# Yuan Ping

List of Publications by Year
in descending order

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| 70 | 4,158 | 136950 | 114465 |
|---|---|---|---|
| papers | citations | 32 h-index | 63 g-index |

| 73 | 73 | 73 | 6165 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Electric fields and substrates dramatically accelerate spin relaxation in graphene. Physical Review B, 2022, 105, . | 3.2 | 4 |
| 2 | Carbon trimer as a 2ÂeV single-photon emitter candidate in hexagonal boron nitride: A first-principles study. Physical Review Materials, 2022, 6, . | 2.4 | 23 |
| 3 | Room-temperature electrically switchable spinâ€“valley coupling in a van der Waals ferroelectric halide perovskite with persistent spin helix. Nature Photonics, 2022, 16, 529-537. | 31.4 | 35 |
| 4 | Organically Capped Iridium Nanoparticles as High-Performance Bifunctional Electrocatalysts for Full Water Splitting in Both Acidic and Alkaline Media: Impacts of Metalâ€“Ligand Interfacial Interactions. ACS Catalysis, 2021, 11, 1179-1188. | 11.2 | 65 |
| 5 | Interplay between Perovskite Magic-Sized Clusters and Amino Lead Halide Molecular Clusters. Research, 2021, 2021, 6047971. | 5.7 | 13 |
| 6 | High-order superlattices by rolling up van der Waals heterostructures. Nature, 2021, 591, 385-390. | 27.8 | 163 |
| 7 | Intersystem crossing and excitonâ€“defect coupling of spin defects in hexagonal boron nitride. Npj Computational Materials, 2021, 7, . | 8.7 | 24 |
| 8 | Substrate effect on excitonic shift and radiative lifetime of two-dimensional materials. Journal of Physics Condensed Matter, 2021, 33, 234001. | 1.8 | 9 |
| 9 | Doping Bottleneck in Hematite: Multipole Clustering by Small Polarons. Chemistry of Materials, 2021, 33, 4390-4398. | 6.7 | 22 |
| 10 | Single-shot complete spatiotemporal measurement of terawatt laser pulses. Journal of Optics (United) Tj ETQq0 0 0 rgBT /Overlock 10 T | 2.2 | 12 |
| 11 | Enhancing Defect Tolerance with Ligands at the Surface of Lead Halide Perovskites. Journal of Physical Chemistry Letters, 2021, 12, 6299-6304. | 4.6 | 20 |
| 12 | Computational design of quantum defects in two-dimensional materials. Nature Computational Science, 2021, 1, 646-654. | 8.0 | 11 |
| 13 | Giant Spin Lifetime Anisotropy and Spin-Valley Locking in Silicene and Germanene from First-Principles Density-Matrix Dynamics. Nano Letters, 2021, 21, 9594-9600. | 9.1 | 7 |
| 14 | Ab initio ultrafast spin dynamics in solids. Physical Review B, 2021, 104, . | 3.2 | 10 |
| 15 | Insights into the pH-dependent Behavior of N-Doped Carbons for the Oxygen Reduction Reaction by First-Principles Calculations. Journal of Physical Chemistry C, 2021, 125, 26429-26436. | 3.1 | 3 |
| 16 | Approaching the intrinsic exciton physics limit in two-dimensional semiconductor diodes. Nature, 2021, 599, 404-410. | 27.8 | 57 |
| 17 | The critical role of synthesis conditions on small polaron carrier concentrations in hematiteâ€”A first-principles study. Journal of Applied Physics, 2021, 130, . | 2.5 | 4 |
| 18 | Interstitial Lithium Doping in BiVO<sub>4</sub> Thin Film Photoanode for Enhanced Solar Water Splitting Activity. Chemistry of Materials, 2020, 32, 6401-6409. | 6.7 | 37 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Development of high power laser platforms to study metal ejecta interactions. AIP Conference Proceedings, 2020, , . | 0.4 | 7 |
| 20 | Development of a Platform at the Matter in Extreme Conditions End Station for Characterization of Matter Heated by Intense Laser-Accelerated Protons. IEEE Transactions on Plasma Science, 2020, 48, 2751-2758. | 1.3 | 4 |
| 21 | Substrate screening approach for quasiparticle energies of two-dimensional interfaces with lattice mismatch. Physical Review B, 2020, 102, . | 3.2 | 8 |
