

Andrzej Szczerbakow

List of Publications by Year in descending order

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41
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100
docs citations

100
times ranked

2158
citing authors

#	ARTICLE	IF	CITATIONS
1	Topological crystalline insulator states in $\text{Pb}_{1-x}\text{Sn}_x\text{Se}$. Nature Materials, 2012, 11, 1023-1027.	13.3	693
2	Robust spin-polarized midgap states at step edges of topological crystalline insulators. Science, 2016, 354, 1269-1273.	6.0	91
3	Spin-polarized (111) surface states of the topological crystalline insulator $\text{Pb}_{1-x}\text{Sn}_x\text{Se}$. Physical Review B, 2014, 89, 041407.	1.1	68
4	Observation of topological crystalline insulator surface states on (111)-oriented $\text{Pb}_{1-x}\text{Sn}_x\text{Se}$ films. Physical Review B, 2014, 89, 041407.	1.1	62
5	Band inversion and the topological phase transition in $(\text{Pb},\text{Sn})\text{Se}$. Physical Review B, 2014, 90, 041407.	1.1	51
6	Direct observation and temperature control of the surface Dirac gap in a topological crystalline insulator. Nature Communications, 2015, 6, 8463.	5.8	49
7	Self-selecting vapour growth of bulk crystals – Principles and applicability. Progress in Crystal Growth and Characterization of Materials, 2005, 51, 81-108.	1.8	45
8	Photovoltaic Effect in $\text{Pb}_{1-x}\text{Mn}_x\text{Te}$. Solid State Communications, 1980, 34, 887-889.	0.9	32
9	Antiferromagnetic interlayer exchange coupling in all-semiconducting $\text{EuS}/\text{PbS}/\text{EuS}$ trilayers. Physical Review B, 2004, 69, 041407.	1.1	32
10	Monocrystalline ZnO Films on GaN/Al ₂ O ₃ by Atomic Layer Epitaxy in Gas Flow. Chemistry of Materials, 2004, 16, 1447-1450.	3.2	30
11	Surface oxidation of SnTe topological crystalline insulator. Applied Surface Science, 2018, 452, 134-140.	3.1	30
12	Investigation of the composition of vapour-grown $\text{Pb}_{1-x}\text{Sn}_x\text{Se}$ crystals ($x \approx 0.4$) by means of lattice parameter measurements. Journal of Crystal Growth, 1994, 139, 172-178.	0.7	28
13	Recrystallization prospects for freestanding low-temperature GaN grown using ZnO buffer layers. Journal of Crystal Growth, 2002, 246, 237-243.	0.7	28
14	Epitaxial Metal Halide Perovskites by Inkjet Printing on Various Substrates. Advanced Functional Materials, 2020, 30, 2004612.	7.8	21
15	Influence of thermal radiation on crystal growth by sublimation of Al _{0.5} B _{0.5} V _{0.5} I _{0.5} solid solutions on source material. Journal of Crystal Growth, 1987, 82, 709-716.	0.7	20
16	Growth by atomic layer epitaxy and characterization of thin films of ZnO. Physica Status Solidi C: Current Topics in Solid State Physics, 2005, 2, 1125-1130.	0.8	20
17	Experimental evidence for topological surface states wrapping around a bulk SnTe crystal. Physical Review B, 2017, 96, 041407.	1.1	20
18	Experimental and Theoretical Analysis of $\text{PbTe}-\text{CdTe}$ Solid Solution Grown by Physical Vapour Transport Method. Acta Physica Polonica A, 2009, 116, 959-961.	0.2	20

