

Chih-Kang Shih

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/8490414/chih-kang-shih-publications-by-year.pdf>

Version: 2024-04-10

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

135 papers	8,600 citations	46 h-index	91 g-index
145 ext. papers	9,605 ext. citations	9 avg, IF	5.84 L-index

#	Paper	IF	Citations
135	Monolayer 1T-NbSe as a 2D-correlated magnetic insulator. <i>Science Advances</i> , 2021 , 7, eabi6339	14.3	6
134	PTCDA Molecular Monolayer on Pb Thin Films: An Unusual π -Electron Kondo System and Its Interplay with a Quantum-Confined Superconductor. <i>Physical Review Letters</i> , 2021 , 127, 186805	7.4	2
133	Phonon renormalization in reconstructed MoS ₂ moiré superlattices. <i>Nature Materials</i> , 2021 , 20, 1100-1105	27	31
132	Tuning of Two-Dimensional Plasmon-Exciton Coupling in Full Parameter Space: A Polaritonic Non-Hermitian System. <i>Nano Letters</i> , 2021 , 21, 2596-2602	11.5	4
131	Momentum-Resolved Electronic Structures of a Monolayer-MoS ₂ /Multilayer-MoSe ₂ Heterostructure. <i>Journal of Physical Chemistry C</i> , 2021 , 125, 16591-16597	3.8	1
130	Engineering Giant Rabi Splitting via Strong Coupling between Localized and Propagating Plasmon Modes on Metal Surface Lattices: Observation of Scaling Rule. <i>Nano Letters</i> , 2021 , 21, 605-611	11.5	10
129	Epitaxial Growth of Two-Dimensional Insulator Monolayer Honeycomb BeO. <i>ACS Nano</i> , 2021 , 15, 2497-2505	57	13
128	Time-resolved ARPES Determination of a Quasi-Particle Band Gap and Hot Electron Dynamics in Monolayer MoS ₂ . <i>Nano Letters</i> , 2021 , 21, 7363-7370	11.5	5
127	Influence of Nanosize Hole Defects and their Geometric Arrangements on the Superfluid Density in Atomically Thin Single Crystals of Indium Superconductor. <i>Physical Review Letters</i> , 2021 , 127, 127003	7.4	1
126	Unveiling defect-mediated carrier dynamics in monolayer semiconductors by spatiotemporal microwave imaging. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 13908-13913	11.5	16
125	Optical dielectric constants of single crystalline silver films in the long wavelength range. <i>Optical Materials Express</i> , 2020 , 10, 693	2.6	7
124	Epitaxial aluminum plasmonics covering full visible spectrum. <i>Nanophotonics</i> , 2020 , 10, 627-637	6.3	6
123	Critical role of parallel momentum in quantum well state couplings in multi-stacked nanofilms: An angle resolved photoemission study. <i>AIP Advances</i> , 2020 , 10, 125211	1.5	
122	Moiré potential impedes interlayer exciton diffusion in van der Waals heterostructures. <i>Science Advances</i> , 2020 , 6,	14.3	29
121	Behavior of superconductivity in a Pb/Ag heterostructure. <i>Physical Review B</i> , 2019 , 100,	3.3	3
120	Engineering Point-Defect States in Monolayer WSe ₂ . <i>ACS Nano</i> , 2019 , 13, 1595-1602	16.7	28
119	Dielectric impact on exciton binding energy and quasiparticle bandgap in monolayer WS ₂ and WSe ₂ . <i>2D Materials</i> , 2019 , 6, 025028	5.9	25

