

# Canhua Liu

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8253774/publications.pdf>

Version: 2024-02-01

85  
papers

6,110  
citations

172207

29  
h-index

66788

78  
g-index

85  
all docs

85  
docs citations

85  
times ranked

7335  
citing authors

#	ARTICLE	IF	CITATIONS
1	Epitaxial growth of two-dimensional stanene. Nature Materials, 2015, 14, 1020-1025.	13.3	1,459
2	Superconductivity above 100 K in single-layer FeSe films on doped SrTiO <sub>3</sub> . Nature Materials, 2015, 14, 285-289.	13.3	924
3	Majorana Zero Mode Detected with Spin Selective Andreev Reflection in the Vortex of a Topological Superconductor. Physical Review Letters, 2016, 116, 257003.	2.9	494
4	The Coexistence of Superconductivity and Topological Order in the Bi <sub>2</sub> Se <sub>3</sub> Thin Films. Science, 2012, 336, 52-55.	6.0	462
5	Experimental Detection of a Majorana Mode in the core of a Magnetic Vortex inside a Topological Insulator-Superconductor $Bi_2Se_3$ Physical Review Letters. 2015, 114, 017001.	2.9	442
6	Spatial and Energy Distribution of Topological Edge States in Single Bi(111) Bilayer. Physical Review Letters, 2012, 109, 016801.	2.9	293
7	Artificial Topological Superconductor by the Proximity Effect. Physical Review Letters, 2014, 112, .	2.9	226
8	Quasiparticle dynamics in reshaped helical Dirac cone of topological insulators. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 2758-2762.	3.3	86
9	Electrical Resistance of a Monatomic Step on a Crystal Surface. Physical Review Letters, 2004, 93, 236801.	2.9	83
10	Various atomic structures of monolayer silicene fabricated on Ag(111). New Journal of Physics, 2014, 16, 075006.	1.2	82
11	Creation of helical Dirac fermions by interfacing two gapped systems of ordinary fermions. Nature Communications, 2013, 4, 1384.	5.8	81
12	Electronic structure of black phosphorus studied by angle-resolved photoemission spectroscopy. Physical Review B, 2014, 90, .	1.1	80
13	Strain Tunable Semimetal-Topological-Insulator Transition in Monolayer $1T' - \text{TaTe}_2$ Physical Review Letters. 2020, 125, 046801.	2.9	67
14	Coexistence of Topological Edge State and Superconductivity in Bismuth Ultrathin Film. Nano Letters, 2017, 17, 3035-3039.	4.5	62
15	Electronic evidence of asymmetry in the Si(111)- $3 \times 3$ Ag structure. Physical Review B, 2003, 68, .	1.1	59
16	Electronic structure of a superconducting topological insulator Sr-doped Bi <sub>2</sub> Se <sub>3</sub> . Applied Physics Letters, 2015, 107, .	1.5	55
17	Evolution of Fermi surface by electron filling into a free-electronlike surface state. Physical Review B, 2005, 71, .	1.1	53
18	A Novel Arc Fault Detector for Early Detection of Electrical Fires. Sensors, 2016, 16, 500.	2.1	49