| 22 | Spin-phonon relaxation from a universal ab initio density-matrix approach. Nature Communications, 2020, 11, 2780. | 12.8 | 26 |
| 23 | Electrochemical Oxidation of Metalâ€“Catechol Complexes as a New Synthesis Route to the High-Quality Ternary Photoelectrodes: A Case Study of Fe<sub>2</sub>TiO<sub>5</sub> Photoanodes. ACS Applied Materials & Interfaces, 2020, 12, 29275-29284. | 8.0 | 11 |
| 24 | Carbon doping switching on the hydrogen adsorption activity of NiO for hydrogen evolution reaction. Nature Communications, 2020, 11, 590. | 12.8 | 170 |
| 25 | Combined Experimental and Theoretical Investigations of n-Type BiFeO<sub>3</sub> for Use as a Photoanode in a Photoelectrochemical Cell. Chemistry of Materials, 2020, 32, 3262-3270. | 6.7 | 39 |
| 26 | The coupling of experiments with density functional theory in the studies of the electrochemical hydrogen evolution reaction. Journal of Materials Chemistry A, 2020, 8, 8783-8812. | 10.3 | 33 |
| 27 | High-volume and -adiabat capsule (â€œHVACâ€) ignition: Lowered fuel compression requirements using advanced Hohlraums. Physics of Plasmas, 2020, 27, 122708. | 1.9 | 3 |
| 28 | Plasmonics in argentene. Physical Review Materials, 2020, 4, . | 2.4 | 15 |
| 29 | Oxygen Reduction Reaction Catalyzed by Carbon-Supported Platinum Few-Atom Clusters: Significant Enhancement by Doping of Atomic Cobalt. Research, 2020, 2020, 9167829. | 5.7 | 18 |
| 30 | Ultra-high (>30%) coupling efficiency designs for demonstrating central hot-spot ignition on the National Ignition Facility using a Frustraum. Physics of Plasmas, 2019, 26, . | 1.9 | 25 |
| 31 | Combined Theoretical and Experimental Investigations of Atomic Doping To Enhance Photon Absorption and Carrier Transport of LaFeO<sub>3</sub> Photocathodes. Chemistry of Materials, 2019, 31, 5890-5899. | 6.7 | 42 |
| 32 | Heat-release equation of state and thermal conductivity of warm dense carbon by proton differential heating. Physical Review E, 2019, 100, 043204. | 2.1 | 10 |
| 33 | Carrier recombination mechanism at defects in wide band gap two-dimensional materials from first principles. Physical Review B, 2019, 100, . | 3.2 | 22 |
| 34 | Oxygen Reduction Reaction Catalyzed by Black-Phosphorus-Supported Metal Nanoparticles: Impacts of Interfacial Charge Transfer. ACS Applied Materials & Interfaces, 2019, 11, 24707-24714. | 8.0 | 33 |
| 35 | Dimensionality and anisotropicity dependence of radiative recombination in nanostructured phosphorene. Journal of Materials Chemistry C, 2019, 7, 12891-12897. | 5.5 | 19 |
| 36 | Ruthenium atomically dispersed in carbon outperforms platinum toward hydrogen evolution in alkaline media. Nature Communications, 2019, 10, 631. | 12.8 | 423 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Optical absorption induced by small polaron formation in transition metal oxides: The case of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Co</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>4</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review Materials, 2019, 3, . | 2.4 | 35 |
| 38 | Nanowrinkled Carbon Aerogels Embedded with FeNx Sites as Effective Oxygen Electrodes for Rechargeable Zinc-Air Battery. Research, 2019, 2019, 6813585. | 5.7 | 29 |
| 39 | Theoretical and Experimental Insight into the Effect of Nitrogen Doping on Hydrogen Evolution Activity of Ni<sub>3</sub>S<sub>2</sub> in Alkaline Medium. Advanced Energy Materials, 2018, 8, 1703538. | 19.5 | 225 |
| 40 | Combining Landauâ€“Zener theory and kinetic Monte Carlo sampling for small polaron mobility of doped BiVO<sub>4</sub> from first-principles. Journal of Materials Chemistry A, 2018, 6, 20025-20036. | 10.3 | 51 |
| 41 | Mechanistic insights of enhanced spin polaron conduction in CuO through atomic doping. Npj Computational Materials, 2018, 4, . | 8.7 | 18 |