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19	Vapour phase growth and properties of $Pb_{1-x}Sn_xTe$ single crystals. <i>Journal of Crystal Growth</i> , 1986, 74, 129-134.	0.7	19
20	Magnetic-resonance study of the diluted magnetic semiconductor $Pb_{1-x}Mn_xTe$. <i>Physical Review B</i> , 1993, 47, 227-236.	1.1	19
21	The lattice constants of ternary and quaternary alloys in the $PbTe-SnTe-MnTe$ system. <i>Journal of Crystal Growth</i> , 1999, 200, 483-489.	0.7	18
22	Vapour phase growth of CdTe. <i>Journal of Crystal Growth</i> , 1982, 56, 213-214.	0.7	17
23	Hybrid Organic/ZnO p-n Junctions with n-Type ZnO Grown by Atomic Layer Deposition. <i>Acta Physica Polonica A</i> , 2008, 114, 1229-1234.	0.2	17
24	Vapour phase growth of large crystals of PbTe and $Pb_{1-x}Sn_xTe$. <i>Journal of Crystal Growth</i> , 1982, 60, 150-152.	0.7	16
25	Methods of dislocation distribution analysis and inclusion identification with application to CdTe and (Cd, Zn)Te. <i>Journal Physics D: Applied Physics</i> , 1998, 31, 1009-1016.	1.3	16
26	Monocrystalline ZnS-sphalerite films grown by atomic layer epitaxy in a gas flow system. <i>Journal of Crystal Growth</i> , 1998, 183, 708-710.	0.7	15
27	Magnetic interactions in $Ge_{1-x}Cr_xTe$ semimagnetic semiconductors. <i>Journal of Applied Physics</i> , 2012, 112, .	1.1	15
28	Diode laser action in $Pb_{1-x}Mn_xS$. <i>Solid State Communications</i> , 1981, 38, 499-501.	0.9	13
29	Structural defects and compositional uniformity in CdTe and $Cd_{1-x}Zn_xTe$ crystals grown by a vapour transport technique. <i>Journal of Crystal Growth</i> , 1998, 191, 673-678.	0.7	13
30	Temperature and composition dependence of the energy band gap of $Pb_{1-x}Mn_xS$ solid solution. <i>Applied Physics A: Solids and Surfaces</i> , 1982, 29, 49-52.	1.4	12
31	Lattice parameters in the solid-solution system Pb_xSe_{1-x} . <i>Crystal Research and Technology</i> , 1985, 20, K8-K10.	0.6	12
32	Growth of CdTe single crystals by vapour condensation on the surface of polycrystalline source material. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 1993, 16, 68-70.	1.7	12
33	Excitation mechanism of blue anti-Stokes and 2.4 μ m infrared emission in ZnSe:Cr. <i>Physica B: Condensed Matter</i> , 2001, 308-310, 942-944.	1.3	12
34	Experimental search for the origin of low-energy modes in topological materials. <i>Physical Review B</i> , 2019, 100, .	1.1	12
35	Optically Pumped Mid-Infrared Stimulated Emission of ZnSe:Cr Crystals. <i>Acta Physica Polonica A</i> , 2004, 105, 553-558.	0.2	12
36	Monocrystalline thin films of ZnSe and ZnO grown by atomic layer epitaxy. <i>Vacuum</i> , 2004, 74, 269-272.	1.6	11

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37	Structure, Surface Morphology and Optical Properties of Thin Films of ZnS and CdS Grown by Atomic Layer Epitaxy. <i>Acta Physica Polonica A</i> , 1998, 94, 579-582.	0.2	11
38	Band structure parameters of $\text{Pb}_{0.25}\text{Sn}_{0.72}\text{Mn}_{0.03}\text{Te}$ semimagnetic semiconductors. <i>Semiconductor Science and Technology</i> , 1990, 5, 1115-1123.	1.0	10
39	Self-Selecting Vapor Growth of Monocrystals: An Alternative in the Area of Wide-Gap $\text{II}^{\sim}\text{VI}$ Solid Solutions. <i>Crystal Growth and Design</i> , 2001, 1, 183-185.	1.4	10
40	Monocrystalline films of sphalerite-type ZnSe grown by atomic layer epitaxy in a gas flow system. <i>Journal of Crystal Growth</i> , 1999, 207, 148-149.	0.7	9
41	Photoemission spectra of frozen rock salt $\text{Pb}_{1-x}\text{Cd}_x\text{Te}$ crystal. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2011, 184, 199-202.	0.8	9
42	The properties of (Pb, Ge)Te single crystals grown from vapour phase. <i>Journal of Crystal Growth</i> , 1994, 135, 565-570.	0.7	8
43	$\text{CdS}_x\text{Te}_{1-x}$: bulk vapour growth, twin formation and the electrical activity of twin boundaries. <i>Journal Physics D: Applied Physics</i> , 2002, 35, 1997-2007.	1.3	8
44	Monocrystalline and Polycrystalline ZnO and ZnMnO Films Grown by Atomic Layer Epitaxy - Growth and Characterization. <i>Acta Physica Polonica A</i> , 2004, 105, 667-673.	0.2	8
45	Crystal Selection in the Self-selected Vapour Growth (SSVG) of PbSe in a Vertical System. <i>Crystal Research and Technology</i> , 1993, 28, K77-K80.	0.6	7
46	Recycled Crystallisation of ZnTe by Evaporation-Condensation. <i>Crystal Research and Technology</i> , 1998, 33, 875-879.	0.6	7
47	Magnetization of EuS/PbS Multilayers with Antiferromagnetic Interlayer Coupling. <i>Journal of Superconductivity and Novel Magnetism</i> , 2003, 16, 213-215.	0.5	7
48	Fragility of the Dirac Cone Splitting in Topological Crystalline Insulator Heterostructures. <i>ACS Nano</i> , 2018, 12, 617-626.	7.3	7
49	Inelastic X-Ray Scattering Studies of Phonon Dispersion in PbTe and (Pb,Cd)Te Solid Solution. <i>Acta Physica Polonica A</i> , 2016, 130, 1251-1254.	0.2	7
50	Anomalous resistivity in the ferroelectric phase transition of $\text{Pb}_{1-x}\text{Ge}_x\text{Te}$. <i>Lettere Al Nuovo Cimento Rivista Internazionale Della Societ� Italiana Di Fisica</i> , 1984, 39, 81-85.	0.4	6
51	Remarks on the separation of a solid solution transported by evaporation-condensation at a small temperature difference. <i>Crystal Research and Technology</i> , 1994, 29, 543-547.	0.6	6
52	Sphalerite-type Cd(Te, Se) crystallised by self-selecting vapour growth. <i>Crystal Research and Technology</i> , 1999, 34, 53-57.	0.6	6
53	Magnetic and Structural Properties of EuS/PbS Multilayers Grown on n-PbS (100) Substrates. <i>Acta Physica Polonica A</i> , 2002, 102, 609-615.	0.2	6
54	Evolution of $\text{Pb}_{1-x}\text{Cd}_x\text{Te}$ Solid Solution Structure at High Temperatures. <i>Acta Physica Polonica A</i> , 2011, 119, 699-701.	0.2	6

