

# Artur Durajski

## List of Publications by Year in descending order

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102  
papers

1,114  
citations

430874

18  
h-index

477307

29  
g-index

103  
all docs

103  
docs citations

103  
times ranked

641  
citing authors

#	ARTICLE	IF	CITATIONS
1	Carbonaceous sulfur hydride system: The strong-coupled room-temperature superconductor with a low value of Ginzburg-Landau parameter. Journal of Applied Physics, 2022, 131, .	2.5	1
2	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
3	The unbalanced phonon-induced superconducting state on a square lattice beyond the static boundary. Physica B: Condensed Matter, 2021, 600, 412613.	2.7	0
4	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
5	Theoretical Investigation of C <sub>3</sub> N Monolayer as Anode Material for Li/Na-Ion Batteries. Acta Physica Polonica A, 2021, 139, 621-624.	0.5	3
6	Substitution induced and stress controlled magnetism in 2D pyrene-based carbon nanomaterial. Surface Science, 2021, 709, 121836.	1.9	0
7	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
8	The influence of heteroatom doping on local properties of phosphorene monolayer. Scientific Reports, 2021, 11, 18494.	3.3	6
9	Stability and superconductivity of Ca-intercalated bilayer blue phosphorene. Physical Chemistry Chemical Physics, 2021, 23, 2846-2852.	2.8	5
10	Evidence of Phonon-Mediated Superconductivity in LaH <sub>10</sub> at High Pressure. Annalen Der Physik, 2021, 533, 2000518.	2.4	12
11	New superconducting superhydride LaC <sub>2</sub> H <sub>8</sub> at relatively low stabilization pressure. Physical Chemistry Chemical Physics, 2021, 23, 25070-25074.	2.8	18
12	First-principles study of a substitutionally doped phosphorene as anode material for Na-ion batteries. Applied Surface Science, 2020, 532, 147377.	6.1	23
13	Nonadiabatic superconductivity in a Li-intercalated hexagonal boron nitride bilayer. Beilstein Journal of Nanotechnology, 2020, 11, 1178-1189.	2.8	2
14	Isotope effect in superconducting lanthanum hydride under high compression. Physical Review B, 2020, 101, .	3.2	28
15	From LaH <sub>10</sub> to room-temperature superconductors. Scientific Reports, 2020, 10, 1592.	3.3	22
16	Pressure effects on the superconductivity in FeH <sub>5</sub> compound. Physica B: Condensed Matter, 2020, 584, 412063.	2.7	1
17	Atomically Thin 1T-FeCl <sub>2</sub> Grown by Molecular-Beam Epitaxy. Journal of Physical Chemistry C, 2020, 124, 9416-9423.	3.1	50
18	Tunable electronic and magnetic properties of substitutionally doped graphene. Physica E: Low-Dimensional Systems and Nanostructures, 2020, 119, 113985.	2.7	17