#	ARTICLE	IF	CITATIONS
19	Quasiparticle interference and nonsymmorphic effect on a floating band surface state of ZrSiSe. Nature Communications, 2018, 9, 4153.	5.8	48
20	Interaction between Adatom-Induced Localized States and a Quasi-Two-Dimensional Electron Gas. Physical Review Letters, 2006, 96, 036803.	2.9	47
21	Designer spin order in diradical nanographenes. Nature Communications, 2020, 11, 6076.	5.8	47
22	Engineering of Magnetic Coupling in Nanographene. Physical Review Letters, 2020, 124, 147206.	2.9	47
23	Large magnetic moment of gadolinium substituted topological insulator: Bi <sub>1.98</sub> Gd <sub>0.02</sub> Se <sub>3</sub> . Applied Physics Letters, 2012, 100, .	1.5	46
24	Discovery of segmented Fermi surface induced by Cooper pair momentum. Science, 2021, 374, 1381-1385.	6.0	45
25	Electron-Phonon Interaction and Localization of Surface-State Carriers in a Metallic Monolayer. Physical Review Letters, 2007, 99, 146805.	2.9	38
26	The fate of the 2 $\times$ 3 Å <sup>-1</sup> 2 $\times$ 3R(30 $\hat{A}$ ) silicene phase on Ag(111). APL Materials, 2014, 2, 092513.	2.2	37
27	Topologically nontrivial bismuth(111) thin films. Scientific Reports, 2016, 6, 21326.	1.6	35
28	Identifying Magnetic Anisotropy of the Topological Surface State of $\text{Cr}_{0.05}\text{Sb}$ Spin-Polarized STM. Physical Review Letters, 2013, 111, 176802.	2.9	33
29	Precise Control of $\text{d}^{\text{I}}$ -Electron Magnetism in Metal-Free Porphyrins. Journal of the American Chemical Society, 2020, 142, 18532-18540.	6.6	31
30	Self-Alignment of Co Adatoms on In Atomic Wires by Quasi-One-Dimensional Electron-Gas-Mediated Interactions. Physical Review Letters, 2008, 101, 146104.	2.9	29
31	Evolution of the electronic structure in ultrathin Bi(111) films. Physical Review B, 2015, 91, .	1.1	29
32	Interface structure of a topological insulator/superconductor heterostructure. New Journal of Physics, 2014, 16, 123043.	1.2	25
33	Disappearance of the quasi-one-dimensional plasmon at the metal-insulator phase transition of indium atomic wires. Physical Review B, 2008, 77, .	1.1	24
34	Carrier density dependence of the magnetic properties in iron-doped Bi <sub>2</sub> Se <sub>3</sub> topological insulator. Journal of Applied Physics, 2013, 113, .	1.1	22
35	Carrier dependence of the magnetic properties in magnetic topological insulator Sb <sub>1.95</sub> Bi <sub>x</sub> Cr <sub>0.05</sub> Te <sub>3</sub> . Applied Physics Letters, 2012, 101, 072406.	1.5	21
36	Development of in situ two-coil mutual inductance technique in a multifunctional scanning tunneling microscope. Review of Scientific Instruments, 2017, 88, 073902.	0.6	20