118	Separation of valley excitons in a MoS2 monolayer using a subwavelength asymmetric groove array. <i>Nature Photonics</i> , 2019 , 13, 180-184	33.9	86
117	Terahertz Faraday and Kerr rotation spectroscopy of Bi1-xSbx films in high magnetic fields up to 30 tesla. <i>Physical Review B</i> , 2019 , 100,	3.3	8
116	Tailoring excitonic states of van der Waals bilayers through stacking configuration, band alignment, and valley spin. <i>Science Advances</i> , 2019 , 5, eaax7407	14.3	31
115	Epitaxial Growth of Optically Thick, Single Crystalline Silver Films for Plasmonics. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 3189-3195	9.5	12
114	Microscopic investigation of Bi2-xSbxTe3-ySey systems: On the origin of a robust intrinsic topological insulator. <i>Journal of Physics and Chemistry of Solids</i> , 2019 , 128, 251-257	3.9	9
113	In situ/non-contact superfluid density measurement apparatus. <i>Review of Scientific Instruments</i> , 2018 , 89, 043901	1.7	6
112	Epitaxial Aluminum-on-Sapphire Films as a Plasmonic Material Platform for Ultraviolet and Full Visible Spectral Regions. <i>ACS Photonics</i> , 2018 , 5, 2624-2630	6.3	34
111	Strain distributions and their influence on electronic structures of WSe-MoS laterally strained heterojunctions. <i>Nature Nanotechnology</i> , 2018 , 13, 152-158	28.7	135
110	Photophysics of Thermally-Assisted Photobleaching in "Giant" Quantum Dots Revealed in Single Nanocrystals. <i>ACS Nano</i> , 2018 , 12, 4206-4217	16.7	18
109	Quantum upside-down cake. <i>Nature</i> , 2018 , 555, 36-37	50.4	
108	Tuning Band Gap and Work Function Modulations in Monolayer hBN/Cu(111) Heterostructures with Moiré Patterns. <i>ACS Nano</i> , 2018 , 12, 9355-9362	16.7	19
107	Atomic-scale tailoring of spin susceptibility via non-magnetic spin-orbit impurities. <i>Communications Physics</i> , 2018 , 1,	5.4	1
106	Geometric quenching of orbital pair breaking in a single crystalline superconducting nanomesh network. <i>Nature Communications</i> , 2018 , 9, 5431	17.4	7
105	Interlayer couplings, Moiré patterns, and 2D electronic superlattices in MoS/WSe hetero-bilayers. <i>Science Advances</i> , 2017 , 3, e1601459	14.3	277
104	Enhanced Photoluminescence of Monolayer WS2 on Ag Films and Nanowire/WS2 Bilayer Composites. <i>ACS Photonics</i> , 2017 , 4, 1421-1430	6.3	32
103	Fabrication of MoSe nanoribbons via an unusual morphological phase transition. <i>Nature Communications</i> , 2017 , 8, 15135	17.4	53
102	Low-Threshold Plasmonic Lasers on a Single-Crystalline Epitaxial Silver Platform at Telecom Wavelength. <i>ACS Photonics</i> , 2017 , 4, 1431-1439	6.3	22
101	Giant Enhancement of Defect-Bound Exciton Luminescence and Suppression of Band-Edge Luminescence in Monolayer WSe-Ag Plasmonic Hybrid Structures. <i>Nano Letters</i> , 2017 , 17, 4317-4322	11.5	21

