

KUDLIS ANDREY

Publications

A. Aharony, O. Entin-Wohlman, A. Kudlis.

"Different critical behaviors in perovskites with a structural phase transition from cubic-totrigonal and cubic-to-tetragonal symmetry"

Physical Review B, 105, 10, 104101

2022

A.Kudlis, A. Pikelner.

"Critical behavior of isotropic systems with strong dipole-dipole interaction: three-loop study"

arXiv:2204.02838

2022

I.A. Aleksandrov, D.A. Tumakov, A. Kudlis, V.A. Zaytsev, N.N. Rosanov

"Scattering of a twisted electron wavepacket by a finite laser pulse"

arXiv:2206.00110

2022

A. Aharony, O. Entin-Wohlman, A. Kudlis.

"Bi- and tetracritical phase diagrams in three dimensions"

Low Temperature Physics 48, 483

2022

L. Ts. Adzhemyan, D. A. Evdokimov, M. Hnatic, E. V. Ivanova, M. V. Kompaniets,

A. Kudlis, D. V. Zakharov.

"Model A of critical dynamics: 5-loop ϵ expansion study".

Physica A, 600, 127530

2022

A. Kudlis, I. Iorsh, I.A. Shelykh.

"All-optical resonant magnetization switching in CrI₃ monolayers".

Physical Review B 104, L020412

2021

M.V. Kompaniets, A. Kudlis, A.I. Sokolov.

"Critical behavior of the weakly disordered Ising model: Six-loop ϵ expansion study".

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2021

A. Kudlis, I. Iorsh, I.V. Tokatly.

"Dissipation and spontaneous emission in quantum electrodynamical density functional theory based on optimized effective potential: A proof of concept study".

arxiv:2111.04523, submitted to Physical Review B

2021

L.Ts. Adzhemyan, D.A. Evdokimov, M.Hnatic, E.V. Ivanova, M.V. Kompaniets,

A. Kudlis, D.V. Zakharov.

"The dynamical critical exponent z for 2d and 3d Ising models from five-loop expansion".

arxiv:2111.04719, submitted to Physics Letters A

2021

P. A. Nosov, I. M. Khaymovich, A. Kudlis, V. E. Kravtsov.

"Statistics of Green's functions on a disordered Cayley tree and the validity of forward scattering approximation".

arXiv:2108.10326, submitted to SciPost

2021

L. Ts. Adzhemyan, E. V. Ivanova, M. V. Kompaniets, A. Kudlis, A. I. Sokolov.
"Six-loop expansion of three-dimensional $U(n) \times U(m)$ -vector models".
arXiv:2104.12195, submitted to Nuclear Physics B 2021

A. Kudlis, I. Iorsh.
"Modeling excitonic Mott transitions in two-dimensional semiconductors".
Physical Review B 103 (115307) 2021

I.A. Aleksandrov, D.A. Tumakov, A. Kudlis, V.M. Shabaev, N.N. Rozanov.
"Relativistic electron spin dynamics in a strong unipolar laser field".
Physical Review A 102, 023102 2020

A. Kudlis, G. Rakhmanova, I. Iorsh
"Many-body phenomena in semiconductors and cluster expansion approach"
AIP Conference Proceedings, 2300, 1, 020072 2020

M.V. Kompaniets, A. Kudlis, A.I. Sokolov.
"Six-loop ϵ expansion study of three-dimensional $O(n) \times O(m)$ -spin models".
Nuclear Physics B 950, 114874 2020

A. Kudlis, A.I. Sokolov.
"Universal effective couplings of the three-dimensional n -vector model and field theory".
Nuclear Physics B 950, 114881 2019

Loran Ts. Adzhemyan, Ella V. Ivanova, Mikhail V. Kompaniets, Andrey Kudlis, Aleksandr I. Sokolov.
"Six-loop ϵ expansion study of three-dimensional n -vector model with cubic anisotropy".
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A. I. Sokolov, A. Kudlis, M. A. Nikitina.
"Effective potential of the three-dimensional Ising model: The pseudo- ϵ expansion study".
Nucl. Phys. B, v. 921, pp. 225–235, 2017; arXiv:1705.10626.
DOI: 10.1016/j.nuclphysb.2017.05.019 2017

A. Kudlis, A. I. Sokolov.
"Field theory and anisotropy of a cubic ferromagnet near the Curie point".
Theoret. and Math. Phys., 190:2, 295–302, 2017; arXiv:1601.00147.
DOI: 10.1134/S0040577917020106 2017

A. I. Sokolov, M. A. Nikitina, and A. Kudlis.
"Universal effective coupling constant ratios of 3D scalar ϕ^4 field theory and pseudo-epsilon expansion".
EPJ Web of Conferences, v. 125, p. 05001, 2016.
DOI: 10.1051/epjconf/201612505001 2016

A. Kudlis and A. I. Sokolov.
"Anisotropy of a cubic ferromagnet at criticality".
Phys. Rev. E, v. 94, 4, p. 042107, 2016; arXiv:1610.04332.
DOI: 10.1103/PhysRevE.94.042107 2016