| 42 | Spin-optotronic Properties of Organometal Halide Perovskites. Journal of Physical Chemistry Letters, 2018, 9, 6103-6111. | 4.6 | 22 |
| 43 | Role of Point Defects in Enhancing the Conductivity of BiVO<sub>4</sub>. Chemistry of Materials, 2018, 30, 7793-7802. | 6.7 | 71 |
| 44 | Point of Anchor: Impacts on Interfacial Charge Transfer of Metal Oxide Nanoparticles. Journal of the American Chemical Society, 2018, 140, 15290-15299. | 13.7 | 18 |
| 45 | Unconventional Relation between Charge Transport and Photocurrent via Boosting Small Polaron Hopping for Photoelectrochemical Water Splitting. ACS Energy Letters, 2018, 3, 2232-2239. | 17.4 | 61 |
| 46 | Fundamental principles for calculating charged defect ionization energies in ultrathin two-dimensional materials. Physical Review Materials, 2018, 2, . | 2.4 | 50 |
| 47 | Modelling heterogeneous interfaces for solar water splitting. Nature Materials, 2017, 16, 401-408. | 27.5 | 252 |
| 48 | Nitrogen and Iron-Codoped Carbon Hollow Nanotubules as High-Performance Catalysts toward Oxygen Reduction Reaction: A Combined Experimental and Theoretical Study. Chemistry of Materials, 2017, 29, 5617-5628. | 6.7 | 92 |
| 49 | First-principles electrostatic potentials for reliable alignment at interfaces and defects. Journal of Chemical Physics, 2017, 146, 104109. | 3.0 | 49 |
| 50 | The Reaction Mechanism with Free Energy Barriers at Constant Potentials for the Oxygen Evolution Reaction at the IrO<sub>2</sub> (110) Surface. Journal of the American Chemical Society, 2017, 139, 149-155. | 13.7 | 243 |
| 51 | Hydrogen evolution reaction catalyzed by ruthenium ion-complexed graphitic carbon nitride nanosheets. Journal of Materials Chemistry A, 2017, 5, 18261-18269. | 10.3 | 136 |
| 52 | Effect of defects on the small polaron formation and transport properties of hematite from first-principles calculations. Journal of Physics Condensed Matter, 2017, 29, 394006. | 1.8 | 35 |
| 53 | First-principles engineering of charged defects for two-dimensional quantum technologies. Physical Review Materials, 2017, 1, . | 2.4 | 64 |
| 54 | Laser shock XAFS studies at OMEGA facility. High Pressure Research, 2016, 36, 303-314. | 1.2 | 14 |

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|---|---|---|---|
| 55 | Ultrafast probe using femtosecond electron pulses: real-time probing plasma dynamics. , 2015, , . | | 1 |
| 56 | Simultaneous enhancements in photon absorption and charge transport of bismuth vanadate photoanodes for solar water splitting. Nature Communications, 2015, 6, 8769. | 12.8 | 471 |
| 57 | Solvation effects on the band edge positions of photocatalysts from first principles. Physical Chemistry Chemical Physics, 2015, 17, 30499-30509. | 2.8 | 47 |
| 58 | Optimizing the Band Edges of Tungsten Trioxide for Water Oxidation: A First-Principles Study. Journal of Physical Chemistry C, 2014, 118, 6019-6028. | 3.1 | 63 |
| 59 | Dynamics of charge clouds ejected from laser-induced warm dense gold nanofilms. Physical Review E, 2014, 90, 041102. | 2.1 | 1 |
| 60 | Synthesis, photoelectrochemical properties, and first principles study of n-type CuW1â^'xMoxO4 electrodes showing enhanced visible light absorption. Energy and Environmental Science, 2013, 6, 2440. | 30.8 | 65 |
| 61 | Electronic excitations in light absorbers for photoelectrochemical energy conversion: first principles calculations based on many body perturbation theory. Chemical Society Reviews, 2013, 42, 2437. | 38.1 | 157 |
| 62 | Optical properties of tungsten trioxide from first-principles calculations. Physical Review B, 2013, 87, . | 3.2 | 71 |
| 63 | Ab initiocalculations of absorption spectra of semiconducting nanowires within many-body perturbation theory. Physical Review B, 2012, 85, . | 3.2 | 16 |
| 64 | