

Chris J Palmström

List of Publications by Year in descending order

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145
papers

6,254
citations

76294

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71651

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149
all docs

149
docs citations

149
times ranked

5561
citing authors

#	ARTICLE	IF	CITATIONS
1	Anomalous Nernst and Seebeck coefficients in epitaxial thin film Co_2 and Co_2 . Physical Review B, 2022, 105, .	1.1	10
2	Supercurrent parity meter in a nanowire Cooper pair transistor. Science Advances, 2022, 8, eabm9896.	4.7	5
3	Cryogenic microwave loss in epitaxial Al/GaAs/Al trilayers for superconducting circuits. Journal of Applied Physics, 2021, 129, .	1.1	7
4	Parity-preserving and magnetic field-robust resilient superconductivity in InSb nanowires with Sn shells. Science, 2021, 372, 508-511.	6.0	50
5	Controlling magnetoresistance by tuning semimetallicity through dimensional confinement and heteroepitaxy. Science Advances, 2021, 7, .	4.7	7
6	Full parity phase diagram of a proximitized nanowire island. Physical Review B, 2021, 104, .	1.1	20
7	Materials for emergent silicon-integrated optical computing. Journal of Applied Physics, 2021, 130, 070907.	1.1	27
8	Gated Magnetotransport in \pm -Sn Thin Films on CdTe. Journal of Electronic Materials, 2021, 50, 6329-6336.	1.0	1
9	Confined lateral epitaxial overgrowth of InGaAs: Mechanisms and electronic properties. Journal of Applied Physics, 2021, 130, 085302.	1.1	0
10	Triggering phase-coherent spin packets by pulsed electrical spin injection across an Fe/GaAs Schottky barrier. Physical Review B, 2021, 104, .	1.1	0
11	Identifying the fingerprints of topological states by tuning magnetoresistance in a semimetal: The case of topological half-Heusler Pt_2Mn . Physical Review Materials, 2021, 5, .	0.9	1
12	Epitaxial Al/GaAs/Al tri-layers fabricated using a novel wafer-bonding technique. Journal of Applied Physics, 2020, 128, 115301.	1.1	2
13	Evaluation of the vortex core size in gate-tunable Josephson junctions in Corbino geometry. Physical Review B, 2020, 102, .	1.1	3
14	Transport studies in a gate-tunable three-terminal Josephson junction. Physical Review B, 2020, 101, .	1.1	44
15	Conductance-Matrix Symmetries of a Three-Terminal Hybrid Device. Physical Review Letters, 2020, 124, 036802.	2.9	72
16	Editorial Expression of Concern: Quantized Majorana conductance. Nature, 2020, 581, E4-E4.	13.7	10
17	Interplay of large two-magnon ferromagnetic resonance linewidths and low Gilbert damping in Heusler thin films. Physical Review B, 2020, 101, .	1.1	27
18	In-plane selective area InSb-Al nanowire quantum networks. Communications Physics, 2020, 3, .	2.0	37

