high-Tc superconductors. Physica C: Superconductivity and Its Applications, 1990, 165, 91-96.	1.2	0
96	Time constants and AC losses of flat superconducting cables in magnetic fields changing along the cable. Cryogenics, 1996, 36, 517-520.	1.7	0
97	Coupling losses in flat superconducting cables with considerable edge currents between the strands. Physica C: Superconductivity and Its Applications, 2002, 372-376, 1806-1809.	1.2	0
98	Acceptable coupling losses in twisted cables with current sharing by connecting the superconducting strands with normal metal plates. Superconductor Science and Technology, 2009, 22, 075006.	3.5	0
99	AC losses in superconductors shielded by a normal metal or another superconductor. Superconductor Science and Technology, 2010, 23, 065023.	3.5	0
100	Possible method to improve the stability of twisted superconductors. Cryogenics, 2015, 65, 1-4.	1.7	0
101	Time constant of round superconducting structures determined from the time development of the induced magnetic field. Cryogenics, 2016, 80, 91-96.	1.7	0
102	Critical Currents and Superconducting Boundary Effects in S-N-S Multifilamentary Composites. , 1998, , 843-850.		0