#	ARTICLE	IF	CITATIONS
37	Resolving Quinoid Structure in Poly( <i>para</i> -phenylene) Chains. Journal of the American Chemical Society, 2020, 142, 10034-10041.	6.6	20
38	Sierpiński Structure and Electronic Topology in Bi Thin Films on InSb(111)B Surfaces. Physical Review Letters, 2021, 126, 176102.	2.9	20
39	Atomic scale observation of a two-dimensional liquid-solid phase transition on the Si(111)-3 $\times$ 3-Ag surface. Physical Review B, 2005, 71, .	1.1	19
40	Development of micro-four-point probe in a scanning tunneling microscope for in situ electrical transport measurement. Review of Scientific Instruments, 2015, 86, 053903.	0.6	17
41	Electronic transport of Au-adsorbed $\text{Si}(111)-\sqrt{3}\times\sqrt{3}$ Ag surface. Physical Review B, 2008, 78, .	1.1	16
42	Fully gapped $\text{Si}(111)-\sqrt{3}\times\sqrt{3}$ Ag surface: wave-like superconducting state and electronic structure in IrPd <sub>0.95</sub> . Physical Review B, 2006, 74, .	1.1	15
43	Self-assembly of two-dimensional nanoclusters observed with STM: From surface molecules to surface superstructure. Physical Review B, 2006, 74, .	1.1	15
44	A tunable and unidirectional one-dimensional electronic system Nb <sub>2n+1</sub> Si <sub>n</sub> Te <sub>4n+2</sub> . Npj Quantum Materials, 2020, 5, .	1.8	15
45	Step Edges as Reservoirs of Ag Adatom Gas on a Si(111) Surface. Japanese Journal of Applied Physics, 2003, 42, 4894-4897.	0.8	14
46	Direct measurement of the Hall effect in a free-electron-like surface state. Physical Review B, 2006, 73, .	1.1	14
47	Microstructural characterization of sulfur-doped Bi <sub>2</sub> Te <sub>3</sub> crystals. Materials Characterization, 2016, 114, 172-178.	1.9	14
48	Orbit- and atom-resolved spin textures of intrinsic, extrinsic, and hybridized Dirac cone states. Physical Review B, 2014, 89, .	1.1	13
49	Diamagnetic Response of Potassium-Adsorbed Multilayer FeSe Film. Physical Review Letters, 2019, 123, 257001.	2.9	13
50	Robust Hot Electron and Multiple Topological Insulator States in PtBi <sub>2</sub> . ACS Nano, 2020, 14, 2366-2372.	7.3	13
51	Topological Defects Induced High-Spin Quartet State in Truxene-Based Molecular Graphenoids. CCS Chemistry, 2023, 5, 695-703.	4.6	13
52	Strongly compressed Bi(111) bilayer films on Bi <sub>2</sub> Se <sub>3</sub> studied by scanning tunneling microscopy. Applied Physics Letters, 2015, 107, .	1.5	12
53	Diamagnetic response of a superconducting surface superstructure: Si(111)- $\sqrt{7}\times\sqrt{7}$ -Ag. Physical Review B, 2019, 99, .	1.1	12
54	.RAD.21*.RAD.21 phase formed by Na adsorption on Si(111).RAD.3*.RAD.3-Ag and its electronic structure. E-Journal of Surface Science and Nanotechnology, 2005, 3, 107-112.	0.1	12

#	ARTICLE	IF	CITATIONS
55	Atomically flat superconducting NbN thin films grown on SrTiO <sub>3</sub> (111) by plasma-assisted MBE. <i>APL Materials</i> , 2017, 5, .	2.2	11
56	Anisotropic gapping of topological Weyl rings in the charge-density-wave superconductor In TaSe <sub>2</sub> . <i>Science Bulletin</i> , 2021, 66, 243-249.	4.3	11
57	Coexistence of Robust Edge States and Superconductivity in Few-Layer Stanene. <i>Physical Review Letters</i> , 2022, 128, .	2.9	11
58	Si(111)- $\sqrt{21}\times\sqrt{21}$ -(Ag+Cs) Surface Studied by Scanning Tunneling Microscopy and Angle-Resolved Photoemission Spectroscopy. <i>Japanese Journal of Applied Physics</i> , 2003, 42, 4659-4662.	0.8	10
59	The excitation of one-dimensional plasmons in Si and Au@Si complex atom wires. <i>Nanotechnology</i> , 2008, 19, 355204.	1.3	10
60	Magnetic anisotropy of van der Waals absorbed iron(II) phthalocyanine layer on $\text{Bi}_2\text{Te}_3$ . <i>Physical Review B</i> , 2014, 90, .	1.1	10
61	Multiple In-Gap States Induced by Topological Surface States in the Superconducting Topological Crystalline Insulator Heterostructure $\text{Sn}_2\text{Te}_3/\text{Bi}_2\text{Te}_3$ . <i>Physical Review Letters</i> , 2020, 125, 136802.	2.9	10
62	Vectorial mapping of noncollinear antiferromagnetic structure of semiconducting FeSe surface with spin-polarized scanning tunneling microscopy. <i>Applied Physics Letters</i> , 2016, 108, .	1.5	9
63	Scanning tunneling microscopic investigation on morphology of magnetic Weyl semimetal $\text{YbMnBi}_2$ . <i>Chinese Physics B</i> , 2019, 28, 077302.	0.7	8
64	Molecular beam epitaxy of superconducting PdTe <sub>2</sub> films on topological insulator Bi <sub>2</sub> Te <sub>3</sub> . <i>Science China: Physics, Mechanics and Astronomy</i> , 2019, 62, 1.	2.0	8
65	Observation of Magnetism-Induced Topological Edge State in Antiferromagnetic Topological Insulator $\text{MnBi}_4\text{Te}_7$ . <i>ACS Nano</i> , 2022, 16, 9810-9818.	7.3	8
66	Nanofiber alignment during electrospinning: Effects of collector structures and governing parameters. , 2014, , .		6
67	On-Surface Synthesis of Iron Phthalocyanine Using Metal-Organic Coordination Templates. <i>ChemPhysChem</i> , 2019, 20, 2394-2397.	1.0	5
68	Moiré-pattern-modulated electronic structures in Sb <sub>2</sub> Te <sub>3</sub> /graphene heterostructure. <i>Nano Research</i> , 2022, 15, 1115-1119.	5.8	5
69	Scanning tunnelling microscopy observations at initial stage of Cs adsorption on Si(111)- $\sqrt{3}\times\sqrt{3}$ -Ag surface. <i>Surface and Interface Analysis</i> , 2005, 37, 101-105.	0.8	4
70	Metastable Face-Centered Cubic Structure and Structural Transition of Sn on 2H-NbSe <sub>2</sub> (0001). <i>Chinese Physics Letters</i> , 2018, 35, 066802.	1.3	4
71	Braiding Majorana zero mode in an electrically controllable way. <i>Journal Physics D: Applied Physics</i> , 2021, 54, 424003.	1.3	4
72	Band-bending inhomogeneity of Au adsorbed surface evaluated with Si 2p core-level spectra. <i>Surface Science</i> , 2008, 602, 3316-3322.	0.8	3