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19	Antiphase Boundary Free InP Microridges on (001) Silicon by Selective Area Heteroepitaxy. <i>Crystal Growth and Design</i> , 2020, 20, 7761-7770.	1.4	7
20	Controlling facets and defects of InP nanostructures in confined epitaxial lateral overgrowth. <i>Physical Review Materials</i> , 2020, 4, .	0.9	3
21	Mechanism for embedded in-plane self-assembled nanowire formation. <i>Physical Review Materials</i> , 2020, 4, .	0.9	1
22	THz-range Faraday rotation in the Weyl semimetal candidate Co ₂ TiGe. <i>Journal of Applied Physics</i> , 2020, 128, .	1.1	4
23	Nanometer scale structural and compositional inhomogeneities of half-Heusler CoTi _{1-x} Fe _x Sb thin films. <i>Journal of Applied Physics</i> , 2019, 125, 205301.	1.1	2
24	Selective and confined epitaxial growth development for novel nano-scale electronic and photonic device structures. <i>Journal of Applied Physics</i> , 2019, 126, .	1.1	9
25	Tailoring commensurability of hBN/graphene heterostructures using substrate morphology and epitaxial growth conditions. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2019, 37, 051503.	0.9	6
26	Horizontal Heterojunction Integration via Template-Assisted Selective Epitaxy. <i>Crystal Growth and Design</i> , 2019, 19, 7030-7035.	1.4	10
27	Transport Studies of Epi-Al/InAs Two-Dimensional Electron Gas Systems for Required Building-Blocks in Topological Superconductor Networks. <i>Nano Letters</i> , 2019, 19, 3083-3090.	4.5	38
28	Weak antilocalization in quasi-two-dimensional electronic states of epitaxial LuSb thin films. <i>Physical Review B</i> , 2019, 99, .	1.1	12
29	Superconducting vanadium/indium-arsenide hybrid nanowires. <i>Nanotechnology</i> , 2019, 30, 294005.	1.3	22
30	End-to-end correlated subgap states in hybrid nanowires. <i>Physical Review B</i> , 2019, 100, .	1.1	36
31	Contribution of top barrier materials to high mobility in near-surface InAs quantum wells grown on GaSb(001). <i>Physical Review Materials</i> , 2019, 3, .	0.9	12
32	Selective-area chemical beam epitaxy of in-plane InAs one-dimensional channels grown on InP(001), InP(111)B, and InP(011) surfaces. <i>Physical Review Materials</i> , 2019, 3, .	0.9	48
33	Reduced interface spin polarization by antiferromagnetically coupled Mn segregated to the C_{MnSi} interface. <i>Physical Review B</i> , 2018, 97, .	1.1	10
34	Influence of the magnetic proximity effect on spin-orbit torque efficiencies in ferromagnet/platinum bilayers. <i>Physical Review B</i> , 2018, 97, .	1.1	24
35	Equal-Spin Andreev Reflection on Junctions of Spin-Resolved Quantum Hall Bulk State and Spin-Singlet Superconductor. <i>Scientific Reports</i> , 2018, 8, 3454.	1.6	9
36	Parity transitions in the superconducting ground state of hybrid InSb-Al Coulomb islands. <i>Nature Communications</i> , 2018, 9, 4801.	5.8	49

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55	Valence-band offsets of CoTiSb/In _{0.53} Ga _{0.47} As and CoTiSb/In _{0.52} Al _{0.48} As heterojunctions. Applied Physics Letters, 2017, 111, .	1.5	8
56	Oxygen migration in epitaxial CoFe/MgO/Co ₂ MnSi magnetic tunnel junctions. Journal of Applied Physics, 2017, 122, .	1.1	7
57	Magnetic field inducing Zeeman splitting and anomalous conductance reduction of half-integer quantized plateaus in InAs quantum wires. Physical Review B, 2017, 96, .	1.1	8
58	Spin injection and detection up to room temperature in Heusler alloy/n-GaAs spin valves. Physical Review B, 2016, 94, .	1.1	49
59	Limits to mobility in InAs quantum wells with nearly lattice-matched barriers. Physical Review B, 2016, 94, .	1.1	16
60	Heusler compounds and spintronics. Progress in Crystal Growth and Characterization of Materials, 2016, 62, 371-397.	1.8	103
61	Demonstration of gate control of spin splitting in a high-mobility InAs/AlSb two-dimensional electron gas. Physical Review B, 2016, 93, .	1.1	20
62	Two-dimensional epitaxial superconductor-semiconductor heterostructures: A platform for topological superconducting networks. Physical Review B, 2016, 93, .	1.1	211
63	Observation of a topologically non-trivial surface state in half-Heusler PtLuSb (001) thin films. Nature Communications, 2016, 7, 11993.	5.8	50
64	Quantized conductance doubling and hard gap in a two-dimensional semiconductor-superconductor heterostructure. Nature Communications, 2016, 7, 12841.	5.8	146
65	Dynamic detection of electron spin accumulation in ferromagnet-semiconductor devices by ferromagnetic resonance. Nature Communications, 2016, 7, 10296.	5.8	16
66	Surface reconstructions and transport of epitaxial PtLuSb (001) thin films grown by MBE. Journal of Crystal Growth, 2016, 436, 145-149.	0.7	11
67	Anisotropic spin relaxation in n-GaAs from strong inhomogeneous hyperfine fields produced by the dynamical polarization of nuclei. Physical Review B, 2015, 92, .	1.1	9
68	Knight shift and nuclear spin relaxation in Fe/n-GaAs heterostructures. Physical Review B, 2015, 92, .	1.1	2
69	Robust micromagnet design for fast electrical manipulations of single spins in quantum dots. Applied Physics Express, 2015, 8, 084401.	1.1	54
70	Studies of scattering mechanisms in gate tunable InAs/(Al,Ga)Sb two dimensional electron gases. Applied Physics Letters, 2015, 106, .	1.5	12
71	Gating of high-mobility InAs metamorphic heterostructures. Applied Physics Letters, 2014, 105, .	1.5	23
72	Photoluminescence lineshape and dynamics of localized excitonic transitions in InAsP epitaxial layers. Journal of Applied Physics, 2014, 115, .	1.1	18

