

Christoph Särgers

List of Publications by Year in descending order

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126
papers

2,107
citations

236925
25
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128
all docs

128
docs citations

128
times ranked

2516
citing authors

#	ARTICLE	IF	CITATIONS
1	Large topological Hall effect in the non-collinear phase of an antiferromagnet. <i>Nature Communications</i> , 2014, 5, 3400.	12.8	169
2	Superconductivity in layered Nb/Gd films. <i>Physical Review B</i> , 1994, 49, 4053-4063.	3.2	134
3	Self-assembly of the 3-aminopropyltrimethoxysilane multilayers on Si and hysteretic current-voltage characteristics. <i>Applied Physics A: Materials Science and Processing</i> , 2008, 90, 581-589.	2.3	121
4	Strongly enhanced Curie temperature in carbon-doped Mn ₅ Ge ₃ films. <i>Journal of Magnetism and Magnetic Materials</i> , 2000, 221, 248-254.	2.3	76
5	Determining the current polarization in Al/Co nanostructured point contacts. <i>Physical Review B</i> , 2004, 69, .	3.2	61
6	Electrical spin injection in multiwall carbon nanotubes with transparent ferromagnetic contacts. <i>Applied Physics Letters</i> , 2005, 86, 112109.	3.3	53
7	Flux-flow instabilities in amorphousNb0.7Ge0.3microbridges. <i>Physical Review B</i> , 2004, 69, .	3.2	52
8	Superconducting spin switch with perpendicular magnetic anisotropy. <i>Physical Review B</i> , 2007, 75, .	3.2	49
9	Photoluminescence microscopy of carbon nanotubes grown by chemical vapor deposition: Influence of external dielectric screening on optical transition energies. <i>Physical Review B</i> , 2007, 75, .	3.2	49
10	Oxygen-induced surface structure of Nb(110). <i>Surface Science</i> , 2001, 471, 209-218.	1.9	48
11	Thermoelectric effects in superconductor-ferromagnet tunnel junctions on europium sulfide. <i>Physical Review B</i> , 2017, 95, .	3.2	44
12	Spin-polarized quasiparticle transport in exchange-split superconducting aluminum on europium sulfide. <i>Physical Review B</i> , 2014, 90, .	3.2	43
13	Superconducting and magnetic properties of Nb/Pd Fe /Nb triple layers. <i>European Physical Journal B</i> , 2000, 14, 1-10.	1.5	39
14	Growth of iron phthalocyanine nanoweb and nanobrush using molecular beam epitaxy. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2008, 41, 154-163.	2.7	39
15	Creation of equal-spin triplet superconductivity at the Al/EuS interface. <i>Nature Communications</i> , 2018, 9, 5248.	12.8	39
16	Magnetic order by C-ion implantation into Mn ₅ Si ₃ and Mn ₅ Ge ₃ and its lateral modification. <i>Applied Physics Letters</i> , 2008, 93, 062503.	3.3	38
17	Spin-polarized current versus stray field in a perpendicularly magnetized superconducting spin switch. <i>Applied Physics Letters</i> , 2007, 91, 152504.	3.3	35
18	Effect of oxygen segregation on the surface structure of single-crystalline niobium films on sapphire. <i>Applied Physics A: Solids and Surfaces</i> , 1992, 54, 350-354.	1.4	33

