

N Savvides

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/10959638/publications.pdf>

Version: 2024-02-01

113
papers

3,857
citations

126907

33
h-index

128289

60
g-index

115
all docs

115
docs citations

115
times ranked

2258
citing authors

#	ARTICLE	IF	CITATIONS
1	Charged particle fluxes from planar magnetron sputtering sources. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1986, 4, 196-202.	2.1	384
2	Optical constants and associated functions of metastable diamondlike amorphous carbon films in the energy range 0.5â€“7.3 eV. Journal of Applied Physics, 1986, 59, 4133-4145.	2.5	298
3	Phonon scattering at grain boundaries in heavily doped fine-grained siliconâ€“germanium alloys. Nature, 1981, 290, 765-766.	27.8	250
4	Unbalanced dc magnetrons as sources of high ion fluxes. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1986, 4, 453-456.	2.1	193
5	Unbalanced magnetron ionâ€“assisted deposition and property modification of thin films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1986, 4, 504-508.	2.1	160
6	Diamondlike amorphous carbon films prepared by magnetron sputtering of graphite. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1985, 3, 2386-2390.	2.1	155
7	Microhardness and Youngâ€™s modulus of diamond and diamondlike carbon films. Journal of Applied Physics, 1992, 72, 2791-2796.	2.5	138
8	Properties and structure of amorphous hydrogenated carbon films. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1983, 48, 341-364.	0.6	117
9	Electrical transport, optical properties, and structure of TiN films synthesized by lowâ€“energy ion assisted deposition. Journal of Applied Physics, 1988, 64, 225-234.	2.5	97
10	Fourfold to threefold transition in diamondlike amorphous carbon films: A study of optical and electrical properties. Journal of Applied Physics, 1985, 58, 518-521.	2.5	90
11	Hardness and elastic modulus of diamond and diamond-like carbon films. Thin Solid Films, 1993, 228, 289-292.	1.8	82
12	Analysis of films prepared by plasma polymerization of acetylene in a D.C. magnetron. Thin Solid Films, 1983, 108, 247-256.	1.8	68
13	Flux creep and transport critical current density in high-Tc superconductors. Physica C: Superconductivity and Its Applications, 1990, 165, 371-376.	1.2	67
14	Boundary scattering of phonons in fine-grained hot-pressed Ge-Si alloys. I. The dependence of lattice thermal conductivity on grain size and porosity. Journal of Physics C: Solid State Physics, 1980, 13, 4657-4670.	1.5	61
15	The interaction of Ag with Bi-Pb-Sr-Ca-Cu-O superconductor. Physica C: Superconductivity and Its Applications, 1989, 160, 533-540.	1.2	61
16	High Tc superconducting B1 phase MoN films prepared by lowâ€“energy ionâ€“assisted deposition. Journal of Applied Physics, 1987, 62, 600-610.	2.5	59
17	Ion-assisted deposition and metastable structures. Thin Solid Films, 1988, 163, 13-32.	1.8	56
18	Microstructure and Thermoelectric Properties of n- and p-Type Doped Mg ₂ Sn Compounds Prepared by the Modified Bridgman Method. Journal of Electronic Materials, 2009, 38, 1056-1060.	2.2	53

