Su Ying Quek

List of Publications by Year
in descending order

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86 papers	6,781 citations	66234 42 h-index	60497 81 g-index
87 all docs	87 docs citations	87 times ranked	9796 citing authors

#	Article	IF	Citations
1	Data-driven discovery of high performance layered van der Waals piezoelectric NbOI2. Nature Communications, 2022, 13, 1884.	5.8	22
2	Strong MoirÃ© Excitons in High-Angle Twisted Transition Metal Dichalcogenide Homobilayers with Robust Commensuration. Nano Letters, 2022, 22, 203-210.	4.5	12
3	Shear Modes in a 2D Polar Metal. Journal of Physical Chemistry Letters, 2022, 13, 4015-4020.	2.1	2
4	Compact Super Electron-Donor to Monolayer MoS₂. Nano Letters, 2022, 22, 4501-4508.	4.5	8
5	Giant second-harmonic generation in ferroelectric NbOI2. Nature Photonics, 2022, 16, 644-650.	15.6	57
6	Lightâ€“Matter Interaction in Quantum Confined 2D Polar Metals. Advanced Functional Materials, 2021, 31, 2005977.	7.8	17
7	Unveiling Atomic-Scale MoirÃ© Features and Atomic Reconstructions in High-Angle Commensurately Twisted Transition Metal Dichalcogenide Homobilayers. Nano Letters, 2021, 21, 3262-3270.	4.5	15
8	Light-matter interactions in high quality manganese-doped two-dimensional molybdenum diselenide. Science China Materials, 2021, 64, 2507-2518.	3.5	6
9	Impurity-Induced Emission in Re-Doped WS₂ Monolayers. Nano Letters, 2021, 21, 5293-5300.	4.5	21
10	Chiral Phonons and Giant Magnetoâ€Optical Effect in CrBr₃ 2D Magnet. Advanced Materials, 2021, 33, e2101618.	11.1	31
11	Tunable 2D Groupâ€III Metal Alloys. Advanced Materials, 2021, 33, e2104265.	11.1	14
12	Photophysical Characteristics of Boron Vacancy-Derived Defect Centers in Hexagonal Boron Nitride. Journal of Physical Chemistry C, 2021, 125, 21791-21802.	1.5	15
13	Charge Transfer Screening and Energy Level Alignment at Complex Organicâ€“Inorganic Interfaces: A Tractable Ab Initio GW Approach. Journal of Physical Chemistry Letters, 2021, 12, 8841-8846.	2.1	6
14	Nearâ€Unity Molecular Doping Efficiency in Monolayer MoS₂. Advanced Electronic Materials, 2021, 7, 2000873.	2.6	16
15	Organic-2D Material Heterostructures: A Promising Platform for Exciton Condensation and Multiplication. Nano Letters, 2021, 21, 8888-8894.	4.5	18
16	Atomic-Level Structure Determines Electronâ€“Phonon Scattering Rates in 2-D Polar Metal Heterostructures. ACS Nano, 2021, 15, 17780-17789.	7.3	7
17	Valley-filling instability and critical magnetic field for interaction-enhanced Zeeman response in doped WSe2 monolayers. Npj Computational Materials, 2021, 7, .	3.5	7
18	Linkage Engineering by Harnessing Supramolecular Interactions to Fabricate 2D Hydrazone-Linked Covalent Organic Framework Platforms toward Advanced Catalysis. Journal of the American Chemical Society, 2020, 142, 18138-18149.	6.6	99

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19	Partitioning the interlayer space of covalent organic frameworks by embedding pseudorotaxanes in their backbones. Nature Chemistry, 2020, 12, 1115-1122.	6.6	88
20	Spin-Dependent Tunneling Barriers in CoPc/VSe₂ from Many-Body Interactions. Journal of Physical Chemistry Letters, 2020, 11, 9358-9363.	2.1	12
21	Isolated flat bands and physics of mixed dimensions in a 2D covalent organic framework. Nanoscale, 2020, 12, 20279-20286.	2.8	7
22	Hydrogen adatoms on graphene: The role of hybridization and lattice distortion. Physical Review B, 2020, 102, .	1.1	7
23	The Origin of Dual Emission in Antiparallel-Stacked Two-Dimensional Covalent Organic Frameworks. , 2020, 2, 654-657.		15
24	Graphene-mediated interaction between hydrogen adsorbates. Physical Review B, 2020, 101, .	1.1	4
25	Rapid, Scalable Construction of Highly Crystalline Acylhydrazone Two-Dimensional Covalent Organic Frameworks via Dipole-Induced Antiparallel Stacking. Journal of the American Chemical Society, 2020, 142, 4932-4943.	6.6	99
26	Room Temperature Commensurate Charge Density Wave on Epitaxially Grown Bilayer 2H-Tantalum Sulfide on Hexagonal Boron Nitride. ACS Nano, 2020, 14, 3917-3926.	7.3	27
27	Valley Zeeman effect and Landau levels in two-dimensional transition metal dichalcogenides. Physical Review Research, 2020, 2, .	1.3	37
28	Point Defects and Localized Excitons in 2D WSe₂. ACS Nano, 2019, 13, 6050-6059.	7.3	127
29	Quasiparticle Levels at Large Interface Systems from Many-Body Perturbation Theory: The XAF-GW Method. Journal of Chemical Theory and Computation, 2019, 15, 3824-3835.	2.3	28
30	Dielectric screening by 2D substrates. 2D Materials, 2019, 6, 035036.	2.0	32
31	Raman Signatures of Surface and Interface Effects in Two-Dimensional Layered Materials: Theoretical Insights. Springer Series in Materials Science, 2019, , 163-184.	0.4	0
32	The organicâ€“2D transition metal dichalcogenide heterointerface. Chemical Society Reviews, 2018, 47, 3241-3264.	18.7	158
33	Temperature- and Phase-Dependent Phonon Renormalization in 1Tâ€²-MoS₂. ACS Nano, 2018, 12, 5051-5058.	7.3	63
34	Tunable bright interlayer excitons in few-layer black phosphorus based van der Waals heterostructures. 2D Materials, 2018, 5, 045031.	2.0	28
35	Tuneable near white-emissive two-dimensional covalent organic frameworks. Nature Communications, 2018, 9, 2335.	5.8	230
36	A two-dimensional conjugated aromatic polymer via Câ€“C coupling reaction. Nature Chemistry, 2017, 9, 563-570.	6.6	306

