

Pedro Schlottmann

List of Publications by Year in descending order

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132
papers

2,744
citations

201674

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132
all docs

132
docs citations

132
times ranked

2252
citing authors

#	ARTICLE	IF	CITATIONS
1	Integrable narrow-band model with possible relevance to heavy-fermion systems. Physical Review B, 1987, 36, 5177-5185.	3.2	277
2	Lattice-driven magnetoresistivity and metal-insulator transition in single-layered iridates. Physical Review B, 2011, 84, .	3.2	171
3	Multichannel Kondo problem and some applications. Advances in Physics, 1993, 42, 641-682.	14.4	157
4	The challenge of spin-orbit-tuned ground states in iridates: a key issues review. Reports on Progress in Physics, 2018, 81, 042502.	20.1	134
5	Exact Results for Highly Correlated Electron Systems in One Dimension. International Journal of Modern Physics B, 1997, 11, 355-667.	2.0	129
6	Electron-doped Sr^2		

#	ARTICLE	IF	CITATIONS
19	Orbital two-channel Kondo effect in epitaxial ferromagnetic L10-MnAl films. Nature Communications, 2016, 7, 10817.	12.8	42
20	Colossal Magnetoresistance by Avoiding a Ferromagnetic State in the Mott System Ca ₃ Ru ₂ O ₇ . Physical Review Letters, 2005, 95, 017203.	7.8	41
21	Local density of states in the vicinity of a Kondo hole. Journal of Applied Physics, 1991, 70, 5803-5805.	2.5	38
22	Decoupling of the antiferromagnetic and insulating states in Tb-doped $Sr_{1-x}R_{x-2}O_4$. Physical Review B, 2015, 92, .	3.2	38
23	The heavy fermion compound YbAgCu ₄ . Journal of Applied Physics, 1993, 73, 5412-5414.	2.5	34
24	Thermodynamics of the SU(N) Anderson impurity. European Physical Journal B, 1984, 54, 207-213.	1.5	32
25	Pressure-induced insulating state in single-crystal $Pb_{1-x}Bi_xTe$ wave superconductor. Physical Review B, 2008, 78, 040401.	3.2	31
26	Pressure-induced insulating state in $Sr_{1-x}Bi_xTe$.		

#	ARTICLE	IF	CITATIONS
37	Ferromagnetic instability in a mean-field slave-boson approach for the Anderson lattice. Journal of Applied Physics, 1993, 73, 5400-5402.	2.5	17
38	Metal-insulator transition in dirty Kondo insulators. Journal of Applied Physics, 1996, 79, 6414.	2.5	17
39	Gradual transition from insulator to semimetal of $\text{Ca}_{1-x}\text{Eu}_x\text{B}_6$ with increasing Eu concentration. Physical Review B, 2005, 71, .	3.2	17
40	Fermi gas with attractive potential and spin S in a one-dimensional trap: Response functions for superfluidity and FFLO signatures. Physical Review B, 2012, 85, .	3.2	27
41	Effects of Eu doping on SmB_6 single crystals. Physical Review B, 2012, 85, .	3.2	15
42	NMR relaxation in the topological Kondo insulator SmB_6 . Physical Review B, 2014, 90, .	3.2	15
43	Anomalies in the dynamical resistivity due to a quantum critical point. Physical Review B, 2006, 74, .	3.2	12
44	Kondo-hole conduction in the La-doped Kondo insulator $\text{Ce}_3\text{Bi}_4\text{Pt}_3$. Physical Review B, 2008, 77, .	3.2	12
45	Fermi gas with attractive potential and arbitrary spin in a one-dimensional trap: Phase diagram for S . Physical Review B, 2012, 85, .	3.2	11
46	Electrical transport properties of single-crystal CaB_6 , SrB_6 , and BaB_6 . Physical Review B, 2016, 94, .	3.2	11
47	Physical properties of SmB_6 single crystals. Physical Review B, 2019, 99, .	3.2	11
48	Fluctuation induced precriticality in heavy fermions. Journal of Applied Physics, 2000, 87, 5140-5142.	2.5	10
49	Debye relaxation in high magnetic fields. Physical Review B, 2008, 78, .	3.2	10
50	Exact solution for a degenerate Anderson impurity in the limit embedded into a correlated host. European Physical Journal B, 1998, 5, 325-335.	1.5	9
51	Thermodynamics of the one-dimensional multicomponent Bariev model for correlated hopping. Nuclear Physics B, 2002, 634, 571-590.	2.5	9
52	Coexisting on-center and off-center Yb in CeCu_2Si_2 . Physical Review B, 2009, 80, .	3.2	9
53	Challenging our understanding of quantum criticality. Physical Review B, 2014, 90, .	3.2	9
54	Simultaneous metal-insulator and antiferromagnetic transitions in orthorhombic perovskite iridate $\text{Sr}_{0.94}\text{Ir}_{0.78}\text{O}_{2.68}$ single crystals. Physical Review B, 2016, 93, .	3.2	9