#	ARTICLE	IF	CITATIONS
73	Creating Majorana fermions in topological insulators. National Science Review, 2014, 1, 36-37.	4.6	3
74	Electronic structure of Ba (Zn <sub>0.875</sub> Mn <sub>0.125</sub> ) <sub>2</sub> As <sub>2</sub> . Applied Physics Letters, 2017, 111, .	1.5	3
75	Surface Structure and Reconstructions of HgTe (111) Surfaces. Chinese Physics Letters, 2018, 35, 026802.	1.3	3
76	One dimensional electronic states in mirror twin boundaries of Bi (1 $\hat{1}\hat{1}$ ). Applied Surface Science, 2020, 512, 145644.	3.1	3
77	Coupling of superconductivity and Coulomb blockade in Sn nanoparticles. Nanotechnology, 2020, 31, 305708.	1.3	3
78	Influence of disorder on superconductivity in the Si(111)- $\sqrt{3}\times\sqrt{3}$ -In surface. Applied Physics Letters, 2020, 117, 172601.	1.5	3
79	Surface states in lightly hole-doped sodium cobaltate $\text{Na}_{1-x}\text{CoO}_2$ Physical Review B, 2015, 91, .		
80	Quantum spin Hall and quantum anomalous Hall states in magnetic Ti <sub>2</sub> Te <sub>2</sub> O single layer. Journal of Physics Condensed Matter, 2021, 33, 21LT01.	0.7	2
81	Intertwining of multiphase charge density waves in In-intercalated Ta <sub>2</sub> Se <sub>5</sub> Physical Review B, 2021, 104, .		
82	Growth of atomically flat nanofilms and surface superstructures of intrinsic liquid alloys. Applied Physics Letters, 2008, 92, 143116.	1.5	0
83	Two-Dimensional Surface Adatom of Gas Phase and Core-Level Photoemission Spectroscopy. Hyomen Kagaku, 2003, 24, 556-562.	0.0	0
84	Electrical Resistance of a Monoatomic Step on a Crystal Surface. Hyomen Kagaku, 2006, 27, 182-187.	0.0	0
85	Interaction between Adatom-induced Localized States and Quasi-two-dimensional Electron Gas. Hyomen Kagaku, 2006, 27, 702-707.	0.0	0