

# Karol SzaÅ,owski

## List of Publications by Year in descending order

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Version: 2024-02-01

59  
papers

717  
citations

567144

15  
h-index

642610

23  
g-index

59  
all docs

59  
docs citations

59  
times ranked

593  
citing authors

#	ARTICLE	IF	CITATIONS
1	Two-spin and multi-spin quantum entanglement in V12 polyoxovanadate molecular nanomagnet. Journal of Magnetism and Magnetic Materials, 2022, 546, 168782.	1.0	5
2	Magnetocaloric and electrocaloric properties of the Hubbard pair cluster. Journal of Magnetism and Magnetic Materials, 2021, 527, 167767.	1.0	4
3	Local electronic structure of stable monolayers of $\text{I}\pm\text{-MoO}_3$ grown on graphite substrate. 2D Materials, 2021, 8, 025005.	2.0	10
4	Spin State Switching in Heptaurene Nanostructure by Electric Field: Computational Study. International Journal of Molecular Sciences, 2021, 22, 13364.	1.8	5
5	Magnetocaloric properties of V6 molecular magnet. Journal of Magnetism and Magnetic Materials, 2020, 496, 165933.	1.0	15
6	The Pair Approximation method for the ferromagnetic Heisenberg model with spin $S$ and arbitrary range of interactions. Application for the magnetic semiconductor CrIAs. Journal of Magnetism and Magnetic Materials, 2020, 513, 167157.	1.0	1
7	Low-Temperature Magnetocaloric Properties of V12 Polyoxovanadate Molecular Magnet: A Theoretical Study. Materials, 2020, 13, 4399.	1.3	5
8	A novel critical behavior of the spin-1 Blume-Capel model with a distance-dependent nearest-neighbor exchange interaction and magneto-elastic coupling. Journal of Physics Condensed Matter, 2020, 32, 335801.	0.7	3
9	Thermodynamic properties of the one-dimensional Ising model with magnetoelastic interaction. Journal of Magnetism and Magnetic Materials, 2020, 507, 166825.	1.0	7
10	Magnetocaloric Effect in Cu5-NIPA Molecular Magnet: A Theoretical Study. Materials, 2020, 13, 485.	1.3	13
11	Spin-Glass-Like Ordering in a Frustrated $J_1$ - $J_2$ Ising Antiferromagnet on a Honeycomb Lattice. Acta Physica Polonica A, 2020, 137, 619-621.	0.2	3
12	Hubbard pair cluster with elastic interactions. Studies of thermal expansion, magnetostriction and electrostriction. Physica A: Statistical Mechanics and Its Applications, 2019, 531, 121740.	1.2	6
13	Magnetization distribution in a spin ladder-shaped quantum nanomagnet. Journal of Magnetism and Magnetic Materials, 2019, 469, 411-418.	1.0	3
14	Hubbard pair cluster in the external fields. Studies of the magnetic properties. Physica A: Statistical Mechanics and Its Applications, 2018, 499, 395-406.	1.2	8
15	Thermodynamic model of a solid with RKKY interaction and magnetoelastic coupling. Journal of Magnetism and Magnetic Materials, 2018, 452, 360-372.	1.0	10
16	Ground-state magnetic properties of spin ladder-shaped quantum nanomagnet: Exact diagonalization study. Journal of Magnetism and Magnetic Materials, 2018, 452, 253-260.	1.0	1
17	Thermodynamics of a model solid with magnetoelastic coupling. Journal of Magnetism and Magnetic Materials, 2018, 445, 110-118.	1.0	6
18	Electronic structure of commensurate, nearly commensurate, and incommensurate phases of $S_1T_2$ by angle-resolved photoelectron spectroscopy, scanning tunneling spectroscopy, and density functional theory. Physical Review B, 2018, 98, .	1.1	29

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19	Hubbard pair cluster in the external fields. Studies of the polarization and susceptibility. Physica A: Statistical Mechanics and Its Applications, 2018, 512, 1069-1084.	1.2	8
20	Electrocaloric effect in cubic Hubbard nanoclusters. Scientific Reports, 2018, 8, 5116.	1.6	11
21	Phase diagram of the frustrated anisotropic antiferromagnet with spin $J$ on the quadratic lattice. Physical Review E, 2018, 98, 022123.	0.8	12
22	Ferrimagnetic and antiferromagnetic phase in bilayer graphene nanoflake controlled with external electric fields. Carbon, 2017, 118, 78-85.	5.4	18
23	Hubbard pair cluster in the external fields. Studies of the chemical potential. Physica A: Statistical Mechanics and Its Applications, 2017, 468, 252-266.	1.2	13
24	Self-consistent model of a solid for the description of lattice and magnetic properties. Journal of Magnetism and Magnetic Materials, 2017, 426, 310-319.	1.0	10
25	Exact Diagonalization Study of an Extended Hubbard Model for a Cubic Cluster at Quarter Filling. Acta Physica Polonica A, 2017, 131, 1012-1014.	0.2	4
26	Frustration in an exactly solvable mixed-spin Ising model with bilinear and three-site four-spin interactions on a decorated square lattice. Journal of Magnetism and Magnetic Materials, 2016, 417, 92-99.	1.0	14
27	Critical temperature of two-dimensional hydrogenated multilayer graphene-based diluted ferromagnet. Carbon, 2016, 108, 327-334.	5.4	5
28	Size Control Methods and Size-Dependent Properties of Graphene. , 2016, , 45-58.		0
29	Graphene nanoflakes in external electric and magnetic in-plane fields. Journal of Magnetism and Magnetic Materials, 2015, 382, 318-327.	1.0	45
30	Magnetic properties of $\text{Ge}_{1-x}\text{Pb}_x\text{Mn}_y\text{Te}$ cluster-glass system. Journal of Alloys and Compounds, 2015, 649, 142-150.	2.8	7
31	Frustration in a Mixed-Spin Ising Model With Multi-Spin Interactions. Acta Physica Polonica A, 2014, 126, 48-49.	0.2	1
32	Indirect Coupling Between Localized Magnetic Moments in Zero-Dimensional Graphene Nanostructures (Quantum Dots). Acta Physica Polonica A, 2014, 126, 236-237.	0.2	2
33	Electric field control of the indirect magnetic coupling through a short graphene nanoribbon. Physical Review B, 2014, 90, .	1.1	13
34	Critical Temperature of Site-Diluted Spin-1/2 Systems with Long-Range Ferromagnetic Interactions. Journal of the Physical Society of Japan, 2014, 83, 044002.	0.7	3
35	Thermodynamic description of the Ising antiferromagnet on a triangular lattice with selective dilution by a modified pair-approximation method. Physical Review E, 2014, 89, 062140.	0.8	11
36	Normal and inverse magnetocaloric effect in magnetic multilayers with antiferromagnetic interlayer coupling. Journal of Physics Condensed Matter, 2014, 26, 386003.	0.7	21