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55	Theory of Electron Spin Resonance in Ferromagnetically Correlated Heavy Fermion Compounds. Magnetochemistry, 2018, 4, 27.	2.4	9
56	Thermal expansion in a system with nested Fermi surface. Journal of Applied Physics, 2004, 95, 7216-7218.	2.5	8
57	Giant magnetoelectric effect in the Jeff=1/2 Mott insulator Sr ₂ IrO ₄ . Journal of Applied Physics, 2010, 107, 09D910.	2.5	8
58	Observation of superconductivity and anomalous electrical resistivity in single-crystal Ir ₃ Te. Physical Review B, 2013, 87, .	3.2	8
59	Observation of oscillatory magnetoresistance periodic in $\frac{1}{3}$ of the Brillouin zone in the topological material Bi ₂ Se ₃ . Physical Review B, 2013, 87, .	3.2	8
60	Observation of oscillatory magnetoresistance periodic in $\frac{1}{3}$ of the Brillouin zone in the topological material Bi ₂ Se ₃ . Physical Review B, 2006, 73, .	3.2	7
61	Resistance and current-voltage characteristics of individual superconducting Nb ₃ Se ₂ nanowires. Physical Review B, 2007, 76, .	3.2	7
62	Ca ₃ Ru ₂ O ₇ : A NEW PARADIGM FOR SPINTRONICS. Modern Physics Letters B, 2008, 22, 1785-1813.	1.9	7
63	Direct determination of the crystal field parameters of Dy, Er, and Yb impurities in the skutterudite compound CeFe ₄ P ₁₂ by electron spin resonance. Physical Review B, 2008, 78, .	3.2	7
64	Effects of spin-orbit interaction in the Hubbard chain with attractive interaction: Application to confined ultracold fermions. Physical Review B, 2013, 88, .	3.2	7
65	Exact solution for a one-dimensional multichannel model of correlated electrons with an Anderson-like impurity. Journal of Physics A, 1998, 31, 1981-1987.	1.6	6
66	Exact solution of the Bariev model for correlated hopping with hard-core repulsion. Physical Review B, 2002, 66, .	3.2	6
67	PHASE SEPARATION AND FFLO PHASES IN ULTRACOLD GAS OF S = 5/2 ATOMS WITH ATTRACTIVE POTENTIAL IN A ONE-DIMENSIONAL TRAP. Modern Physics Letters B, 2012, 26, 1230009.	1.9	6
68	Microwave-induced excitations in the kagome system Pr ₃ Ga ₅ SiO ₁₄ . Physical Review B, 2013, 88, .	3.2	6
69	Decoupling of magnetism and electric transport in single-crystal (Sr _{1-x} A _x) ₂ TjETQq ₁ . Physical Review B, 2018, 30, 245801.	1.8	6
70	Applications of the overcompensated channel Kondo problem. Journal of Applied Physics, 1991, 70, 5806-5808.	2.5	5
71	Quantum critical points of an anisotropic multichannel Kondo impurity. Journal of Applied Physics, 2001, 89, 7183-7185.	2.5	5
72	Thermally activated exchange narrowing of the Gd ₃ ESR fine structure in a single crystal of Ce ₃ . Physical Review B, 2001, 63, 040401.	3.2	5