100	Zeeman-limited superconductivity in crystalline Al films. <i>Physical Review B</i> , 2017 , 95,	3.3	9
99	Contrasting Structural Reconstructions, Electronic Properties, and Magnetic Orderings along Different Edges of Zigzag Transition Metal Dichalcogenide Nanoribbons. <i>Nano Letters</i> , 2017 , 17, 1097-1101	11.5	60
98	Enhancement of Plasmonic Performance in Epitaxial Silver at Low Temperature. <i>Scientific Reports</i> , 2017 , 7, 8917	4.9	6
97	Tailoring Semiconductor Lateral Multijunctions for Giant Photoconductivity Enhancement. <i>Advanced Materials</i> , 2017 , 29, 1703680	24	17
96	Cascaded exciton energy transfer in a monolayer semiconductor lateral heterostructure assisted by surface plasmon polariton. <i>Nature Communications</i> , 2017 , 8, 35	17.4	22
95	Visualizing band offsets and edge states in bilayer-monolayer transition metal dichalcogenides lateral heterojunction. <i>Nature Communications</i> , 2016 , 6, 10349	17.4	99
94	Semiconductor plasmonic nanolasers: current status and perspectives. <i>Reports on Progress in Physics</i> , 2016 , 79, 086501	14.4	61
93	Interrogating the superconductor Ca(PtAs)(FePtAs) Layer-by-layer. <i>Scientific Reports</i> , 2016 , 6, 35365	4.9	6
92	Bandgap renormalization and work function tuning in MoSe/hBN/Ru(0001) heterostructures. <i>Nature Communications</i> , 2016 , 7, 13843	17.4	51
91	Tuning the Proximity Effect through Interface Engineering in a Pb/Graphene/Pt Trilayer System. <i>ACS Nano</i> , 2016 , 10, 4520-4	16.7	2
90	Ultrathin two-dimensional superconductivity with strong spin-orbit coupling. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 10513-7	11.5	31
89	Epitaxial Growth of Atomically Smooth Aluminum on Silicon and Its Intrinsic Optical Properties. <i>ACS Nano</i> , 2016 , 10, 9852-9860	16.7	47
88	Determination of band alignment in the single-layer MoS ₂ /WSe ₂ heterojunction. <i>Nature Communications</i> , 2015 , 6, 7666	17.4	421
87	Microscopic Real-Space Resistance Mapping Across CdTe Solar Cell Junctions by Scanning Spreading Resistance Microscopy. <i>IEEE Journal of Photovoltaics</i> , 2015 , 5, 395-400	3.7	7
86	Tailoring Plasmonic Enhanced Upconversion in Single NaYF ₄ :Yb(3+)/Er(3+) Nanocrystals. <i>Scientific Reports</i> , 2015 , 5, 10196	4.9	34
85	Probing Critical Point Energies of Transition Metal Dichalcogenides: Surprising Indirect Gap of Single Layer WSe ₂ . <i>Nano Letters</i> , 2015 , 15, 6494-500	11.5	137
84	Influence of quantum well states on the formation of AuPb alloy in ultra-thin Pb films. <i>Surface Science</i> , 2015 , 632, 174-179	1.8	0
83	Compact low temperature scanning tunneling microscope with in-situ sample preparation capability. <i>Review of Scientific Instruments</i> , 2015 , 86, 093707	1.7	18

82	Observation of topological surface state quantum Hall effect in an intrinsic three-dimensional topological insulator. <i>Nature Physics</i> , 2014 , 10, 956-963	16.2	271
81	Role of thermal processes in dewetting of epitaxial Ag(111) film on Si(111). <i>Surface Science</i> , 2014 , 630, 168-173	1.8	12
80	All-color plasmonic nanolasers with ultralow thresholds: autotuning mechanism for single-mode lasing. <i>Nano Letters</i> , 2014 , 14, 4381-8	11.5	168
79	Intrinsic optical properties and enhanced plasmonic response of epitaxial silver. <i>Advanced Materials</i> , 2014 , 26, 6106-10	24	101
78	Direct imaging of band profile in single layer MoS ₂ on graphite: quasiparticle energy gap, metallic edge states, and edge band bending. <i>Nano Letters</i> , 2014 , 14, 2443-7	11.5	342
77	Giant up-conversion efficiency of InGaAs quantum dots in a planar microcavity. <i>Scientific Reports</i> , 2014 , 4, 3953	4.9	4
76	Observation of Coulomb repulsion between Cu intercalants in Cu _x Bi ₂ Se ₃ . <i>Physical Review B</i> , 2014 , 89,	3.3	8
75	Mapping the 3D surface potential in Bi ₂ Se ₃ . <i>Nature Communications</i> , 2013 , 4, 2277	17.4	43
74	Site-controlled formation of InGaAs quantum nanostructures-Tailoring the dimensionality and the quantum confinement. <i>Nano Research</i> , 2013 , 6, 235-242	10	12
73	Anomalous phase relations of quantum size effects in ultrathin Pb films on Si(111). <i>Physical Review B</i> , 2013 , 87,	3.3	10
72	Correlating electronic transport to atomic structures in self-assembled quantum wires. <i>Nano Letters</i> , 2012 , 12, 938-42	11.5	26
71	Contrast between surface plasmon polariton-mediated extraordinary optical transmission behavior in epitaxial and polycrystalline Ag films in the mid- and far-infrared regimes. <i>Nano Letters</i> , 2012 , 12, 6187-91	11.5	9
70	Atomic scale control of catalytic process in oxidation of Pb thin films. <i>Surface Science</i> , 2012 , 606, 450-455	1.8	8
69	Plasmonic nanolaser using epitaxially grown silver film. <i>Science</i> , 2012 , 337, 450-3	33.3	571
68	Visualization of geometric influences on proximity effects in heterogeneous superconductor thin films. <i>Nature Physics</i> , 2012 , 8, 464-469	16.2	60
67	Strain relaxation in single crystal SrTiO ₃ grown on Si (001) by molecular beam epitaxy. <i>Journal of Applied Physics</i> , 2012 , 111, 064112	2.5	46
66	Polarization-resolved resonant fluorescence of a single semiconductor quantum dot. <i>Applied Physics Letters</i> , 2012 , 101, 251118	3.4	
65	Universal quenching of the superconducting state of two-dimensional nanosize Pb-island structures. <i>Physical Review B</i> , 2011 , 84,	3.3	18