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55	Anisotropy of Young's Modulus and Microhardness of PbTe. Acta Physica Polonica A, 2018, 134, 941-943.	0.2	6
56	Some aspects of the technology of lead salt diode lasers used in gas monitoring systems. Crystal Research and Technology, 1987, 22, 981-986.	0.6	5
57	Compositional variations in the incongruent condensation of an ideal solid solution under near equilibrium conditions. Journal of Crystal Growth, 1995, 151, 384-386.	0.7	5
58	“Contactless” growth of uniform Cd _{0.8} Zn _{0.2} Te monocrystals from the vapour. Materials Letters, 2004, 58, 1781-1783.	1.3	5
59	Surface core-level shifts in CdTe _{1-x} S _x (110) and CdTe _{1-x} Se _x (110). Physical Review B, 2006, 73, .	1.1	5
60	Systematic Investigation of the Coupling between One-Dimensional Edge States of a Topological Crystalline Insulator. Physical Review Letters, 2021, 126, 236402.	2.9	5
61	Sphalerite-type (Cd, Zn)S films by atomic layer epitaxy in the gas flow. Journal of Crystal Growth, 2000, 216, 532-534.	0.7	4
62	R-EBIC study of the electrical activity of grain boundaries in CdTe and Cd(S,Te). , 0, , .		4
63	Differential reflectivity and angle-resolved photoemission of PbS(1 0 0). Surface Science, 2001, 482-485, 659-663.	0.8	4
64	Optical and Structural Properties of Thin Films of ZnS Grown by Atomic Layer Epitaxy. Journal of Wide Bandgap Materials, 2001, 9, 55-63.	0.1	4
65	Surface core-level shift and AFM study of the galena (100) surface. Surface and Interface Analysis, 2002, 33, 964-967.	0.8	4
66	Magnetic anisotropy induced by crystal distortion in Ge _{1-x} MnxTe/PbTe//KCl (001) ferromagnetic semiconductor layers. Journal of Applied Physics, 2015, 118, 113905.	1.1	4
67	Efficient thermoelectric energy conversion in Pb _{0.95} Mn _{0.05} Te p-n couple. Applied Physics Letters, 2016, 108, .	1.5	4
68	Nernst-Ettingshausen effect at the trivial-nontrivial band ordering in topological crystalline insulator Pb _{1-x} Sn _x Se. New Journal of Physics, 2016, 18, 013047.	1.2	4
69	Thermostructural and Elastic Properties of PbTe and Pb _{0.884} Cd _{0.116} Te: A Combined Low-Temperature and High-Pressure X-ray Diffraction Study of Cd-Substitution Effects. Crystals, 2021, 11, 1063.	1.0	4
70	Temperature and Composition Dependence of Photovoltaic Spectra of Pb _{1-x} MnxSe Diodes. Acta Physica Polonica A, 1991, 79, 287-290.	0.2	4
71	Direct evidence for the existence of exciton bound on Yb ³⁺ ion in In(P,As) crystals. Applied Physics Letters, 1995, 66, 3630-3632.	1.5	3
72	Search for Spin Filtering by Electron Tunneling Through Ferromagnetic EuS Barriers in PbS. Journal of Superconductivity and Novel Magnetism, 2003, 16, 183-185.	0.5	3