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19	Thermodynamic Properties of Superconducting State in Intercalated Bilayer Graphene. Acta Physica Polonica A, 2020, 137, 776-778.	0.5	1
20	Studies of Acoustic Wave Propagation when Facing Obstacle. Acta Physica Polonica A, 2020, 138, 280-282.	0.5	0
21	The Energy Storage Properties of Supercapacitors with Carbon-Based Electrodes. Acta Physica Polonica A, 2020, 138, 148-151.	0.5	0
22	Electronic Properties of Graphene/hBN Heterostructures with in-Plane Displacement. Acta Physica Polonica A, 2020, 138, 136-139.	0.5	0
23	Phonon-Induced Superconducting State: From Metallic Hydrogen to LaH10. Acta Physica Polonica A, 2020, 138, 715-727.	0.5	0
24	Atom-dependent superconducting transition temperature in monolayer graphene. Superconductor Science and Technology, 2019, 32, 125005.	3.5	4
25	Computational Design of Novel Hydrogen-Rich YH Compounds. ACS Omega, 2019, 4, 14317-14323.	3.5	17
26	Thermodynamic properties of superconducting GeH <sub>3</sub> under high pressure. Journal of Physics and Chemistry of Solids, 2019, 132, 110-115.	4.0	0
27	Superconductivity in bilayer graphene intercalated with alkali and alkaline earth metals. Physical Chemistry Chemical Physics, 2019, 21, 5925-5931.	2.8	27
28	Problems with identification of vortex rings when using anemometry measurements.. Journal of Physics: Conference Series, 2019, 1398, 012005.	0.4	0
29	Spontaneous magnetization of ferromagnet in mean-field Heisenberg model. Modern Physics Letters B, 2019, 33, 1950036.	1.9	2
30	Non-parametric application of Tsallis statistics to systems consisting of $M$ hydrogen molecules. Physica A: Statistical Mechanics and Its Applications, 2019, 518, 1-12.	2.6	2
31	Non-Adiabatic Effects in Superconducting Intermetallic Borocarbides. Acta Physica Polonica A, 2019, 135, 276-279.	0.5	0
32	London Penetration Depth Study of Nb <sub>2</sub> InC Nanolaminate. Acta Physica Polonica A, 2019, 135, 196-199.	0.5	0
33	Influence of external extrusion on stability of hydrogen molecule and its chaotic behavior. Chaos, 2018, 28, 013126.	2.5	8
34	Diagram of the Critical Temperature–Nernst Temperature for the Superconductivity Induced by Modified Electron-Phonon Interaction. Journal of Superconductivity and Novel Magnetism, 2018, 31, 19-28.	1.8	0
35	Ab-initio study of superconducting state in intercalated MoSe <sub>2</sub> and WSe <sub>2</sub> bilayers. Physica B: Condensed Matter, 2018, 536, 773-776.	2.7	2
36	Strong-coupling superconductivity induced by calcium intercalation in bilayer transition-metal dichalcogenides. Frontiers of Physics, 2018, 13, 1.	5.0	12

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37	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
38	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
39	Effect of covalent bonding on the superconducting critical temperature of the H-S-Se system. Physical Review B, 2018, 98, .	3.2	54
40	Strain effect on thermodynamic properties of superconducting Nb2InC. Physica C: Superconductivity and Its Applications, 2018, 555, 39-44.	1.2	1
41	Unusual sulfur isotope effect and extremely high critical temperature in H3S superconductor. Scientific Reports, 2018, 8, 6037.	3.3	21
42	Structural, electronic, vibrational, and superconducting properties of hydrogenated chlorine. Journal of Chemical Physics, 2018, 149, 074101.	3.0	15
43	The half-filled superconducting system with on-site inter-band interactions. Physica C: Superconductivity and Its Applications, 2018, 552, 1-18.	1.2	0
44	Pseudogap in the Eliashberg approach based on electron-phonon and electron-electron-phonon interaction. Annalen Der Physik, 2017, 529, 1600254.	2.4	8
45	Doping dependence of critical temperature for superconductivity induced by hole-phonon interaction. Physics Letters, Section A: General, Atomic and Solid State Physics, 2017, 381, 3332-3336.	2.1	4
46	Metallization and superconductivity in Ca-intercalated bilayer MoS2. Journal of Physics and Chemistry of Solids, 2017, 111, 254-257.	4.0	12
47	First-principles study of superconducting hydrogen sulfide at pressure up to 500 GPa. Scientific Reports, 2017, 7, 4473.	3.3	32
48	The isotope effect in H3S superconductor. Solid State Communications, 2017, 249, 30-33.	1.9	11
49	On the Magnetic Penetration Depth in Superconducting Ultrathin Lead Films. Acta Physica Polonica A, 2017, 131, 1051-1053.	0.5	0
50	Quantitative analysis of nonadiabatic effects in dense H3S and PH3 superconductors. Scientific Reports, 2016, 6, 38570.	3.3	72
51	Low-Temperature Thermodynamic Properties of Superconducting Antiperovskite $\text{CdNi}_3$ . Journal of Low Temperature Physics, 2016, 183, 387-398.	1.4	2
52	Superconductivity in the intermetallic borocarbides YPd2B2C, YPt2B2C and LaPt2B2C. Solid State Sciences, 2016, 61, 215-219.	3.2	0
53	Anisotropic evolution of energy gap in Bi2212 superconductor. Frontiers of Physics, 2016, 11, 1.	5.0	5
54	Pressure effects on the unconventional superconductivity of noncentrosymmetric $\text{LaNiC}_2$ . Physical Review B, 2016, 94, .	3.2	32