64	Quantum size effects on the work function of metallic thin film nanostructures. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010 , 107, 12761-5	11.5	54
63	Visualizing quantum well state perturbations of metallic thin films near stacking fault defects. <i>Physical Review B</i> , 2010 , 81,	3.3	5
62	Adsorbate-induced restructuring of Pb mesas grown on vicinal Si(111) in the quantum regime. <i>Physical Review B</i> , 2009 , 80,	3.3	8
61	Resonantly driven coherent oscillations in a solid-state quantum emitter. <i>Nature Physics</i> , 2009 , 5, 203-207	6.2	249
60	Superconductivity at the two-dimensional limit. <i>Science</i> , 2009 , 324, 1314-7	33.3	248
59	Propagating surface plasmon induced photon emission from quantum dots. <i>Nano Letters</i> , 2009 , 9, 4168-71	5	158
58	Energy transfer within ultralow density twin InAs quantum dots grown by droplet epitaxy. <i>ACS Nano</i> , 2008 , 2, 2219-24	16.7	47
57	Structural characterization and temperature-dependent photoluminescence of linear CdTe/CdSe/CdTe heterostructure nanorods. <i>ChemPhysChem</i> , 2008 , 9, 1158-63	3.2	35
56	VLS growth of Si nanocones using Ga and Al catalysts. <i>Journal of Crystal Growth</i> , 2008 , 310, 4407-4411	1.6	21
55	Pattern formation of nanoflowers during the vapor-liquid-solid growth of silicon nanowires. <i>Physica B: Condensed Matter</i> , 2008 , 403, 3514-3518	2.8	2
54	Single dot spectroscopy of site-controlled InAs quantum dots nucleated on GaAs nanopyramids. <i>Applied Physics Letters</i> , 2007 , 91, 133104	3.4	25
53	Whispering gallery mode microresonators as polarization converters. <i>Optics Letters</i> , 2007 , 32, 2224-6	3	21
52	Polarization conversion in a silica microsphere. <i>Optics Express</i> , 2007 , 15, 7000-5	3.3	26
51	Resonance fluorescence from a coherently driven semiconductor quantum dot in a cavity. <i>Physical Review Letters</i> , 2007 , 99, 187402	7.4	251
50	Time-resolved photoluminescence spectroscopy of individual Te impurity centers in ZnSe. <i>Physical Review B</i> , 2006 , 73,	3.3	46
49	Persistent superconductivity in ultrathin Pb films: a scanning tunneling spectroscopy study. <i>Physical Review Letters</i> , 2006 , 96, 027005	7.4	232
48	Direct spectroscopic evidence for the formation of one-dimensional wetting wires during the growth of InGaAs/GaAs quantum dot chains. <i>Nano Letters</i> , 2006 , 6, 1847-51	11.5	30
47	Quantum growth of magnetic nanoplatelets of Co on Si with high blocking temperature. <i>Nano Letters</i> , 2005 , 5, 87-90	11.5	40