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73	Model of the temperature field in tube furnaces and its application to a system of "contactless" crystal growth from the vapour. <i>Journal of Crystal Growth</i> , 2003, 257, 31-41.	0.7	3
74	Two-valence band electron and heat transport in monocrystalline PbTe-CdTe solid solutions with Cd content up to 10 atomic percent. <i>Physical Review Materials</i> , 2020, 4, .	0.9	3
75	Temperature Dependence of Antiferromagnetic Interlayer Exchange Coupling in EuS-PbS Multilayers. <i>Acta Physica Polonica A</i> , 2004, 105, 599-605.	0.2	3
76	Magnetic Properties of EuS-SrS Semiconductor Multilayer Structures. <i>Acta Physica Polonica A</i> , 2007, 112, 419-424.	0.2	3
77	The Young Modulus and Microhardness Anisotropy in (Pb,Cd)Te Solid Solution Crystallizing in the Rock Salt Structure and Containing 5% of Cd. <i>Acta Physica Polonica A</i> , 2017, 132, 343-346.	0.2	3
78	Highly Stable Lasing from Solution-Grown Formamidinium-Lead-Bromide Micro-Resonators. <i>Advanced Optical Materials</i> , 2022, 10, .	3.6	3
79	Applied Infrared Photoluminescence in Lead Salt Crystals. <i>Crystal Research and Technology</i> , 1991, 26, 757-766.	0.6	2
80	Modeling interlayer exchange coupling in EuS/PbS/EuS trilayers. <i>Journal of Applied Physics</i> , 2004, 95, 7169-7171.	1.1	2
81	Monocrystalline ZnO films grown by atomic layer epitaxy - growth and characterization. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2004, 1, 892-895.	0.8	2
82	Geometrical aspects of solid solution separation by evaporation-condensation driven in a closed system by a small temperature difference. <i>Crystal Research and Technology</i> , 2004, 39, 401-403.	0.6	2
83	A preliminary study of CdS for solar cells using combined TEM and cathodoluminescence. <i>Thin Solid Films</i> , 2005, 480-481, 236-240.	0.8	2
84	Monocrystalline Cd _{0.2} Zn _{0.8} Te solid solution obtained by self-selecting vapour growth. <i>Crystal Research and Technology</i> , 2010, 45, 895-898.	0.6	2
85	Vertical Electron Transport through PbS-EuS Structures. <i>Acta Physica Polonica A</i> , 2003, 103, 629-635.	0.2	2
86	Hardening of (Pb,Cd)Te Crystal Lattice with an Increasing CdTe Content in the Solid Solution. <i>Acta Physica Polonica A</i> , 2016, 130, 1245-1247.	0.2	2
87	Perspectives of solution epitaxially grown defect tolerant lead-halide-perovskites and lead-chalcogenides. <i>Applied Physics Letters</i> , 2021, 119, .	1.5	2
88	Glass substrates for GaN using ZnO buffer layers. , 0, , .		1
89	Compositional effects accompanying near equilibrium vapour growth of solid solution crystals of the types IV-VI and II-VI. <i>Crystal Research and Technology</i> , 2010, 45, 679-684.	0.6	1
90	Characterization of wurtzite CdSe single crystal surfaces. <i>Journal of Physics and Chemistry of Solids</i> , 2014, 75, 624-628.	1.9	1

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91	Synchrotron radiation photoemission study of $Pb_{1-x}Cd_xTe$ crystal with local structure. Nuclear Instruments & Methods in Physics Research B, 2015, 364, 132-135.	0.6	1
92	Anisotropy of Selected Mechanical Properties of PbTe. Physica Status Solidi (B): Basic Research, 2019, 256, .	0.7	1
93	Low-Temperature Neutron Diffraction in the (Pb,Cd)Te Solid Solution Containing 2.2% of Cd. Acta Physica Polonica A, 2018, 134, 944-946.	0.2	1
94	Relaxation of Yb 4f-Shell in In(P,As) Alloys. Materials Science Forum, 1995, 196-201, 651-656.	0.3	0
95	Atomic layer epitaxy of ZnO for substrates for GaN epitaxy. , 0, , .		0
96	PbSe(100) surface electronic states studied by surface differential reflectivity. Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 3007-3011.	0.8	0
97	Fabrication and Electrical Characterization of PbS-EuS Ferromagnetic Semiconductor Microstructures. Acta Physica Polonica A, 2004, 105, 615-620.	0.2	0
98	Spatial analysis of dislocation distribution as a means of assessing crystal growth processes. , 2018, , 215-218.		0