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55	Thermodynamic parameters of Zr superconductor at $a_2$ structural phase transition. Physica Status Solidi (B): Basic Research, 2016, 253, 538-544.	1.5	2
56	Energy band gaps in graphene nanoribbons with corners. Europhysics Letters, 2016, 114, 48001.	2.0	9
57	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
58	Superconductivity well above room temperature in compressed MgH6. Frontiers of Physics, 2016, 11, 1.	5.0	15
59	High-temperature study of superconducting hydrogen and deuterium sulfide. Annalen Der Physik, 2016, 528, 358-364.	2.4	57
60	On the Ratio of the Energy Gap Amplitude to the Critical Temperature for Cuprates (Acta Physica) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	0.5	0
61	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
62	A comparison of two high-pressure superconducting phases in yttrium. Physica Status Solidi (B): Basic Research, 2015, 252, 2167-2173.	1.5	2
63	Non-BCS thermodynamic properties of $H_2S$ superconductor. Physica C: Superconductivity and Its Applications, 2015, 515, 1-6.	1.2	56
64	Detailed study of the superconducting properties in compressed germane. European Physical Journal B, 2015, 88, 1.	1.5	1
65	Influence of hole doping on the superconducting state in graphane. Superconductor Science and Technology, 2015, 28, 035002.	3.5	20
66	Characterization of phonon-mediated superconductivity in lithium doping borocarbide. Solid State Sciences, 2015, 42, 20-24.	3.2	4
67	Effect of layer thickness on the superconducting properties in ultrathin Pb films. Superconductor Science and Technology, 2015, 28, 095011.	3.5	8
68	Comparison study of superconductivity in zirconium and hafnium based electron-doped layered chloronitrides. Physica B: Condensed Matter, 2015, 475, 66-72.	2.7	0
69	Pressure Dependence of the Thermodynamic Critical Field in Francium. Acta Physica Polonica A, 2015, 127, 231-233.	0.5	0
70	Description of High-Temperature Superconducting State in BSLCO Compound. Journal of Superconductivity and Novel Magnetism, 2015, 28, 19-24.	1.8	7
71	Thermodynamic properties of antiperovskite $MgCNi_3$ in superconducting phase. Solid State Communications, 2015, 203, 63-68.	1.9	12
72	Phonon-mediated superconductivity in compressed $NbH_4$ compound. European Physical Journal B, 2014, 87, 1.	1.5	14