46	Cell motility and local viscoelasticity of fibroblasts. <i>Biophysical Journal</i> , 2005 , 89, 4330-42	2.9	109
45	Coherent control of a V-type three-level system in a single quantum dot. <i>Physical Review Letters</i> , 2005 , 95, 187404	7.4	55
44	Decoherence processes during optical manipulation of excitonic qubits in semiconductor quantum dots. <i>Physical Review B</i> , 2005 , 72,	3.3	82
43	Three-dimensional modeling of nanoscale Seebeck measurements by scanning thermoelectric microscopy. <i>Applied Physics Letters</i> , 2005 , 87, 053115	3.4	20
42	Determination of anisotropic dipole moments in self-assembled quantum dots using Rabi oscillations. <i>Applied Physics Letters</i> , 2004 , 84, 981-983	3.4	55
41	Spatial correlation-anticorrelation in strain-driven self-assembled InGaAs quantum dots. <i>Applied Physics Letters</i> , 2004 , 85, 1356-1358	3.4	39
40	Photoluminescence properties of single CdS nanorods. <i>Journal of Applied Physics</i> , 2004 , 95, 1056-1063	2.5	24
39	Profiling the thermoelectric power of semiconductor junctions with nanometer resolution. <i>Science</i> , 2004 , 303, 816-8	33.3	143
38	Electrical characterization of individual carbon nanotubes grown in nanoporous anodic alumina templates. <i>Applied Physics Letters</i> , 2004 , 84, 1177-1179	3.4	61
37	Quantitative analysis of the viscoelastic properties of thin regions of fibroblasts using atomic force microscopy. <i>Biophysical Journal</i> , 2004 , 86, 1777-93	2.9	368
36	Quantitative determination of the metastability of flat Ag overlayers on GaAs(110). <i>Physical Review Letters</i> , 2002 , 88, 016102	7.4	37
35	Interplay of Rabi oscillations and quantum interference in semiconductor quantum dots. <i>Physical Review Letters</i> , 2002 , 88, 087401	7.4	246
34	Carrier relaxation and quantum decoherence of excited states in self-assembled quantum dots. <i>Physical Review B</i> , 2001 , 63,	3.3	67
33	Cross-sectional nanophotoluminescence studies of Stark effects in self-assembled quantum dots. <i>Applied Physics Letters</i> , 2000 , 76, 700-702	3.4	19
32	Nonuniform composition profile in In _{0.5} Ga _{0.5} As alloy quantum dots. <i>Physical Review Letters</i> , 2000 , 84, 334-7	7.4	244
31	Scanning probe-based frequency-dependent microrheology of polymer gels and biological cells. <i>Physical Review Letters</i> , 2000 , 85, 880-3	7.4	401
30	Growing atomically flat metal films on semiconductor substrates. <i>Series on Directions in Condensed Matter Physics</i> , 1999 , 438-449		
29	Factors influencing the interfacial roughness of InGaAs/GaAs heterostructures: A scanning tunneling microscopy study. <i>Applied Physics Letters</i> , 1999 , 75, 1703-1705	3.4	20