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73	Lattice distortion in single crystal rare-earth arsenide/GaAs nanocomposites. Applied Physics Letters, 2014, 104, .	1.5	5
74	An apparent metal-insulator transition in high-mobility two-dimensional InAs heterostructures. Physical Review B, 2014, 90, .	1.1	16
75	Fast Electrical Control of Single Electron Spins in Quantum Dots with Vanishing Influence from Nuclear Spins. Physical Review Letters, 2014, 113, 267601.	2.9	70
76	Electrical detection of ferromagnetic resonance in ferromagnet/ <i>n</i> -GaAs heterostructures by tunneling anisotropic magnetoresistance. Applied Physics Letters, 2014, 105, .	1.5	8
77	Time resolved magneto-optical studies of InAsP ternary alloys. , 2014, , .		1
78	Room temperature deposition of sputtered TiN films for superconducting coplanar waveguide resonators. Superconductor Science and Technology, 2014, 27, 015009.	1.8	58
79	Growth and transport properties of epitaxial lattice matched half Heusler CoTiSb/InAlAs/InP(001) heterostructures. Applied Physics Letters, 2014, 104, 022109.	1.5	18
80	Surface and electronic structure of epitaxial PtLuSb (001) thin films. Applied Physics Letters, 2014, 104, 201603.	1.5	16
81	Dynamics of photoexcited carriers and spins in InAsP ternary alloys. Applied Physics Letters, 2013, 102, 222102.	1.5	10
82	Structural and transport properties of epitaxial PrNiO ₃ thin films grown by molecular beam epitaxy. Journal of Crystal Growth, 2013, 366, 51-54.	0.7	13
83	Surface-Mediated Tunable Self-Assembly of Single Crystal Semimetallic ErSb/GaSb Nanocomposite Structures. Nano Letters, 2013, 13, 2895-2901.	4.5	25
84	Thermoelectric properties of single crystal Sc _{1-x} Er _x As/InGaAs nanocomposites. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2013, 31, .	0.6	5
85	Epitaxial growth and surface studies of the Half Heusler compound NiTiSn (001). Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2013, 31, .	0.6	13
86	Planar superconducting resonators with internal quality factors above one million. Applied Physics Letters, 2012, 100, .	1.5	341
87	Growth and characterization of TbAs/GaAs nanocomposites. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2011, 29, .	0.6	18
88	Cross-sectional scanning tunneling microscopy and spectroscopy of semimetallic ErAs nanostructures embedded in GaAs. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2011, 29, .	0.6	8
89	Growth of epitaxial NiTi shape memory alloy films on GaAs(001) and evidence of martensitic transformation. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2011, 29, .	0.6	4
90	Spin accumulation near Fe/GaAs (001) interfaces: The role of semiconductor band structure. Physical Review B, 2011, 84, .	1.1	26