#	ARTICLE	IF	CITATIONS
19	Stabilisation of 110 K superconducting phase in Bi _{1-x} Sr _x Ca _{1-y} Cu _y O _z Pb substitution. Physica C: Superconductivity and Its Applications, 1989, 157, 93-98.	1.2	51
20	Deposition parameters and film properties of hydrogenated amorphous silicon prepared by high rate dc planar magnetron reactive sputtering. Journal of Applied Physics, 1984, 55, 4232-4238.	2.5	49
21	Superconductivity in a Ag-doped Bi ₂ Pb _{1-x} Sr _x CaCuO system. Applied Physics Letters, 1990, 56, 493-494.	3.3	46
22	Growth and evolution of microstructure of epitaxial YBa ₂ Cu ₃ O _{7-x} ultrathin and thin films on MgO. Physica C: Superconductivity and Its Applications, 1994, 226, 23-36.	1.2	46
23	Electronic and thermal transport properties of Mg ₂ Sn crystals containing finely dispersed eutectic structures. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 2523-2531.	1.8	46
24	Critical current density and flux pinning in silver/superconductor composites and tapes. Physica C: Superconductivity and Its Applications, 1991, 179, 361-368.	1.2	44
25	The effect of boundary scattering on the high-temperature thermal conductivity of silicon. Journal of Physics C: Solid State Physics, 1973, 6, 1701-1708.	1.5	39
26	Boundary scattering of phonons in fine-grained hot-pressed Ge-Si alloys. II. Theory. Journal of Physics C: Solid State Physics, 1980, 13, 4671-4678.	1.5	39
27	Hydrogenated carbon films produced by sputtering in argon-hydrogen mixtures. Applied Optics, 1982, 21, 3615.	2.1	39
28	Optical constants of amorphous hydrogenated carbon and silicon-carbon alloy films and their application in high temperature solar selective surfaces. Solar Energy Materials and Solar Cells, 1983, 9, 113-126.	0.4	38
29	Melt processing of alkali element doped Bi ₂ Sr ₂ CaCu ₂ O ₈ . Physica C: Superconductivity and Its Applications, 1990, 172, 295-303.	1.2	37
30	Localization in the metallic regime of granular Cu-SiO ₂ films. Solid State Communications, 1982, 42, 143-145.	1.9	36
31	In situ growth of epitaxial YBa ₂ Cu ₃ O ₇ thin films by on-axis unbalanced direct current magnetron sputtering. Applied Physics Letters, 1993, 62, 528-530.	3.3	36
32	Evolution of texture of CeO ₂ thin film buffer layers prepared by ion-assisted deposition. Thin Solid Films, 1999, 350, 124-129.	1.8	33
33	Epitaxial growth of cerium oxide thin film buffer layers deposited by d.c. magnetron sputtering. Thin Solid Films, 2001, 388, 177-182.	1.8	33
34	Labile Cu ³⁺ ions correlated with superconducting properties in YBa ₂ Cu ₃ O _{7-x} . Solid State Communications, 1988, 68, 221-225.	1.9	31
35	Biaxially aligned buffer layers of cerium oxide, yttria stabilized zirconia, and their bilayers. Applied Physics Letters, 1997, 70, 2816-2818.	3.3	31
36	High quality Mg ₂ Sn crystals prepared by RF induction melting. Journal of Crystal Growth, 2010, 312, 2328-2334.	1.5	29

#	ARTICLE	IF	CITATIONS
37	Transition from dislocation controlled plasticity to grain boundary mediated shear in nanolayered aluminum/palladium thin films. <i>Thin Solid Films</i> , 2011, 519, 3213-3220.	1.8	29
38	Current distribution and critical state in superconducting silver-sheathed (Bi,Pb)-2223 tapes. <i>Physica C: Superconductivity and Its Applications</i> , 1998, 305, 114-124.	1.2	28
39	Electron microscopy and microanalysis of a YBa ₂ Cu ₃ O _x superconducting oxide. <i>Applied Physics Letters</i> , 1987, 51, 535-537.	3.3	26
40	Influence of mechanical strain on critical current density and microstructure of silver-sheathed Bi(Pb)2223 superconducting tapes. <i>Physica C: Superconductivity and Its Applications</i> , 1996, 266, 223-229.	1.2	26
41	Trends in optical parameters and band structure with increasing hydrogenation of amorphous silicon. <i>Solid State Communications</i> , 1983, 48, 189-193.	1.9	25
42	Hot-press sintering of Ge-Si alloys. <i>Journal of Materials Science</i> , 1980, 15, 594-600.	3.7	24
43	Temperature, field and frequency dependence of intergranular AC loss in high-temperature superconductors. <i>Physica C: Superconductivity and Its Applications</i> , 1992, 197, 267-273.	1.2	24
44	Characterisation of nanolayered aluminium/palladium thin films using nanoindentation. <i>Thin Solid Films</i> , 2009, 517, 3698-3703.	1.8	24
45	Thermal Conductivity and Other Transport Properties of Mg ₂ Sn:Ag Crystals. <i>Journal of Electronic Materials</i> , 2010, 39, 2136-2141.	2.2	24
46	Eutectic Microstructure and Thermoelectric Properties of Mg ₂ Sn. <i>Journal of Electronic Materials</i> , 2010, 39, 1792-1797.	2.2	23
47	Optical properties of a-Si and a-Si:H prepared by DC magnetron techniques. <i>Journal of Physics C: Solid State Physics</i> , 1983, 16, 4933-4944.	1.5	21
48	Boundary scattering of phonons in silicon crystals at room temperature. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1972, 41, 193-194.	2.1	20
49	Labile Cu ³⁺ ions in the Bi-Sr-Ca-Cu-O system and the effects of varying the composition and heat treatment. <i>Superconductor Science and Technology</i> , 1988, 1, 78-82.	3.5	20
50	In-situ growth of epitaxial YBa ₂ Cu ₃ O ₇ thin films by on-axis unbalanced d.c. magnetron sputtering. <i>Thin Solid Films</i> , 1993, 228, 182-185.	1.8	20
51	Electrical resistivity of some niobium A15 compounds. <i>Solid State Communications</i> , 1982, 41, 735-738.	1.9	19
52	Impurity and thermodynamic effects on superconducting properties of Y ₁ Ba ₂ Cu ₃ O _{7-x} . <i>Journal of Physics C: Solid State Physics</i> , 1987, 20, L1003-L1008.	1.5	19
53	Local bonding environment of plasma deposited nitrogen-rich silicon nitride thin films. <i>Journal of Applied Physics</i> , 2005, 97, 093714.	2.5	18
54	Apparatus for the measurement of thermal diffusivity featuring a low-frequency sine-wave generator and a digital phase meter. <i>Journal of Physics E: Scientific Instruments</i> , 1978, 11, 941-947.	0.7	17

