Artur Durajski

List of Publications by Year
in descending order

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102	1,114	430843	477281
papers	citations	18 h-index	29 g-index

103	103	103	641
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Quantitative analysis of nonadiabatic effects in dense H3S and PH3 superconductors. Scientific Reports, 2016, 6, 38570.	3.3	72
2	Highâ€temperature study of superconducting hydrogen and deuterium sulfide. Annalen Der Physik, 2016, 528, 358-364.	2.4	57
3	Non-BCS thermodynamic properties of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si28.gif" overflow="scroll"><mml:mrow><mml:msub><mml:mrow><mml:mi mathvariant="normal">H</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub><mml:mi mathvariant="normal">S</mml:mi></mml:mrow></mml:math> superconductor. Physica C: Superconductivity and its Applications, 2015, 515, 1-6.	1.2	56
4	Effect of covalent bonding on the superconducting critical temperature of the H-S-Se system. Physical Review B, 2018, 98, .	3.2	54
5	Atomically Thin 1T-FeCl₂ Grown by Molecular-Beam Epitaxy. Journal of Physical Chemistry C, 2020, 124, 9416-9423.	3.1	50
6	Superconducting state above the boiling point of liquid nitrogen in the GaH3compound. Superconductor Science and Technology, 2014, 27, 015003.	3.5	32
7	Pressure effects on the unconventional superconductivity of noncentrosymmetric <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>LaNiC</mml:mi><mml:mn>2</mml:mn></mml:msub><m Physical Review B, 2016, 94, .	3.2	32
8	First-principles study of superconducting hydrogen sulfide at pressure up to 500â€‰GPa. Scientific Reports, 2017, 7, 4473.	3.3	32
9	Isotope effect in superconducting lanthanum hydride under high compression. Physical Review B, 2020, 101, .	3.2	28
10	Superconductivity in bilayer graphene intercalated with alkali and alkaline earth metals. Physical Chemistry Chemical Physics, 2019, 21, 5925-5931.	2.8	27
11	The thermodynamic properties of the high-pressure superconducting state in the hydrogen-rich compounds. Solid State Sciences, 2013, 25, 45-54.	3.2	26
12	Properties of the pressure-induced superconducting state in trihydrides ScH₃and LaH₃. Superconductor Science and Technology, 2014, 27, 115012.	3.5	25
13	Study of the superconducting phase in silicene under biaxial tensile strain. Solid State Communications, 2014, 200, 17-21.	1.9	23
14	First-principles study of a substitutionally doped phosphorene as anode material for Na-ion batteries. Applied Surface Science, 2020, 532, 147377.	6.1	23
15	From LaH10 to roomâ€“temperature superconductors. Scientific Reports, 2020, 10, 1592.	3.3	22
16	Unusual sulfur isotope effect and extremely high critical temperature in H3S superconductor. Scientific Reports, 2018, 8, 6037.	3.3	21
17	Influence of hole doping on the superconducting state in graphane. Superconductor Science and Technology, 2015, 28, 035002.	3.5	20
18	Anisotropy of the gap parameter in the hole-doped cuprates. Superconductor Science and Technology, 2014, 27, 125004.	3.5	18