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19	Observation of P donors on the Si(111) surface by scanning tunneling microscopy. <i>Europhysics Letters</i> , 1997, 38, 177-182.	2.0	33
20	Anomalous Hall effect in the noncollinear antiferromagnet Mn ₅ Si ₃ . <i>AIP Advances</i> , 2016, 6, .	1.3	33
21	Morphology and magnetic properties of submonolayer Cd films. <i>Physical Review B</i> , 1998, 57, 3525-3530.	3.2	31
22	Switching of a large anomalous Hall effect between metamagnetic phases of a non-collinear antiferromagnet. <i>Scientific Reports</i> , 2017, 7, 42982.	3.3	31
23	Preparation and structural characterization of ferromagnetic Mn ₅ Si ₃ C _x films. <i>Physical Review B</i> , 2003, 68, .	3.2	29
24	Formation of copper oxide surface structures via pulse injection of air onto Cu(111) surfaces. <i>Physical Review B</i> , 2012, 85, .	3.2	28
25	Optical absorption in silicon layers in the presence of charge inversion/accumulation or ion implantation. <i>Applied Physics Letters</i> , 2013, 103, .	3.3	26
26	Fabrication and superconducting properties of nanostructured SFS contacts. <i>Journal of Magnetism and Magnetic Materials</i> , 2002, 240, 598-600.	2.3	25
27	Low temperature thermoelectric properties of Cu intercalated TiSe ₂ : a charge density wave material. <i>Applied Physics A: Materials Science and Processing</i> , 2013, 111, 465-470.	2.3	24
28	Ferromagnetism in carbon-doped Mn ₅ Si ₃ films. <i>Journal of Applied Physics</i> , 2000, 87, 6013-6015.	2.5	23
29	Electronic Transport in magnetically ordered Mn ₅ Si ₃ films. <i>Physical Review B</i> , 2008, 77, 104411. Hanle-effect measurements of spin injection from Mn ₅ Ge ₃ C _{0.8} /Al ₂ O ₃ -contacts into degenerately doped Ge channels on Si. <i>Applied Physics Letters</i> , 2014, 105, 222408.	3.2	22
30	Superconducting properties of fractal Nb/Cu multilayers. <i>Physical Review B</i> , 1996, 53, 11751-11756.	3.2	20
32	Ion beam deposition and structural characterization of GMR spin valves. <i>IEEE Transactions on Magnetics</i> , 1997, 33, 2369-2374.	2.1	20
33	Magnetotransport in ferromagnetic Mn ₅ Si ₃ films. <i>Physical Review B</i> , 2014, 90, 024405. Second-harmonic Generation from ZnO/Al ₂ O ₃ Nanolaminate Optical Metamaterials Grown by Atomic Layer Deposition. <i>Advanced Optical Materials</i> , 2016, 4, 1203-1208.	7.3	19
35	Investigation of single boron acceptors at the cleaved Si:B(111) surface. <i>Physical Review B</i> , 2000, 61, 7622-7627.	3.2	18
36	Identification of P dopants at nonequivalent lattice sites of the Si ₅ Al ₃ film. <i>Physical Review B</i> , 2007, 76, .	3.2	18

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37	Effect of substrate temperature on the microstructure of thin niobium films. <i>Thin Solid Films</i> , 1994, 239, 51-56.	1.8	17
38	Size Dependence of Current Spin Polarization through Superconductor/Ferromagnet Nanocontacts. <i>Physical Review Letters</i> , 2008, 101, 147005.	7.8	17
39	Switching the Conductance of Dy Nanocontacts by Magnetostriction. <i>Nano Letters</i> , 2011, 11, 574-578.	9.1	16
40	Quasi-metallic behavior of ZnO grown by atomic layer deposition: The role of hydrogen. <i>Journal of Applied Physics</i> , 2017, 122, .	2.5	15
41	Ferromagnetism above room temperature in Mn _x Si _{1-x} C alloy films. <i>Applied Physics Letters</i> , 1996, 68, 3189-3190.	3.3	14
42	Investigation of the (111) surface of P-doped Si by scanning tunneling microscopy. <i>Applied Physics A: Materials Science and Processing</i> , 1999, 68, 167-172.	2.3	14
43	Evidence for one-dimensional electron propagation on Si(111)-(2Å-1) from Coulomb blockade. <i>Physical Review B</i> , 2005, 72, .	3.2	14
44	Magnetism of carbon doped Mn ₅ Si ₃ and Mn ₅ Ge ₃ films. <i>Journal of Chemical Sciences</i> , 2009, 121, 173-176.	1.5	14
45	Low-temperature properties of amorphous (Mo _{1-x} Ru _x) _{0.8} P _{0.2} alloys. <i>European Physical Journal B</i> , 1988, 70, 361-369.	1.5	13
46	Structure and electronic properties of ultrathin gold films on vicinal silicon(111). <i>Thin Solid Films</i> , 2003, 428, 11-14.	1.8	13
47	Growth and characterization of Nb/Gd multilayers for different substrate temperatures. <i>Thin Solid Films</i> , 1992, 219, 69-79.	1.8	12
48	Remote control of magnetostriction-based nanocontacts at room temperature. <i>Scientific Reports</i> , 2015, 5, 13621.	3.3	12
49	Specific heat of mechanically alloyed amorphous Zr _{0.7} Ni _{0.3} . <i>Physical Review B</i> , 1989, 40, 8787-8790.	3.2	11
50	Nonlocal vortex motion in mesoscopic amorphous Nb _{0.7} Ge _{0.3} structures. <i>Physical Review B</i> , 2006, 74, .	3.2	11
51	Effect of ion bombardment on the long-range chemical order in FePd films. <i>Journal of Applied Physics</i> , 1996, 80, 5753-5758.	2.5	10
52	Perpendicular upper critical field of a proximity-coupled superconducting film. <i>Physica C: Superconductivity and Its Applications</i> , 2002, 370, 197-204.	1.2	10
53	Local-strain mapping on Ag(111) islands on Nb(110). <i>Applied Physics Letters</i> , 2012, 101, 063111.	3.3	10
54	Ferromagnetic Mn ₅ Ge ₃ C _{0.8} contacts on Ge: work function and specific contact resistivity. <i>Semiconductor Science and Technology</i> , 2013, 28, 125002.	2.0	10