#	ARTICLE	IF	CITATIONS
55	The reversal of precipitation in heavily doped silicon-germanium alloys. <i>Journal Physics D: Applied Physics</i> , 1979, 12, 1613-1619.	2.8	17
56	Precipitation of phosphorus from solid solutions in Si-Ge alloys and its effect on thermoelectric transport properties. <i>Journal Physics D: Applied Physics</i> , 1981, 14, 723-732.	2.8	17
57	Effect of strain on ac power loss of Bi-2223/Ag superconducting tapes. <i>Physica C: Superconductivity and Its Applications</i> , 1998, 306, 129-135.	1.2	14
58	Magnetron Deposition of In-Situ Thermoelectric Mg ₂ Ge Thin Films. <i>Journal of Electronic Materials</i> , 2009, 38, 1008-1012.	2.2	13
59	Thermal Conductivity of Thin Crystals of Pure Silicon. <i>Physica Status Solidi (B): Basic Research</i> , 1974, 63, K89.	1.5	12
60	Specific heat of polycrystalline Ba _{0.6} K _{0.4} BiO ₃ from 0.5 to 20 K. <i>Physical Review B</i> , 1990, 42, 4794-4796.	3.2	12
61	AC susceptibility of granular superconductors. <i>Superconductor Science and Technology</i> , 1991, 4, S325-S327.	3.5	12
62	Correction masks for large-area ion beam etching and figuring of optics. <i>Journal of Applied Physics</i> , 2006, 99, 094912.	2.5	12
63	Effects of hydrogenation and doping on the conductivity and density of defect states in amorphous silicon. <i>Journal of Applied Physics</i> , 1984, 56, 2788-2792.	2.5	11
64	New techniques for fabricating step-edge junctions for high-T _c SQUIDs on MgO substrates. <i>IEEE Transactions on Applied Superconductivity</i> , 1993, 3, 2361-2364.	1.7	11
65	Noise in thin-film YBa ₂ Cu ₃ O ₇ step-edge junction RF SQUIDS. <i>Superconductor Science and Technology</i> , 1994, 7, 260-264.	3.5	11
66	AC losses of YBCO strips on YSZ/hastelloy substrates. <i>Physica C: Superconductivity and Its Applications</i> , 2000, 341-348, 2493-2494.	1.2	11
67	Thermoelectric Properties of Ag-doped Mg ₂ Ge Thin Films Prepared by Magnetron Sputtering. <i>Journal of Electronic Materials</i> , 2010, 39, 1971-1974.	2.2	11
68	A two-band model applied to resistivity data on a superconducting ceramic specimen of YBa ₂ Cu ₃ O _{7-x} . <i>Physica C: Superconductivity and Its Applications</i> , 1989, 158, 258-264.	1.2	10
69	Effect of silver addition on superconductivity in the Bi _{1.6} Pb _{0.4} Sr _{1.6} Ca ₂ Cu ₃ O _{10-y} system. <i>Journal of Materials Science: Materials in Electronics</i> , 1990, 1, 30-33.	2.2	10
70	Nanoindentation of plasma-deposited nitrogen-rich silicon nitride thin films. <i>Journal of Applied Physics</i> , 2006, 100, 024310.	2.5	10
71	Short-wavelength infrared tuneable filters on HgCdTe photoconductors. <i>Optics Express</i> , 2005, 13, 9683.	3.4	9
72	Phase changes in Y ₁ Ba ₂ Cu ₃ O _{7-x} induced by Fe ₂ O ₃ and V ₂ O ₅ dopants. <i>Journal of Physics C: Solid State Physics</i> , 1988, 21, L127-L131.	1.5	8