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19	Influence of lithium doping on the thermodynamic properties of graphene based superconductors. Journal of Physics Condensed Matter, 2014, 26, 255701.	1.8	18
20	New superconducting superhydride LaC₂H₈ at relatively low stabilization pressure. Physical Chemistry Chemical Physics, 2021, 23, 25070-25074.	2.8	18
21	Properties of the superconducting state in compressed sulphur. Phase Transitions, 2012, 85, 727-734.	1.3	17
22	On the critical temperature and the energy gap in dense ()2 at 250GPa. Solid State Communications, 2013, 153, 26-30.	1.9	17
23	Computational Design of Novel Hydrogen-Rich YSâ€“H Compounds. ACS Omega, 2019, 4, 14317-14323.	3.5	17
24	Tunable electronic and magnetic properties of substitutionally doped graphene. Physica E: Low-Dimensional Systems and Nanostructures, 2020, 119, 113985.	2.7	17
25	The superconducting phase of calcium under the pressure at 200GPa: The strong-coupling description. Solid State Communications, 2012, 152, 1018-1022.	1.9	16
26	The characterization of high-pressure superconducting state in compound: The strong-coupling description. Journal of Physics and Chemistry of Solids, 2013, 74, 641-646.	4.0	16
27	SPECIFIC HEAT AND THERMODYNAMIC CRITICAL FIELD FOR CALCIUM UNDER THE PRESSURE AT 120 GPa. Modern Physics Letters B, 2012, 26, 1250050.	1.9	15
28	Thermodynamics of the Superconducting State in Calcium at 200 GPa. Journal of Superconductivity and Novel Magnetism, 2012, 25, 399-404.	1.8	15
29	Superconductivity of calcium in phase VI. Physica C: Superconductivity and Its Applications, 2012, 472, 15-20.	1.2	15
30	Study of the superconducting state in the Cmmm phase of GeH4 compound. Solid State Communications, 2013, 165, 39-44.	1.9	15
31	Superconductivity well above room temperature in compressed MgH6. Frontiers of Physics, 2016, 11, 1.	5.0	15
32	Structural, electronic, vibrational, and superconducting properties of hydrogenated chlorine. Journal of Chemical Physics, 2018, 149, 074101.	3.0	15
33	Phonon-mediated superconductivity in compressed NbH4 compound. European Physical Journal B, 2014, 87, 1.	1.5	14
34	Gradual reduction of the superconducting transition temperature of H3S by partial replacing sulfur with phosphorus. Physica C: Superconductivity and Its Applications, 2018, 554, 38-43.	1.2	13
35	Thermodynamic properties of antiperovskite MgCNi3 in superconducting phase. Solid State Communications, 2015, 203, 63-68.	1.9	12
36	Metallization and superconductivity in Ca-intercalated bilayer MoS2. Journal of Physics and Chemistry of Solids, 2017, 111, 254-257.	4.0	12

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37	Strong-coupling superconductivity induced by calcium intercalation in bilayer transition-metal dichalcogenides. Frontiers of Physics, 2018, 13, 1.	5.0	12
38	Evidence of Phononâ€Mediated Superconductivity in LaH₁₀ at High Pressure. Annalen Der Physik, 2021, 533, 2000518.	2.4	12
39	Theoretical description of the SrPt3P superconductor in the strong-coupling limit. Physica Scripta, 2014, 89, 125701.	2.5	11
40	The Energy Gap in the (Hg1â^'x Sn x)Ba2Ca2Cu3O8+y Superconductor. Journal of Superconductivity and Novel Magnetism, 2014, 27, 1363-1367.	1.8	11
41	The isotope effect in H3S superconductor. Solid State Communications, 2017, 249, 30-33.	1.9	11
42	The High Pressure Superconductivity of CaLi2 Compound: The Thermodynamic Properties. Journal of Low Temperature Physics, 2013, 171, 769-778.	1.4	9
43	The high-pressure superconductivity in SiH4: The strong-coupling approach. Solid State Communications, 2013, 172, 5-9.	1.9	9
44	Study of thermodynamic properties of SiH4(H2)2 superconductor under high pressure. Physica C: Superconductivity and Its Applications, 2013, 485, 145-148.	1.2	9
45	Energy band gaps in graphene nanoribbons with corners. Europhysics Letters, 2016, 114, 48001.	2.0	9
46	Effect of layer thickness on the superconducting properties in ultrathin Pb films. Superconductor Science and Technology, 2015, 28, 095011.	3.5	8
47	Pseudogap in the Eliashberg approach based on electronâ€phonon and electronâ€electronâ€phonon interaction. Annalen Der Physik, 2017, 529, 1600254.	2.4	8
48	Influence of external extrusion on stability of hydrogen molecule and its chaotic behavior. Chaos, 2018, 28, 013126.	2.5	8
49	Description of High-Temperature Superconducting State in BSLCO Compound. Journal of Superconductivity and Novel Magnetism, 2015, 28, 19-24.	1.8	7
50	Estimation of the superconducting parameters for silane at high pressure. Modern Physics Letters B, 2014, 28, 1450052.	1.9	6
51	On the Ratio of the Energy Gap Amplitude to the Critical Temperature for Cuprates. Acta Physica Polonica A, 2014, 126, A-92-A-96.	0.5	6
52	The influence of heteroatom doping on local properties of phosphorene monolayer. Scientific Reports, 2021, 11, 18494.	3.3	6
53	CaLi2superconductor under the pressure of 100 GPa: the thermodynamic critical field and the specific heat. Physica Scripta, 2013, 88, 025704.	2.5	5
54	On the thermodynamic properties of the Rb3C60 superconductor. Cryogenics, 2014, 61, 38-42.	1.7	5