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91	Martensite transformation of epitaxial NiTi films. Applied Physics Letters, 2011, 98, .	1.5	11
92	Mechanical Construction of Semiconductor Band Gaps. IEEE Journal of Quantum Electronics, 2010, 46, 1261-1267.	1.0	5
93	Electrical Measurement of the Direct Spin Hall Effect in Fe/InGaAs Heterostructures. Physical Review Letters, 2010, 105, 156602.	2.9	53
94	Hyperfine interactions and spin transport in ferromagnet-semiconductor heterostructures. Physical Review B, 2009, 80, .	1.1	43
95	Bias-controlled sensitivity of ferromagnet/semiconductor electrical spin detectors. Physical Review B, 2009, 80, .	1.1	47
96	Comment on "High-resolution core-level photoemission study on GaAs(111)B surfaces". Appl. Phys. 101, 043516 (2007). Journal of Applied Physics, 2009, 105, 056106.	1.1	4
97	Spin injection across the Fe/GaAs interface: Role of interfacial ordering. Physical Review B, 2009, 80, .	1.1	40
98	Dielectric properties of InAsP alloy thin films and evaluation of direct- and reciprocal-space methods of determining critical-point parameters. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 884-887.	0.8	3
99	Phase formation in the thin film Fe/GaAs system. Applied Physics Letters, 2008, 92, .	1.5	18
100	Local Hanle-effect studies of spin drift and diffusion in n:GaAs epilayers and spin-transport devices. New Journal of Physics, 2007, 9, 347-347.	1.2	51
101	Growth temperature dependence of Mn/GaAs surfaces and interfaces. Journal of Applied Physics, 2007, 102, 063513.	1.1	9
102	Optical and electrical spin injection and spin transport in hybrid Fe/GaAs devices. Journal of Applied Physics, 2007, 101, 081716.	1.1	20
103	Dielectric functions and electronic structure of $\text{InAs}_x\text{P}_{1-x}$ films on InP. Applied Physics Letters, 2007, 91, .	1.5	16
104	Electrical detection of spin transport in lateral ferromagnet-semiconductor devices. Nature Physics, 2007, 3, 197-202.	6.5	732
105	Epitaxial Growth and Characterization of Single Crystal Ferromagnetic Shape Memory Co_2NiGa Films. Ferroelectrics, 2006, 342, 35-42.	0.3	4
106	Electrical Detection of Spin Accumulation at a Ferromagnet-Semiconductor Interface. Physical Review Letters, 2006, 96, 176603.	2.9	173
107	Ferromagnetic resonance in the stripe domain state: A study in Co_2MnGa (001). Journal of Applied Physics, 2006, 99, 08J109.	1.1	8
108	Nonequilibrium phases in epitaxial Mn/GaAs interfacial reactions. Journal of Vacuum Science & Technology B, 2006, 24, 2018.	1.3	2

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109	Spin injection from perpendicular magnetized ferromagnetic $\hat{\Gamma}$ -MnGa into (Al,Ga)As heterostructures. Applied Physics Letters, 2006, 89, 112511.	1.5	45
110	Embedded growth mode of thermodynamically stable metallic nanoparticles on III-V semiconductors. Applied Physics Letters, 2006, 88, 243117.	1.5	19
111	Embedded assembly mechanism of stable metal nanocrystals on semiconductor surfaces. Physical Review B, 2006, 73, .	1.1	30
112	Optical and Electrical Detection of Spin-Polarized Transport. , 2006, , .		0
113	Remarkable strain-induced magnetic anisotropy in epitaxial Co ₂ MnGa (001) films. Journal of Magnetism and Magnetic Materials, 2005, 286, 340-345.	1.0	30
114	Growth of a-plane ZnO Thin Films on r-plane Sapphire by Plasma-assisted MBE. Materials Research Society Symposia Proceedings, 2005, 891, 1.	0.1	4
115	Phase behavior of thin film Mn ²⁺ GaAs interfacial reactions. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2005, 23, 1752.	1.6	14
116	Optical Properties of AlGaSb Alloys Grown by MBE. AIP Conference Proceedings, 2005, , .	0.3	1
117	Spin injection and relaxation in ferromagnet-semiconductor heterostructures. Physical Review B, 2005, 71, .	1.1	141
118	Electron spin dynamics and hyperfine interactions in Fe ²⁺ Al _{0.1} Ga _{0.9} As ²⁺ GaAs spin injection heterostructures. Physical Review B, 2005, 72, .	1.1	30
119	Effects of growth temperature on the structural and magnetic properties of epitaxial Ni ₂ MnIn thin films on InAs (001). Journal of Applied Physics, 2005, 97, 073901.	1.1	9
120	Spin injection from the Heusler alloy Co ₂ MnGe into Al _{0.1} Ga _{0.9} As ²⁺ GaAs heterostructures. Applied Physics Letters, 2005, 86, 102107.	1.5	153
121	Exchange biasing of the ferromagnetic semiconductor (Ga,Mn)As by MnO (invited). Journal of Applied Physics, 2005, 97, 10D304.	1.1	17
122	Imaging Spin Transport in Lateral Ferromagnet/Semiconductor Structures. Science, 2005, 309, 2191-2195.	6.0	298
123	Shape memory and ferromagnetic shape memory effects in single-crystal Ni ₂ MnGa thin films. Journal of Applied Physics, 2004, 95, 2593-2600.	1.1	102
124	Interfacial reactions of Mn/GaAs thin films. Applied Physics Letters, 2004, 84, 3145-3147.	1.5	34
125	Exchange biasing of the ferromagnetic semiconductor Ga _{1-x} Mn _x As. Applied Physics Letters, 2004, 85, 1556-1558.	1.5	53
126	Epitaxial Heusler Alloys: New Materials for Semiconductor Spintronics. MRS Bulletin, 2003, 28, 725-728.	1.7	110