#	ARTICLE	IF	CITATIONS
73	Crystallite alignment of YBa ₂ Cu ₃ O _{7-x} through texture growth. Superconductor Science and Technology, 1989, 2, 212-215.	3.5	8
74	Environmental degradation of YBa ₂ Cu ₃ O _{7-δ} thin films. Analysis by atomic force microscopy. Physica C: Superconductivity and Its Applications, 1995, 243, 123-133.	1.2	8
75	Measurement of thermal conductivity by a parallel flow sandwich technique using the Peltier effect. Journal of Physics E: Scientific Instruments, 1972, 5, 553-554.	0.7	7
76	Dependence of the Superconducting Transition Temperature on Radii of Alkali and Alkaline Earth Dopants in Y _{1-x} Ba _{2-x} Cu ₃ O _{7-δ} . Physica Status Solidi (B): Basic Research, 1988, 147, K153.	1.5	7
77	On the bonding microstructure of amorphous silicon oxide thin films. Thin Solid Films, 2006, 515, 2284-2290.	1.8	7
78	Altering the thermal conductivity of phosphorus-doped Si-Ge alloys by the precipitation of dopant. Journal Physics D: Applied Physics, 1982, 15, 299-304.	2.8	6
79	Electrical conduction in sputtered Si:Al films. Solid State Communications, 1983, 47, 555-558.	1.9	6
80	AC susceptibility, resistivity and specific heat of the cubic superconductor Ba _{0.6} K _{0.4} BiO ₃ . Physica C: Superconductivity and Its Applications, 1990, 171, 181-186.	1.2	6
81	EFFECT OF Fe DOPING ON SUPERCONDUCTIVITY IN THE Bi-Pb-Sr-Ca-Cu-O SYSTEM. Modern Physics Letters B, 1990, 04, 1393-1402.	1.9	6
82	Long multifilament Bi-2223 Ag-sheathed superconducting tapes and solenoids. Journal of Superconductivity and Novel Magnetism, 1994, 7, 829-833.	0.5	6
83	Josephson behaviour and flux penetration effects in YBCO double tilt-angle step-edge junctions. IEEE Transactions on Applied Superconductivity, 1995, 5, 2805-2808.	1.7	6
84	High- J_c YBCO Conductors Fabricated By Magnetron Deposition. Materials Research Society Symposia Proceedings, 2000, 616, 199.	0.1	6
85	Evaluation of plasma deposited silicon nitride thin films for microsystems technology. Journal of Microelectromechanical Systems, 2005, 14, 971-977.	2.5	6
86	Thermoelectric properties and microstructure of large-grain Mg ₂ Sn doped with Ag. Materials Research Society Symposia Proceedings, 2009, 1166, 26.	0.1	6
87	Transport current distribution in (Bi,Pb)-2223/Ag tapes. IEEE Transactions on Applied Superconductivity, 1999, 9, 1824-1827.	1.7	5
88	YSZ buffer layers and YBCO superconducting tapes with enhanced biaxial alignment and properties. Physica C: Superconductivity and Its Applications, 2003, 387, 328-340.	1.2	5
89	The role of solitons and the kinetics of precipitate growth in boron doped silicon-germanium alloys. Journal of Applied Physics, 1983, 54, 2402-2406.	2.5	4
90	Processing, characterisation and properties of the superconducting Tl-Ba-Ca-Cu-O system. Superconductor Science and Technology, 1988, 1, 83-87.	3.5	4