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55	Magnetooptic measurements on ultrathin Gd films on Y. Zeitschrift FÄr Physik B-Condensed Matter, 1995, 98, 541-547.	1.1	9
56	Electronic transport and Kondo effect in $\text{La}_{1-x}\text{Ce}_x$ films. Physical Review B, 1996, 54, 3454-3461.	3.2	9
57	STM Investigation of Large π -Conjugated Oligomers and Tetrahydrofuran Codeposited on Cu(111) by Pulse Injection. Journal of Physical Chemistry C, 2009, 113, 14335-14340.	3.1	9
58	Cu-doped GaN grown by molecular beam epitaxy. Journal of Physics: Conference Series, 2010, 200, 062006.	0.4	9
59	Magnetic properties of Cu-doped GaN grown by molecular beam epitaxy. Physical Review B, 2012, 85, .	3.2	9
60	Two-band superconductivity of bulk and surface states in Ag thin films on Nb. Physical Review B, 2016, 94, .	3.2	9
61	Vortex motion noise in micrometer-sized thin films of the amorphous $\text{Nb}_{0.7}\text{Ge}_{0.3}$ weak-pinning superconductor. Physical Review B, 2002, 66, .	3.2	8
62	Atomically resolved tunneling spectroscopy on Si(557)-Au. Europhysics Letters, 2006, 74, 473-478.	2.0	8
63	Fabrication and magnetic characterization of nanometer-sized ellipses of the ferromagnetic insulator EuS. Journal of Magnetism and Magnetic Materials, 2014, 368, 49-53.	2.3	8
64	Electrical switching of the anomalous Hall effect. Nature Electronics, 2018, 1, 154-155.	26.0	8
65	Onset of phase diffusion in high kinetic inductance granular aluminum micro-SQUIDs. Superconductor Science and Technology, 2019, 32, 125008.	3.5	8
66	Weak localization and weak antilocalization in doped $\text{Ge}_{1-y}\text{Sn}_y$ layers with up to 8% Sn. Journal of Physics Condensed Matter, 2021, 33, 085703.	1.8	8
67	Distribution of manganese moments in magnetically ordered $\text{Mn}_5\text{Si}_3\text{C}_{1.5}$ films. Physics Letters, Section A: General, Atomic and Solid State Physics, 2000, 269, 234-237.	2.1	7
68	Local structural and magnetic properties of $\text{Mn}_5\text{Si}_3\text{Cx}$ films. Journal of Magnetism and Magnetic Materials, 2002, 240, 383-385.	2.3	7
69	Field-screening properties of proximity-coupled Nb/Ag double layers. Europhysics Letters, 2006, 76, 121-127.	2.0	7
70	Correlations between one-dimensional structures at the Si(557):Au surface. Physical Review B, 2007, 75, .	3.2	7
71	Effect of vortex-core size on the flux lattice in a mesoscopic superconducting strip. Physical Review B, 2008, 77, .	3.2	7
72	Poly(3-hexylthiophene) based field-effect transistors with gate SiO ₂ dielectric modified by multi-layers of 3-aminopropyltrimethoxysilane. Thin Solid Films, 2009, 517, 6124-6128.	1.8	7