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73	Commensurate and incommensurate spin-density waves and the superconductivity dome in heavy electron systems. <i>Physical Review B</i> , 2015, 92, .	3.2	5
74	Anharmonic rattling vibrations effects in the ESR of Er ³⁺ doped SmB ₆ Kondo insulator. <i>AIP Advances</i> , 2017, 7, 055709.	1.3	5
75	Observation of a pressure-induced transition from interlayer ferromagnetism to intralayer antiferromagnetism in $\text{Sr}_{1-x}\text{Ca}_x\text{Fe}_2\text{As}_2$. <i>Physical Review B</i> , 2018, 98, .	3.2	4
76	Integrable one-dimensional N-component fermion model with correlated hopping and hard-core repulsion. <i>Nuclear Physics B</i> , 2002, 647, 539-564.	2.5	4
77	\hat{t}^{\sim} Jrjng with an Anderson impurity: A model for a quantum dot. <i>Physical Review B</i> , 2003, 67, .	3.2	4
78	Spin-density waves and the superconductivity dome in heavy electron systems with nested Fermi surfaces. <i>Physical Review B</i> , 2014, 89, .	3.2	4
79	Threshold singularities in a Fermi gas with attractive potential in one dimension. <i>Nuclear Physics B</i> , 2015, 892, 269-287.	2.5	4
80	Non-Fermi Liquid Behavior in Heavy Fermion Systems. <i>Handbook of Magnetic Materials</i> , 2015, , 85-160.	0.6	4
81	Ground-state tuning of metal-insulator transition by compositional variations in $\text{Ba}_{1-x}\text{Ru}_x\text{O}_3$ ($0 \leq x \leq 1$). <i>Physical Review B</i> , 2016, 93, .	3.2	4
82	Threshold singularities in the one-dimensional supersymmetric boson-fermion gas mixture. <i>International Journal of Modern Physics B</i> , 2018, 32, 1850221.	2.0	4
83	Quest for quantum states via field-altering technology. <i>Npj Quantum Materials</i> , 2020, 5, .	5.2	4
84	Correlation between antiferromagnetic and Mott states in spin orbit coupled Sr_2VO_4 : A study of Sr_4VO_4 . <i>Physical Review B</i> , 2021, 103, .	3.2	4
85	Perturbative approximation scheme for isolated impurity bonds in the two-dimensional spin-1/2 Heisenberg antiferromagnet. <i>Journal of Applied Physics</i> , 1994, 75, 5532-5534.	2.5	3
86	Persistent current oscillations in a metallic ring embedding a quantum dot. <i>European Physical Journal D</i> , 1996, 46, 2409-2410.	0.4	3
87	Canting of Spins in Manganites. <i>IEEE Transactions on Magnetics</i> , 2007, 43, 3085-3087.	2.1	3
88	Magnetic anisotropy and geometrical frustration in the Ising spin-chain system $\text{Sr}_5\text{Rh}_4\text{O}_{12}$. <i>Journal of Applied Physics</i> , 2011, 109, 07E164.	2.5	3
89	Pressure-driven Fermi surface reconstruction of chromium. <i>Physical Review B</i> , 2013, 88, .	3.2	3
90	Calculation of electric transport close to a Lifshitz transition in a high magnetic field. <i>European Physical Journal B</i> , 2013, 86, 1.	1.5	3

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91	Superfluid instability in ultra-cold gas of fermionic atoms with attractive potential in a one-dimensional trap. Journal of Physics: Conference Series, 2014, 529, 012013.	0.4	3
92	Quantum oscillations in the surface states of topological Kondo insulators. Philosophical Magazine, 2016, 96, 3250-3261.	1.6	3
93	Instabilities of a Fermi Gas with Nested Fermi Surfaces. Annalen Der Physik, 2018, 530, 1700263.	2.4	3
94	Lattice flexibility in CaMn_3O_7 : Control of electrical transport via anisotropic magnetostriction. Physical Review B, 2021, 104, .	3.2	3
95	Bound fermion states in pinned vortices in the surface states of a superconducting topological insulator. Journal of Physics Condensed Matter, 2021, 33, 035604.	1.8	3
96	Phase separation in inhomogeneous mixed-valence systems: Application to manganites. Journal of Applied Physics, 2000, 87, 5022-5024.	2.5	2
97	Boundary defects in integrable quantum spin ladders. Physical Review B, 2002, 65, .	3.2	2
98	Gd ³⁺ and Eu ²⁺ local environment in $\text{Ca}_{1-x}\text{Eu}_x\text{B}_6$ (0.0001 $\leq x \leq$ 0.30) and $\text{Ca}_{1-x}\text{Gd}_x\text{B}_6$ (0.0001 $\leq x \leq$ 0.01). Physica Status Solidi (A) Applications and Materials Science, 2006, 203, 1550-1555.	1.8	2
99	Coulomb-drag effect between two quantum wires: integrable models with long-range potentials. Philosophical Magazine, 2006, 86, 2469-2481.	1.6	2
100	ESR study of the Eu ²⁺ g-value in the metallic phase of cubic hexaboride $\text{Ca}_{1-x}\text{Eu}_x\text{B}_6$ (0.15 $\leq x \leq$ 1.00). Physical Review B, 2006, 73, .	3.2	2
101	Orbital order in electron-doped manganites. Journal of Applied Physics, 2008, 103, .	2.5	2
102	$\text{Ca}_3(\text{Ru}_{1-x}\text{Cr}_x)_2\text{O}_7$: A new paradigm for spin valves. Journal of Applied Physics, 2010, 107, 09D718.	2.5	2
103	Mixture of interacting supersymmetric spinless fermions and bosons in a one-dimensional trap. Modern Physics Letters B, 2016, 30, 1630007.	1.9	2
104	Exponents of Spectral Functions in the One-Dimensional Bose Gas. Condensed Matter, 2018, 3, 35.	1.8	2
105	Ground state in proximity to a possible Kitaev spin liquid: The undistorted honeycomb iridate NaIrO_3 (0.60 $\leq x \leq$ 0.80). Physical Review B, 2021, 104, .	3.2	2
106	An STM Perspective on Hexaborides: Surface States of the Kondo Insulator SmB_6 . Advanced Quantum Technologies, 2021, 4, 2100102.	3.9	2
107	Slow crystalline electric field fluctuations in the Kondo lattice SmB_6 . Physical Review B, 2022, 105, .	3.2	2
108	Groundstate properties of the degenerate supersymmetric t^2J model with crystalline field splitting in one dimension. Journal of Applied Physics, 1993, 73, 6645-6647.	2.5	1