#	ARTICLE	IF	CITATIONS
91	Comparison of YBCO thin films and SQUIDs prepared by ion beam deposition and RF and DC unbalanced magnetron sputtering. IEEE Transactions on Magnetics, 1991, 27, 3036-3039.	2.1	4
92	AC loss from susceptibility measurements in Bi-2223/Ag superconducting tapes. European Physical Journal D, 1996, 46, 1297-1298.	0.4	4
93	YBCO coated tapes fabricated by IBAD and magnetron sputtering techniques. Physica C: Superconductivity and Its Applications, 2000, 341-348, 2491-2492.	1.2	4
94	Highly Oriented $Yb_{2-x}Cu_3O_{7-x}$ Thin Films Prepared by Unbalanced Dc Magnetron Sputtering From a Single Stoichiometric Target. Materials Research Society Symposia Proceedings, 1989, 169, 655.	0.1	3
95	Critical current and magnetic field performance of Bi-2223/Ag composite superconducting tapes. IEEE Transactions on Applied Superconductivity, 1999, 9, 2609-2612.	1.7	3
96	On the Boundary Scattering of Phonons in Silicon. Physica Status Solidi (B): Basic Research, 1981, 103, K13.	1.5	2
97	The role of hydrogen and boron in a-SiH : B ⁺ Electronic and optical properties. Applications of Surface Science, 1985, 22-23, 916-924.	1.0	2
98	Modification of the adhesion and contact resistance of the Ag/YBa ₂ Cu ₃ O ₇ interface with keV electron irradiation. Journal of Applied Physics, 1995, 78, 5782-5786.	2.5	2
99	Amorphous Hydrogenated α -Diamondlike-Carbon Films and Arc-Evaporated Carbon Films. , 1997, , 837-852.		2
100	Niobium step-edge superconducting junctions. Superconductor Science and Technology, 2008, 21, 045013.	3.5	2
101	Dual ion beam assisted magnetron deposition of biaxially textured YSZ and YBCO/YSZ thin films. Surface and Coatings Technology, 2016, 305, 116-122.	4.8	2
102	CORRELATION OF CRITICAL CURRENT DENSITY WITH Cu^{3+} CONCENTRATION AND DENSITY IN $YBa_2Cu_3O_{7-x}$. Modern Physics Letters B, 1989, 03, 151-155.	1.9	1
103	Critical Current Density and Labile Ions in Superconducting $YBa_2Cu_3O_{7-x}$ Wire and Tape. Materials Science Forum, 1988, 34-36, 341-344.	0.3	1
104	Strain dependence of the critical current density of Bi-2223 multifilament tape conductors. Physica C: Superconductivity and Its Applications, 1994, 235-240, 3457-3458.	1.2	1
105	Epitaxial Growth of Cerium Oxide Buffer Layers on MgO, YSZ and Sapphire Substrates. Materials Research Society Symposia Proceedings, 2000, 619, 191.	0.1	1
106	Properties of the Cubic Superconductor $Ba_{0.6}K_{0.4}BiO_3$. , 1991, , 109-112.		1
107	Amorphous Hydrogenated α -Diamondlike-Carbon Films and Arc-Evaporated Carbon Films. , 1998, , 837-852.		1
108	Superconducting Millimetre-Wavelength Bolometers. , 0, , .		0

#	ARTICLE	IF	CITATIONS
109	AC losses of arrays of superconducting strips on metallic substrates. Physica B: Condensed Matter, 2000, 284-288, 2083-2084.	2.7	0
110	Processing, Characterisation and Properties of the Superconducting Tl-Ba-Ca-Cu-O System. , 1989, , 813-818.		0
111	Superconductor/Silver Composites and Tapes Based on Bi-Pb-Sr-Ca-Cu-O. , 1991, , 683-686.		0
112	Growth and Microstructure of YBa ₂ Cu ₃ O _{7-x} Thin Films for Superconductor Devices. , 1994, , 409-416.		0
113	Transport Current Distribution in Superconducting Tapes. , 1999, , 315-318.		0