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37	A self-consistent thermodynamic model of metallic systems. Application for the description of gold. Journal of Applied Physics, 2014, 116, 043508.	1.1	7
38	Ferrimagnetism in the Heisenberg-Ising bilayer with magnetically non-equivalent planes. Physica A: Statistical Mechanics and Its Applications, 2014, 395, 183-192.	1.2	21
39	Indirect RKKY interaction between localized magnetic moments in armchair graphene nanoribbons. Journal of Physics Condensed Matter, 2013, 25, 166001.	0.7	17
40	Ground-state magnetic phase diagram of bow-tie graphene nanoflakes in external magnetic field. Journal of Applied Physics, 2013, 114, 243908.	1.1	13
41	Low-dilution limit of $Zn_{1-x}Mn_xGeAs_2$ : Electrical and magnetic properties. Journal of Applied Physics, 2013, 114, .	1.1	14
42	Indirect coupling between localized magnetic moments in triangular graphene nanoflakes. Physica E: Low-Dimensional Systems and Nanostructures, 2013, 52, 46-53.	1.3	19
43	The influence of interplanar coupling on the entropy and specific heat of the bilayer ferromagnet. Thin Solid Films, 2013, 534, 546-552.	0.8	36
44	Magnetic interactions in $Ge_{1-x}Cr_xTe$ semimagnetic semiconductors. Journal of Applied Physics, 2012, 112, .	1.1	15
45	Critical temperature studies of the anisotropic bilayer and multilayer Heisenberg ferromagnets in Pair Approximation. Physica A: Statistical Mechanics and Its Applications, 2012, 391, 2197-2208.	1.2	21
46	RKKY coupling between impurity spins in graphene nanoflakes. Physical Review B, 2011, 84, .	1.1	35
47	Nearest-neighbour antiferromagnetic interaction as a limiting factor for critical temperature in a model DMS system. Physica Status Solidi (B): Basic Research, 2011, 248, 1623-1627.	0.7	0
48	Thermodynamic properties of a diluted Heisenberg ferromagnet with interaction anisotropy- Magnetocaloric point of view. Journal of Magnetism and Magnetic Materials, 2011, 323, 2095-2102.	1.0	26
49	Magnetic interactions in spin-glasslike $Ge_{1-x}Mn_xTe$ . Physical Review B, 2010, 82, .	1.1	23
50	A simple thermodynamic description of the combined Einstein and elastic models. Journal of Physics Condensed Matter, 2010, 22, 425401.	0.7	8
51	Antiferromagnetic interlayer coupling in diluted magnetic thin films with RKKY interaction. Physical Review B, 2009, 79, .	1.1	25
52	Influence of structural short-range order on the phase diagram of diluted anisotropic Heisenberg ferromagnet. Physical Review B, 2009, 80, .	1.1	10
53	Ferromagnetic Transition in $Ge_{1-x}Mn_xTe$ Layers. Acta Physica Polonica A, 2009, 116, 904-906.	0.2	9
54	Phase diagrams of a model diluted fcc magnet with arbitrary spin and modified RKKY interaction: Influence of external magnetic field and structural short-range order. Physical Review B, 2008, 77, .	1.1	12

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55	RKKY interaction with diffused contact potential. <i>Physical Review B</i> , 2008, 78, .	1.1	8
56	Ground-State Phase Diagram of a Model FCC Magnet with Modified RKKY Interaction. <i>Acta Physica Polonica A</i> , 2008, 113, 421-424.	0.2	1
57	The RKKY Coupling of Two Magnetically Doped Monolayers in Thin Films. <i>Acta Physica Polonica A</i> , 2008, 114, 1375-1382.	0.2	3
58	Critical temperature of MgB <sub>2</sub> ultrathin superconducting films: BCS model calculations in the tight-binding approximation. <i>Physical Review B</i> , 2006, 74, .	1.1	16
59	The effect of the solar eclipse on the air temperature near the ground. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2002, 64, 1589-1600.	0.6	46