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37	Determination of Crystal Axes in Semimetallic Tâ€²â€MoTe₂ by Polarized Raman Spectroscopy. Advanced Functional Materials, 2017, 27, 1604799.	7.8	47
38	Energy Level Alignment at Hybridized Organicâ€“Metal Interfaces: The Role of Many-Electron Effects. Journal of Physical Chemistry C, 2017, 121, 13125-13134.	1.5	23
39	Fabrication and Properties of a Free-Standing Two-Dimensional Titania. Journal of the American Chemical Society, 2017, 139, 15414-15419.	6.6	58
40	Tunable inverted gap in monolayer quasi-metallic MoS2 induced by strong charge-lattice coupling. Nature Communications, 2017, 8, 486.	5.8	75
41	van der Waals Bonded Co/h-BN Contacts to Ultrathin Black Phosphorus Devices. Nano Letters, 2017, 17, 5361-5367.	4.5	48
42	Gap States at Low-Angle Grain Boundaries in Monolayer Tungsten Diselenide. Nano Letters, 2016, 16, 3682-3688.	4.5	55
43	Lattice vibrations and Raman scattering in two-dimensional layered materials beyond graphene. Nano Research, 2016, 9, 3559-3597.	5.8	93
44	Origin of Contact Resistance at Ferromagnetic Metalâ€“Graphene Interfaces. ACS Nano, 2016, 10, 11219-11227.	7.3	16
45	Heterointerface Screening Effects between Organic Monolayers and Monolayer Transition Metal Dichalcogenides. ACS Nano, 2016, 10, 2476-2484.	7.3	87
46	Dynamic Structural Evolution of Metalâ€“Metal Bonding Network in Monolayer WS₂. Chemistry of Materials, 2016, 28, 2308-2314.	3.2	37
47	Stacking sequence determines Raman intensities of observed interlayer shear modes in 2D layered materials â€“ A general bond polarizability model. Scientific Reports, 2015, 5, 14565.	1.6	51
48	Rapid and Nondestructive Identification of Polytypism and Stacking Sequences in Fewâ€Layer Molybdenum Diselenide by Raman Spectroscopy. Advanced Materials, 2015, 27, 4502-4508.	11.1	96
49	Graphene Nanomesh Formation by Fluorine Intercalation. Journal of Physical Chemistry C, 2015, 119, 29193-29200.	1.5	15
50	Bandgap tunability at single-layer molybdenum disulphide grain boundaries. Nature Communications, 2015, 6, 6298.	5.8	358
51	Low-bias negative differential resistance effect in armchair graphene nanoribbon junctions. Applied Physics Letters, 2015, 106, .	1.5	15
52	Tuning the threshold voltage of MoS₂field-effect transistors via surface treatment. Nanoscale, 2015, 7, 10823-10831.	2.8	71
53	Large Frequency Change with Thickness in Interlayer Breathing Modeâ€”Significant Interlayer Interactions in Few Layer Black Phosphorus. Nano Letters, 2015, 15, 3931-3938.	4.5	100
54	Low Resistance Metal Contacts to MoS₂ Devices with Nickel-Etched-Graphene Electrodes. ACS Nano, 2015, 9, 869-877.	7.3	184