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127	Tunable magnetization reversal in epitaxial bcc Fe _{1-x} Cox films on vicinal surfaces. Journal of Applied Physics, 2003, 93, 8256-8258.	1.1	2
128	Nuclear magnetic resonance in a ferromagnet-semiconductor heterostructure. Applied Physics Letters, 2003, 83, 3335-3337.	1.5	14
129	Dynamic Nuclear Polarization by Electrical Spin Injection in Ferromagnet-Semiconductor Heterostructures. Physical Review Letters, 2003, 91, 036602.	2.9	71
130	Self-assembled CoAs nanostructures. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2003, 21, 1760.	1.6	3
131	Time-domain ferromagnetic resonance in epitaxial thin films. Journal of Applied Physics, 2002, 91, 8040.	1.1	9
132	TEM Characterization of Thin, Epitaxial Ni ₂ MnGa films on GaAs. Microscopy and Microanalysis, 2002, 8, 302-303.	0.2	0
133	Anomalous magnetotransport properties of epitaxial full Heusler alloys. Applied Physics Letters, 2002, 80, 4798-4800.	1.5	78
134	GaAs(111)B(1×1)R23.4° surface reconstruction. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2001, 19, 1597.	1.6	17
135	Optical pumping in ferromagnet-semiconductor heterostructures: Magneto-optics and spin transport. Physical Review B, 2001, 64, .	1.1	47
136	Epitaxial growth of ferromagnetic Ni ₂ MnIn on (001) InAs. Applied Physics Letters, 2001, 79, 1003-1005.	1.5	39
137	Epitaxial growth of ferromagnetic Ni ₂ MnGa on GaAs(001) using NiGa interlayers. Journal of Applied Physics, 2000, 88, 7357-7359.	1.1	48
138	Self-assembled ErAs islands in GaAs: Growth and subpicosecond carrier dynamics. Applied Physics Letters, 1999, 75, 3548-3550.	1.5	124
139	Formation and Characterization of Single Crystal Ni ₂ MnGa Thin Films. Materials Research Society Symposia Proceedings, 1999, 604, 297.	0.1	7
140	In-Situ Regrowth of GaAs Through Controlled Phase Transformations and Reactions of Thin Films on GaAs. Materials Research Society Symposia Proceedings, 1998, 514, 455.	0.1	2
141	Substrate Effects on Yield Point Phenomena in Epitaxial Thin Films. Materials Research Society Symposia Proceedings, 1998, 522, 89.	0.1	0
142	Giant Magnetoresistance of Self-Assembled ErAs Islands in GaAs. Materials Research Society Symposia Proceedings, 1997, 475, 251.	0.1	12
143	Growth of γ -alumina on crystallographically distinct aluminium substrates. Journal of Materials Science, 1989, 24, 515-522.	1.7	1
144	Lateral Reactions of GaAs with Ni Studied by Transmission Electron Microscopy. Materials Research Society Symposia Proceedings, 1985, 54, 361.	0.1	8

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145	Epitaxy of Aluminium Films on Semiconductors by Ionized Cluster Beam. Materials Research Society Symposia Proceedings, 1984, 37, 401.	0.1	19