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55	Anisotropic evolution of energy gap in Bi2212 superconductor. Frontiers of Physics, 2016, 11, 1.	5.0	5
56	Stability and superconductivity of Ca-intercalated bilayer blue phosphorene. Physical Chemistry Chemical Physics, 2021, 23, 2846-2852.	2.8	5
57	On the Thermodynamic Critical Field for the K_3C_{60} and Rb_3C_{60} Fullerides. Acta Physica Polonica A, 2014, 126, 342-343.	0.5	4
58	High temperature superconducting properties of atomic hydrogen at 802 GPa. Solid State Communications, 2014, 195, 55-60.	1.9	4
59	Thermodynamics of the superconducting phase in compressed <mml:math altimg="si0002.gif" overflow="scroll" xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd" xmlns:sb="http://www.elsevier.com/xml/co	1.9	4
60	Characterization of phonon-mediated superconductivity in lithium doping borocarbide. Solid State Sciences, 2015, 42, 20-24.	3.2	4
61	Doping dependence of critical temperature for superconductivity induced by holeâ€“phonon interaction. Physics Letters, Section A: General, Atomic and Solid State Physics, 2017, 381, 3332-3336.	2.1	4
62	Adatom-dependent superconducting transition temperature in monolayer graphene. Superconductor Science and Technology, 2019, 32, 125005.	3.5	4
63	Non-BCS Temperature Dependence of Energy Gap in Thin Film Electron-Doped Cuprates. Journal of Superconductivity and Novel Magnetism, 2016, 29, 1779-1786.	1.8	3
64	Theoretical Investigation of C₃N Monolayer as Anode Material for Li/Na-Ion Batteries. Acta Physica Polonica A, 2021, 139, 621-624.	0.5	3
65	Superconductivity in Î±-polonium at the reduced volume. Journal of Physics and Chemistry of Solids, 2014, 75, 224-229.	4.0	2
66	A comparison of two high-pressure superconducting phases in yttrium. Physica Status Solidi (B): Basic Research, 2015, 252, 2167-2173.	1.5	2
67	Low-Temperature Thermodynamic Properties of Superconducting AntiperovskiteÂCdCNi $$_3$$ 3. Journal of Low Temperature Physics, 2016, 183, 387-398.	1.4	2
68	Thermodynamic parameters of Zr superconductor at â€“ structural phase transition. Physica Status Solidi (B): Basic Research, 2016, 253, 538-544.	1.5	2
69	Ab-initio study of superconducting state in intercalated MoSe2 and WSe2 bilayers. Physica B: Condensed Matter, 2018, 536, 773-776.	2.7	2
70	Multi-band description of the specific heat and thermodynamic critical field in MgB2 superconductor. Physica B: Condensed Matter, 2018, 536, 726-729.	2.7	2
71	Spontaneous magnetization of ferromagnet in mean-field Heisenberg model. Modern Physics Letters B, 2019, 33, 1950036.	1.9	2
72	Non-parametric application of Tsallis statistics to systems consisting of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll" id="d1e1133" altimg="si259.gif"><mml:mi>M</mml:mi></mml:math> hydrogen molecules. Physica A: Statistical Mechanics and Its Applications, 2019, 518, 1-12.	2.6	2