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55	Length dependence of electron transport through molecular wires â€“ a first principles perspective. Physical Chemistry Chemical Physics, 2015, 17, 77-96.	1.3	46
56	Quantum-confinement and Structural Anisotropy result in Electrically-Tunable Dirac Cone in Few-layer Black Phosphorous. Scientific Reports, 2015, 5, 11699.	1.6	87
57	Interlayer vibrational modes in few-quintuple-layer<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Bi</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math> xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Bi</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math> crystals: Raman spectroscopy and. Physical Review B, 2014, 90, .	3.7	87
58	Band structure mapping of bilayer graphene via quasiparticle scattering. APL Materials, 2014, 2, .	2.2	22
59	Anomalous length-independent frontier resonant transmission peaks in armchair graphene nanoribbon molecular wires. Carbon, 2014, 76, 285-291.	5.4	20
60	Trimethyltin-Mediated Covalent Goldâ€“Carbon Bond Formation. Journal of the American Chemical Society, 2014, 136, 12556-12559.	6.6	25
61	Determination of Energy Level Alignment and Coupling Strength in 4,4â€²-Bipyridine Single-Molecule Junctions. Nano Letters, 2014, 14, 794-798.	4.5	112
62	Predictive DFT-Based Approaches to Charge and Spin Transport in Single-Molecule Junctions and Two-Dimensional Materials: Successes and Challenges. Accounts of Chemical Research, 2014, 47, 3250-3257.	7.6	41
63	Nanoscale Transition Metal Dichalcogenides: Structures, Properties, and Applications. Critical Reviews in Solid State and Materials Sciences, 2014, 39, 319-367.	6.8	125
64	Theoretical study of thermoelectric properties of few-layer MoS2 and WSe2. Physical Chemistry Chemical Physics, 2014, 16, 10866.	1.3	174
65	Large magnetoresistance from long-range interface coupling in armchair graphene nanoribbon junctions. Applied Physics Letters, 2014, 105, .	1.5	3
66	Anomalous frequency trends in MoS<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>thin films attributed to surface effects. Physical Review B, 2013, 88, .	1.1	104
67	Interface effects on tunneling magnetoresistance in organic spintronics with flexible amineâ€“Au links. Nanotechnology, 2013, 24, 415201.	1.3	13
68	Interlayer Breathing and Shear Modes in Few-Trilayer MoS₂ and WSe₂. Nano Letters, 2013, 13, 1007-1015.	4.5	576
69	Effects of lower symmetry and dimensionality on Raman spectra in two-dimensional WSe<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>. Physical Review B, 2013, 88, .	1.1	204
70	First-principles investigations of the atomic, electronic, and thermoelectric properties of equilibrium and strained Bi<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>Se<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>and Bi<mml:math xmlns:mml="http://www.w3.org/199	1.1	132
71	Thermopower of Aminea~Gold-Linked Aromatic Molecular Junctions from First Principles. ACS Nano, 2011, 5, 551-557.	7.3	87
72	Electronic energy level alignment at metal-molecule interfaces with a<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>G</mml:mi><mml:mi>W</mml:mi></mml:mrow></mml:math>approach. Physical Review B, 2011, 84, .	1.1	75

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73	Relating Energy Level Alignment and Amine-Linked Single Molecule Junction Conductance. Nano Letters, 2010, 10, 2470-2474.	4.5	95
74	Conductance and Geometry of Pyridine-Linked Single-Molecule Junctions. Journal of the American Chemical Society, 2010, 132, 6817-6821.	6.6	186
75	Applications of Thin Film Oxides in Catalysis. , 2010, , 281-301.		0
76	Mechanically controlled binary conductance switching of a single-molecule junction. Nature Nanotechnology, 2009, 4, 230-234.	15.6	609
77	Length Dependence of Conductance in Aromatic Single-Molecule Junctions. Nano Letters, 2009, 9, 3949-3953.	4.5	151
78	Selective thermal reduction of single-layer MoO3 nanostructures on Au(111). Surface Science, 2008, 602, 1166-1174.	0.8	52
79	Mechanical and Charge Transport Properties of Alkanethiol Self-Assembled Monolayers on a Au(111) Surface:â€‰ The Role of Molecular Tilt. Langmuir, 2008, 24, 2219-2223.	1.6	62
80	Structure of incommensurate gold sulfide monolayer on Au(111). Journal of Chemical Physics, 2007, 127, 104704.	1.2	19
81	Negative Differential Resistance in Transport through Organic Molecules on Silicon. Physical Review Letters, 2007, 98, 066807.	2.9	54
82	Amineâ^'Gold Linked Single-Molecule Circuits:â€‰ Experiment and Theory. Nano Letters, 2007, 7, 3477-3482.	4.5	447
83	Rich Coordination Chemistry of Au Adatoms in Gold Sulfide Monolayer on Au(111). Journal of Physical Chemistry B, 2006, 110, 15663-15665.	1.2	41
84	First-principles studies of the electronic structure of cyclopentene on Si(001): density functional theory and GW calculations. Physica Status Solidi (B): Basic Research, 2006, 243, 2048-2053.	0.7	12
85	Active role of buried ultrathin oxide layers in adsorption of O2 on Au films. Surface Science, 2006, 600, 3388-3393.	0.8	14
86	Tuning electronic properties of novel metal oxide nanocrystals using interface interactions: MoO3 monolayers on Au(111). Surface Science, 2005, 577, L71-L77.	0.8	36