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73	Reversal of Nonlocal Vortex Motion in the Regime of Strong Nonequilibrium. Physical Review Letters, 2010, 104, 027005.	7.8	7
74	Cu-doped nitrides: Promising candidates for a nitride based spin-aligner. Journal of Crystal Growth, 2011, 323, 355-358.	1.5	7
75	Experimental verification of contact-size estimates in point-contact spectroscopy on superconductor/ferromagnet heterocontacts. Physical Review B, 2012, 86, .	3.2	7
76	Temperature-dependent scanning tunneling spectroscopy on the Si(557)-Au surface. Physical Review B, 2014, 89, .	3.2	7
77	Generation of spin-polarized hot electrons at topological insulators surfaces by scattering from collective charge excitations. Communications Physics, 2021, 4, .	5.3	7
78	Structural Parameters of Multilayers from X-ray Reflectivity: an Easy-to-Handle Approach. Journal of Applied Crystallography, 1995, 28, 160-167.	4.5	6
79	Effect of submicron holes on the vortex dynamics of a superconducting microbridge. Physical Review B, 2004, 70, .	3.2	6
80	Manipulating superconductivity in perpendicularly magnetized FSF triple layers. Applied Physics A: Materials Science and Processing, 2007, 89, 593-597.	2.3	6
81	Signature of $\langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \langle \text{mml:mi} \rangle f \langle / \text{mml:mi} \rangle \langle / \text{mml:math} \rangle$ -electron conductance in $\langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \langle \text{mml:mi} \rangle \hat{f} \pm \langle / \text{mml:mi} \rangle \langle / \text{mml:math} \rangle$ -Ce single-atom contacts. Physical Review B, 2017, 96, .	3.2	6
82	Anomalous Nernst effect in ferromagnetic Mn ₅ Ge ₃ C_i_x</i> thin films on insulating sapphire. Journal of Applied Physics, 2020, 128, .	2.5	6
83	Proximity effect between superconductors and ferromagnets: from thin films to nanostructures. Annalen Der Physik, 2005, 14, 591-601.	2.4	5
84	Fully ultrahigh-vacuum-compatible fabrication of submicrometer-spaced electrical contacts. Review of Scientific Instruments, 2006, 77, 026101.	1.3	5
85	Nonlocal versus local vortex dynamics in the transversal flux transformer effect. Physical Review B, 2010, 81, .	3.2	5
86	Controlled electromigration and oxidation of free-standing copper wires. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	2.3	5
87	Minority spin conduction in ferromagnetic <math>\langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \rangle Mn \langle / \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 5 \langle / \text{mml:mn} \rangle \langle / \text{mml:math} \rangle</mathvariant="normal">C</math>$\times$$\langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \rangle Mn \langle / \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 5 \langle / \text{mml:mn} \rangle \langle / \text{mml:math} \rangle$ and $\langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \rangle Mn \langle / \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 5 \langle / \text{mml:mn} \rangle \langle / \text{mml:math} \rangle$. Physical Review B, 2021, 103	3.2	5
88	Anomalous Nernst effect of a ferromagnetic film on a semiconductor. Applied Physics Letters, 2020, 117, 262402.	3.3	5
89	Search for Universality of the Density of States of Low-Energy Excitations in Amorphous Metals. Japanese Journal of Applied Physics, 1987, 26, 737.	1.5	5
90	Dimensional crossover in fractal multilayered superconductors. Physica C: Superconductivity and Its Applications, 1994, 235-240, 2615-2616.	1.2	4

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91	Scanning tunneling spectroscopy of rare-earth metals: Gadolinium on yttrium. <i>Europhysics Letters</i> , 1997, 39, 159-164.	2.0	4
92	UHV compatible nanostructuring technique for mesoscopic hybrid devices: application to superconductor/ferromagnet Josephson contacts. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2002, 14, 341-345.	2.7	4
93	Inhomogeneous magnetization of a superconducting film measured with a gradiometer. <i>Applied Physics Letters</i> , 2004, 84, 1522-1524.	3.3	4
94	<math display="block">\langle mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="block">\langle mml:mrow>\langle mml:mn>1</mml:mn>\langle mml:mo>\hat{\wedge}</mml:mo>\langle mml:mi>f</mml:mi>\langle mml:mrow>\langle mml:math>	flux flow noise due to a coexistence of qualitatively different vortex states. <i>Physical Review B</i> , 2007, 76, .	
95	Superconducting state of very thin Pd films deposited on a diluted insulating Eu _x Sr _{1-x} S ferromagnet. <i>Physical Review B</i> , 2011, 83, .	3.2	4
96	Phase separation and zero thermal expansion in antiperovskite Mn ₃ Zn _{0.77} Mn _{0.19} N _{0.94} : An in situ neutron diffraction investigation. <i>Scripta Materialia</i> , 2018, 146, 18-21.	5.2	4
97	Controlling Chiral Spin States of a Triangular Lattice Magnet by Cooling in a Magnetic Field. <i>Advanced Functional Materials</i> , 2019, 29, 1900947.	14.9	4
98	Specific heat of metastable Zr _{1-x} Si _x alloys. <i>Journal of Physics Condensed Matter</i> , 1990, 2, 4559-4565.	1.8	3
99	Electronic Transport in Ultrathin Gold Films on Si(111). <i>Journal of Low Temperature Physics</i> , 2004, 137, 509-522.	1.4	3
100	Proximity effect between superconductors and ferromagnets. <i>Physica C: Superconductivity and Its Applications</i> , 2007, 460-462, 322-326.	1.2	3
101	Pair-breaking mechanisms in Nb/Gd/Nb films. <i>Physica B: Condensed Matter</i> , 1994, 194-196, 2403-2404.	2.7	2
102	Transition temperature and critical fields of Nb/Gd layers. <i>Physica B: Condensed Matter</i> , 1994, 194-196, 2405-2406.	2.7	2
103	STM and STS on single dopants and Au-induced chains at the Si(1 1 1) surface. <i>Applied Surface Science</i> , 2003, 212-213, 105-109.	6.1	2
104	Strongly nonequilibrium flux flow in the presence of perforating submicron holes. <i>Physica C: Superconductivity and Its Applications</i> , 2005, 432, 223-230.	1.2	2
105	Competition between proximity-induced superconductivity and pair breaking: Ag sandwiched between Nb and Fe. <i>Physical Review B</i> , 2007, 75, .	3.2	2
106	Spintronics in metallic superconductor/ferromagnet hybrid structures. <i>International Journal of Materials Research</i> , 2010, 101, 164-174.	0.3	2
107	Electronic disorder of P- and B-doped Si at the metal-insulator transition investigated by scanning tunnelling microscopy and electronic transport. <i>New Journal of Physics</i> , 2013, 15, 055009.	2.9	2
108	15 cm ⁻¹ to 12 000 cm ⁻¹ spectral coverage without changing optics: Diamond beam splitter adaptation of an FTIR spectrometer. <i>Review of Scientific Instruments</i> , 2017, 88, 023118.	1.3	2