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73	Nonadiabatic superconductivity in a Li-intercalated hexagonal boron nitride bilayer. Beilstein Journal of Nanotechnology, 2020, 11, 1178-1189.	2.8	2
74	Detailed study of the superconducting properties in compressed germane. European Physical Journal B, 2015, 88, 1.	1.5	1
75	Strain effect on thermodynamic properties of superconducting Nb2InC. Physica C: Superconductivity and Its Applications, 2018, 555, 39-44.	1.2	1
76	Pressure effects on the superconductivity in FeH<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e606" altimg="si134.svg"><mml:msub><mml:mrow /><mml:mrow><mml:mn>5</mml:mn></mml:mrow></mml:msub></mml:math> compound. Physica B: Condensed Matter, 2020, 584, 412063.	2.7	1
77	Chaotic evolution of the energy of the electron orbital and the hopping integral in diatomic molecule cations subjected to harmonic excitation. Physica D: Nonlinear Phenomena, 2021, 423, 132929.	2.8	1
78	Thermodynamic Properties of Superconducting State in Intercalated Bilayer Graphene. Acta Physica Polonica A, 2020, 137, 776-778.	0.5	1
79	A study of the thermodynamic superconducting state parameters in selenium under high pressure. Journal of Physical Studies, 2013, 17, .	0.5	1
80	Carbonaceous sulfur hydride system: The strong-coupled room-temperature superconductor with a low value of Ginzburgâ€“Landau parameter. Journal of Applied Physics, 2022, 131, .	2.5	1
81	Balanced electron flow and the hydrogen bridge energy levels in Pt, Au, or Cu nanojunctions. Applied Nanoscience (Switzerland), 2022, 12, 2595-2607.	3.1	1
82	INVESTIGATION OF THE SUPERCONDUCTING PHASE IN METALLIC HYDROGEN NEAR THE PRESSURE OF METALLIZATION. Modern Physics Letters B, 2014, 28, 1450010.	1.9	0
83	Strong-coupling superconductivity in CaLi2 under the pressure of 100GPa. Solid State Communications, 2014, 192, 93-97.	1.9	0
84	A comparison of two high-pressure superconducting phases in yttrium (Phys. Status Solidi B 10/2015). Physica Status Solidi (B): Basic Research, 2015, 252, .	1.5	0
85	Comparison study of superconductivity in zirconium and hafnium based electron-doped layered chloronitrides. Physica B: Condensed Matter, 2015, 475, 66-72.	2.7	0
86	Pressure Dependence of the Thermodynamic Critical Field in Francium. Acta Physica Polonica A, 2015, 127, 231-233.	0.5	0
87	Superconductivity in the intermetallic borocarbides YPd2B2C, YPt2B2C and LaPt2B2C. Solid State Sciences, 2016, 61, 215-219.	3.2	0
88	Diagram of the Critical Temperatureâ€”Nernst Temperature for the Superconductivity Induced by Modified Electron-Phonon Interaction. Journal of Superconductivity and Novel Magnetism, 2018, 31, 19-28.	1.8	0
89	The half-filled superconducting system with on-site inter-band interactions. Physica C: Superconductivity and Its Applications, 2018, 552, 1-18.	1.2	0
90	Thermodynamic properties of superconducting GeH3 under high pressure. Journal of Physics and Chemistry of Solids, 2019, 132, 110-115.	4.0	0

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91	Problems with identification of vortex rings when using anemometry measurements.. Journal of Physics: Conference Series, 2019, 1398, 012005.	0.4	0
92	The unbalanced phonon-induced superconducting state on a square lattice beyond the static boundary. Physica B: Condensed Matter, 2021, 600, 412613.	2.7	0
93	Thermodynamic Properties of the Superconducting State in Metallic Hydrogen: Electronic Correlations, Non-conventional Electron-Phonon Couplings and the Anharmonic Effects. Journal of Superconductivity and Novel Magnetism, 2021, 34, 2281-2291.	1.8	0
94	Substitution induced and stress controlled magnetism in 2D pyrene-based carbon nanomaterial. Surface Science, 2021, 709, 121836.	1.9	0
95	On the Ratio of the Energy Gap Amplitude to the Critical Temperature for Cupratesi (Acta Physica) Tj ETQq1 1 0.784314 rgBT /Overlo	0.5	0
96	On the Magnetic Penetration Depth in Superconducting Ultrathin Lead Films. Acta Physica Polonica A, 2017, 131, 1051-1053.	0.5	0
97	Non-Adiabatic Effects in Superconducting Intermetallic Borocarbides. Acta Physica Polonica A, 2019, 135, 276-279.	0.5	0
98	London Penetration Depth Study of Nb₂InC Nanolaminate. Acta Physica Polonica A, 2019, 135, 196-199.	0.5	0
99	Studies of Acoustic Wave Propagation when Facing Obstacle. Acta Physica Polonica A, 2020, 138, 280-282.	0.5	0
100	The Energy Storage Properties of Supercapacitors with Carbon-Based Electrodes. Acta Physica Polonica A, 2020, 138, 148-151.	0.5	0
101	Electronic Properties of Graphene/hBN Heterostructures with in-Plane Displacement. Acta Physica Polonica A, 2020, 138, 136-139.	0.5	0
102	Phonon-Induced Superconducting State: From Metallic Hydrogen to LaH10. Acta Physica Polonica A, 2020, 138, 715-727.	0.5	0