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109	Ground state properties and excitations of an integrable one-dimensional model with δ -function interaction involving several bands. Journal of Applied Physics, 1994, 75, 6731-6733.	2.5	1
110	Low-temperature specific heat of the degenerate supersymmetric t-J model in one dimension. Journal of Applied Physics, 1996, 79, 6605.	2.5	1
111	Kondo hole states in Kondo insulators. European Physical Journal D, 1996, 46, 1895-1896.	0.4	1
112	Kondo effect in a host with fractional statistics: Absence of Kondo logarithms. Physical Review B, 2001, 64, .	3.2	1
113	Exact solution of Heisenberg-liquid models with long-range coupling. Physical Review B, 2001, 63, .	3.2	1
114	Boundary defect in a spin ladder. Journal of Applied Physics, 2001, 89, 7335-7337.	2.5	1
115	Specific features of a magnetic impurity in a correlated electron model with Ising anisotropy. Physical Review B, 2002, 66, .	3.2	1
116	Double exchange and charge fluctuations in CrO ₂ . Journal of Applied Physics, 2004, 95, 7471-7473.	2.5	1
117	Magnon Excitation Spectrum in Ferromagnetic Quasicubic Manganites. IEEE Transactions on Magnetics, 2010, 46, 1295-1298.	2.1	1
118	Commensurate and incommensurate spin-density waves in heavy electron systems. AIP Advances, 2016, 6, .	1.3	1
119	Edge singularities in the one-dimensional Bariev model. Nuclear Physics B, 2019, 949, 114808.	2.5	1
120	Local density of states in a vortex at the surface of a topological insulator in a magnetic field. European Physical Journal B, 2021, 94, 1.	1.5	1
121	Resistivity and Magnetoresistance of La-doped CeOs ₄ Sb ₁₂ and PrOs ₄ Sb ₁₂ . Journal of the Physical Society of Japan, 2008, 77, 148-152.	1.6	1
122	Overcompensated impurities in antiferromagnetic Heisenberg chains. Journal of Applied Physics, 1991, 70, 6071-6073.	2.5	0
123	Impurity model for Mn ions: Possibility of charge order and lattice distortions. Journal of Applied Physics, 1999, 85, 5423-5425.	2.5	0
124	One-dimensional heavy fermion lattice model. Journal of Applied Physics, 1999, 85, 5335-5337.	2.5	0
125	Mean-field approach for the B phase of (La,Ca)MnO ₃ . Journal of Applied Physics, 2001, 89, 6624-6626.	2.5	0
126	Bariev model for correlated hopping with crystalline field splitting. Physical Review B, 2003, 67, .	3.2	0

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127	Thermodynamics of a magnetic impurity in a small metallic grain. Journal of Applied Physics, 2003, 93, 8358-8360.	2.5	0
128	Spin Coulomb Drag in a One-Dimensional Spin-Polarized Conductor. IEEE Transactions on Magnetics, 2010, 46, 1346-1349.	2.1	0
129	THE CONTRADICTION PHYSICAL PROPERTIES AND EXTREME ANISOTROPY OF Ca ₃ Ru ₂ O ₇ . , 2013, , 179-214.		0
130	Landau quantization and spin-momentum locking in topological Kondo insulators. AIP Advances, 2016, 6, .	1.3	0
131	Giant enhancement of the in-plane critical field for thin Al films via proximity coupling to a topological insulator. Physical Review B, 2020, 102, .	3.2	0
132	In-gap states of vortices at the surface of a topological insulator. Physica C: Superconductivity and Its Applications, 2022, 596, 1354047.	1.2	0