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109	Local Joule Heating Mimicking Electroresistance-Like Behavior in Antiperovskite Mn ₃ GaC. Advanced Electronic Materials, 2018, 4, 1800028.	5.1	2
110	MAGNETOOPTIC MEASUREMENTS ON Gd/Nb/Gd SANDWICHES. International Journal of Modern Physics B, 1993, 07, 500-503.	2.0	1
111	(Invited) Mn ₅ Ge ₃ C _{0.8} Contacts for Spin Injection Into Ge. ECS Transactions, 2013, 58, 29-36.	0.5	1
112	Magnetostrictive Fe ₇₃ Ga ₂₇ nanocontacts for low-field conductance switching. Applied Physics Letters, 2016, 108, 242408.	3.3	1
113	Magnetic Characterization of a Mn Based Ferromagnet on Si _x Ge _(1-x) Sn _y with High Sn Content. ECS Transactions, 2019, 93, 101-104.	0.5	1
114	Upper critical field of periodic and fractal Nb/Cu multilayers. European Physical Journal D, 1996, 46, 737-738.	0.4	0
115	Upper critical field of Nb/Pd _{1-x} Fe _x /Nb triple layers. Physica B: Condensed Matter, 2000, 284-288, 499-500.	2.7	0
116	Electronic transport properties of bismuth nanobridges through silicon-nitride membranes. Physica E: Low-Dimensional Systems and Nanostructures, 2004, 22, 872-880.	2.7	0
117	Proximity-induced superconductivity in Nb/Ag/Fe triple layers. Journal of Magnetism and Magnetic Materials, 2007, 310, e767-e768.	2.3	0
118	Effect of magnetic flux penetration on the magnetic hysteresis loops of a Pt/Co/Pt triple layer on Nb(110). Journal of Physics: Conference Series, 2010, 200, 072096.	0.4	0
119	Selected invited contributions from the International Conference on Magnetism (Karlsruhe, Germany,) T _j ETQq1 1 Q.784314 gBT /Over		
120	Interface-induced superconductivity in Pd films on SrS. , 2012, , .		0
121	Effect of cold working in a magnetic field on the shape of a ferromagnetic nanocontact. Applied Physics Letters, 2012, 100, 202402.	3.3	0
122	Spin accumulation in n-Ge on Si with sputtered Mn ₅ Ge ₃ C _{0.8} -contacts. , 2014, , .		0
123	Resolving the spin polarization and magnetic domain wall width of (Nd,Dy) ₂ Fe ₁₄ B with spin-polarized scanning tunneling microscopy. Applied Physics Express, 0, , .	2.4	0
124	ELECTROGRAFTING OF ORGANIC MONOLAYERS ON SILICON FOR MOLECULAR ELECTRONICS. , 2007, , .		0
125	Composition and magnetic properties of thin films grown by interdiffusion of Mn and Sn-Rich, Ge lattice matched SixGe _{1-x-y} Sn _y layers. Journal of Magnetism and Magnetic Materials, 2022, 546, 168731.	2.3	0
126	Formation of Mn ₅ Ge ₃ on a Recess-Etched Ge (111) Quantum-Well Structure for Semiconductor Spintronics. , 2021, , .		0