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73	Estimation of the superconducting parameters for silane at high pressure. Modern Physics Letters B, 2014, 28, 1450052.	1.9	6
74	INVESTIGATION OF THE SUPERCONDUCTING PHASE IN METALLIC HYDROGEN NEAR THE PRESSURE OF METALLIZATION. Modern Physics Letters B, 2014, 28, 1450010.	1.9	0
75	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
76	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
77	Theoretical description of the SrPt <sub>3</sub> P superconductor in the strong-coupling limit. Physica Scripta, 2014, 89, 125701.	2.5	11
78	Superconducting state above the boiling point of liquid nitrogen in the GaH <sub>3</sub> compound. Superconductor Science and Technology, 2014, 27, 015003.	3.5	32
79	On the thermodynamic properties of the Rb <sub>3</sub> C <sub>60</sub> superconductor. Cryogenics, 2014, 61, 38-42.	1.7	5
80	The Energy Gap in the (Hg <sub>1-x</sub> Sn <sub>x</sub> )Ba <sub>2</sub> Ca <sub>2</sub> Cu <sub>3</sub> O <sub>8+y</sub> Superconductor. Journal of Superconductivity and Novel Magnetism, 2014, 27, 1363-1367.	1.8	11
81	Anisotropy of the gap parameter in the hole-doped cuprates. Superconductor Science and Technology, 2014, 27, 125004.	3.5	18
82	High temperature superconducting properties of atomic hydrogen at 802 GPa. Solid State Communications, 2014, 195, 55-60.	1.9	4
83	Study of the superconducting phase in silicene under biaxial tensile strain. Solid State Communications, 2014, 200, 17-21.	1.9	23
84	Properties of the pressure-induced superconducting state in trihydrides ScH <sub>3</sub> and LaH <sub>3</sub> . Superconductor Science and Technology, 2014, 27, 115012.	3.5	25
85	Superconductivity in $\hat{\pm}$ -polonium at the reduced volume. Journal of Physics and Chemistry of Solids, 2014, 75, 224-229.	4.0	2
86	Thermodynamics of the superconducting phase in compressed $\langle \text{mml:math altimg="si0002.gif" overflow="scroll" xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd" xmlns:sb="http://www.elsevier.com/xml/co$	1.9	4
87	Influence of lithium doping on the thermodynamic properties of graphene based superconductors. Journal of Physics Condensed Matter, 2014, 26, 255701.	1.8	18
88	Strong-coupling superconductivity in CaLi <sub>2</sub> under the pressure of 100GPa. Solid State Communications, 2014, 192, 93-97.	1.9	0
89	The High Pressure Superconductivity of CaLi <sub>2</sub> Compound: The Thermodynamic Properties. Journal of Low Temperature Physics, 2013, 171, 769-778.	1.4	9
90	The high-pressure superconductivity in SiH <sub>4</sub> : The strong-coupling approach. Solid State Communications, 2013, 172, 5-9.	1.9	9

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91	CaLi <sub>2</sub> superconductor under the pressure of 100 GPa: the thermodynamic critical field and the specific heat. <i>Physica Scripta</i> , 2013, 88, 025704.	2.5	5
92	The thermodynamic properties of the high-pressure superconducting state in the hydrogen-rich compounds. <i>Solid State Sciences</i> , 2013, 25, 45-54.	3.2	26
93	Study of thermodynamic properties of SiH <sub>4</sub> (H <sub>2</sub> ) <sub>2</sub> superconductor under high pressure. <i>Physica C: Superconductivity and Its Applications</i> , 2013, 485, 145-148.	1.2	9
94	The characterization of high-pressure superconducting state in compound: The strong-coupling description. <i>Journal of Physics and Chemistry of Solids</i> , 2013, 74, 641-646.	4.0	16
95	Study of the superconducting state in the Cmmm phase of GeH <sub>4</sub> compound. <i>Solid State Communications</i> , 2013, 165, 39-44.	1.9	15
96	On the critical temperature and the energy gap in dense ( ) <sub>2</sub> at 250GPa. <i>Solid State Communications</i> , 2013, 153, 26-30.	1.9	17
97	A study of the thermodynamic superconducting state parameters in selenium under high pressure. <i>Journal of Physical Studies</i> , 2013, 17, .	0.5	1
98	SPECIFIC HEAT AND THERMODYNAMIC CRITICAL FIELD FOR CALCIUM UNDER THE PRESSURE AT 120 GPa. <i>Modern Physics Letters B</i> , 2012, 26, 1250050.	1.9	15
99	Properties of the superconducting state in compressed sulphur. <i>Phase Transitions</i> , 2012, 85, 727-734.	1.3	17
100	Thermodynamics of the Superconducting State in Calcium at 200 GPa. <i>Journal of Superconductivity and Novel Magnetism</i> , 2012, 25, 399-404.	1.8	15
101	The superconducting phase of calcium under the pressure at 200GPa: The strong-coupling description. <i>Solid State Communications</i> , 2012, 152, 1018-1022.	1.9	16
102	Superconductivity of calcium in phase VI. <i>Physica C: Superconductivity and Its Applications</i> , 2012, 472, 15-20.	1.2	15