

# Xiao Yan Xu

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6518565/publications.pdf>

Version: 2024-02-01

30  
papers

1,194  
citations

430754

18  
h-index

454834

30  
g-index

30  
all docs

30  
docs citations

30  
times ranked

1158  
citing authors

#	ARTICLE	IF	CITATIONS
1	Topological nature of the $\text{FeSe}$ $\text{MnO}_2$ Physical Review B, 2015, 92, .		
2	Kekulé valence bond order in an extended Hubbard model on the honeycomb lattice with possible applications to twisted bilayer graphene. Physical Review B, 2018, 98, .	1.1	134
3	Spinon Fermi Surface in a Cluster Mott Insulator Model on a Triangular Lattice and Possible Application to $\text{MnO}$ Physical Review Letters, 2018, 121, 046401.	7.0	70
4	Valence Bond Orders at Charge Neutrality in a Possible Two-Orbital Extended Hubbard Model for Twisted Bilayer Graphene. Physical Review Letters, 2019, 123, 157601.	2.9	70
5	Correlation-Induced Insulating Topological Phases at Charge Neutrality in Twisted Bilayer Graphene. Physical Review X, 2021, 11, .	2.8	64
6	Self-learning quantum Monte Carlo method in interacting fermion systems. Physical Review B, 2017, 96, .	1.1	61
7	Monte Carlo Study of Lattice Compact Quantum Electrodynamics with Fermionic Matter: The Parent State of Quantum Phases. Physical Review X, 2019, 9, .	2.8	54
8	Charge-Density-Wave Transitions of Dirac Fermions Coupled to Phonons. Physical Review Letters, 2019, 122, 077601.	2.9	48
9	Non-Fermi Liquid at $\text{MnO}$ Fermimagnetic Quantum Critical Point. Physical Review X, 2017, 7, .	2.8	42
10	Symmetry-enforced self-learning Monte Carlo method applied to the Holstein model. Physical Review B, 2018, 98, .	1.1	42
11	Itinerant quantum critical point with frustration and a non-Fermi liquid. Physical Review B, 2018, 98, .	1.1	33
12	Dynamical generation of topological masses in Dirac fermions. Physical Review B, 2018, 97, .	1.1	31
13	Revealing fermionic quantum criticality from new Monte Carlo techniques. Journal of Physics Condensed Matter, 2019, 31, 463001.	0.7	30
14	Itinerant quantum critical point with fermion pockets and hotspots. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 16760-16767.	3.3	29
15	Correlated insulating phases in the twisted bilayer graphene*. Chinese Physics B, 2021, 30, 017305.	0.7	29
16	Mott transition in the triangular lattice Hubbard model: A dynamical cluster approximation study. Physical Review B, 2015, 91, .	1.1	22
17	Competing pairing channels in the doped honeycomb lattice Hubbard model. Physical Review B, 2016, 94, .	1.1	22
18	Kramers nodal line metals. Nature Communications, 2021, 12, 3064.	5.8	20

#	ARTICLE	IF	CITATIONS
19	Confinement transition in the $3+1$ QED universality class. Physical Review B, 2020, 101, .	1.1	18
20	Topological phase transitions with SO(4) symmetry in (2+1)D interacting Dirac fermions. Physical Review B, 2017, 95, .	1.1	18
21	Dynamics of compact quantum electrodynamics at large fermion flavor. Physical Review B, 2019, 100, .	1.1	17
22	Identification of non-Fermi liquid fermionic self-energy from quantum Monte Carlo data. Npj Quantum Materials, 2020, 5, .	1.8	17
23	Elective-momentum ultrasize quantum Monte Carlo method. Physical Review B, 2019, 99, .	1.1	16
24	Competing Nodal $d$ -Wave Superconductivity and Antiferromagnetism. Physical Review Letters, 2021, 126, 217002.	2.9	15
25	Pair Density Wave in the Doped $t$ - $J$ Model with Ring Exchange on a Triangular Lattice. Physical Review Letters, 2019, 122, 167001.	2.9	14
26	Metal to Orthogonal Metal Transition*. Chinese Physics Letters, 2020, 37, 047103.	1.3	14
27	Kramers Weyl semimetals as quantum solenoids and their applications in spin-orbit torque devices. Communications Physics, 2021, 4, .	2.0	14
28	Projection of infinite- $U$ Hubbard model and algebraic sign structure. Physical Review B, 2021, 104, .	1.1	10
29	Fermion sign bounds theory in quantum Monte Carlo simulation. Physical Review B, 2022, 106, .	1.1	10
30	Band gap anomaly and topological properties in lead chalcogenides. Chinese Physics B, 2016, 25, 037311.	0.7	8