28	Quantum dots at the nanometer scale: Interdot carrier shuffling and multiparticle states. <i>Physical Review B</i> , 1999 , 60, 11026-11029	3-3	22
27	Dislocations, Phason Defects, and Domain Walls in a One-Dimensional Quasiperiodic Superstructure of a Metallic Thin Film. <i>Physical Review Letters</i> , 1999 , 83, 3222-3225	7-4	19
26	Nano-Photoluminescence Studies of Self-Assembled Quantum Dots. <i>Materials Research Society Symposia Proceedings</i> , 1999 , 583, 105		
25	Quantum Effect in Metal Overlayers on Semiconductor Substrates. <i>Series on Directions in Condensed Matter Physics</i> , 1999 , 149-173		
24	Electronic Growth of Metallic Overlayers on Semiconductor Substrates. <i>Physical Review Letters</i> , 1998 , 80, 5381-5384	7-4	336
23	Alloy ordering in GaInP alloys: A cross-sectional scanning tunneling microscopy study. <i>Applied Physics Letters</i> , 1998 , 73, 1979-1981	3-4	26
22	Determination of 2D Pair Correlations and Pair Interaction Energies of In Atoms in Molecular Beam Epitaxially Grown InGaAs Alloys. <i>Physical Review Letters</i> , 1997 , 79, 4822-4825	7-4	43
21	Application of scanning tunneling microscopy to determine the exact charge states of surface point defects. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1996 , 14, 948		5
20	Thermal formation of Zn-dopant-vacancy defect complexes on InP(110) surfaces. <i>Physical Review B</i> , 1996 , 53, 4580-4590	3-3	56
19	Direct determination of exact charge states of surface point defects using scanning tunneling microscopy: As vacancies on GaAs (110). <i>Physical Review B</i> , 1996 , 53, 6935-6938	3-3	45
18	Temperature dependent compensation of Zn-dopant atoms by vacancies in III-V semiconductor surfaces. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1996 , 14, 1807-1811	2-9	15
17	Dimer-vacancy-dimer-vacancy interaction on the Si(001) surface: The nature of the 2 x n structure. <i>Physical Review B</i> , 1995 , 52, R8650-R8653	3-3	46
16	Cross-sectional scanning tunneling microscopy study of GaAs/AlAs short period superlattices: The influence of growth interrupt on the interfacial structure. <i>Applied Physics Letters</i> , 1995 , 66, 478-480	3-4	34
15	New variable low-temperature scanning tunneling microscope for use in ultrahigh vacuum. <i>Review of Scientific Instruments</i> , 1995 , 66, 2499-2503	1-7	13
14	Double-tip scanning tunneling microscope for surface analysis. <i>Physical Review B</i> , 1995 , 51, 5502-5505	3-3	40
13	A new high-resolution two-dimensional micropositioning device for scanning probe microscopy applications. <i>Review of Scientific Instruments</i> , 1994 , 65, 3216-3219	1-7	29
12	Cross-sectional scanning tunneling microscopy of doped and undoped AlGaAs/GaAs heterostructures. <i>Applied Physics Letters</i> , 1994 , 64, 493-495	3-4	10
11	Direct mapping of electronic structure across Al _{0.3} Ga _{0.7} As/GaAs heterojunctions: Band offsets, asymmetrical transition widths, and multiple-valley band structures. <i>Physical Review Letters</i> , 1993 , 71, 1883-1886	7-4	46

10	Site-selective imaging in scanning tunneling microscopy of graphite: The nature of site asymmetry. <i>Physical Review B</i> , 1993 , 47, 13059-13062	3.3	38
9	Vacancy migration, adatom motion, and atomic bistability on the GaAs(110) surface studied by scanning tunneling microscopy. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1993 , 11, 1644-1648	2.9	16
8	Scanning tunneling microscopy of GaAs multiple pn junctions. <i>Applied Physics Letters</i> , 1992 , 61, 1104-1106	3.4	23
7	Electronic structure of NiO: Correlation and band effects. <i>Physical Review B</i> , 1991 , 44, 3604-3626	3.3	153
6	Scanning tunneling microscopy and spectroscopy of Bi-Sr-Ca-Cu-O 2:2:1:2 high-temperature superconductors. <i>Physical Review B</i> , 1991 , 43, 7913-7922	3.3	64
5	Aspects of the correlation effects, antiferromagnetic order, and translational symmetry of the electronic structure of NiO and CoO. <i>Physical Review Letters</i> , 1990 , 64, 2442-2445	7.4	79
4	Surface structural and electronic properties of cleaved single crystals of Bi _{2.15} Sr _{1.7} CaCu ₂ O _{8+δ} compounds: A scanning tunneling microscopy study. <i>Physical Review B</i> , 1989 , 40, 2682-2685	3.3	87
3	Determination of a natural valence-band offset: The case of HgTe-CdTe. <i>Physical Review Letters</i> , 1987 , 58, 2594-2597	7.4	77
2	Bond-length relaxation in pseudobinary alloys. <i>Physical Review B</i> , 1985 , 31, 1139-1140	3.3	92
1	Moiré excitons at line defects in transition metal dichalcogenides heterobilayers. <i>Comptes Rendus Physique</i> , 1-16	1.4	0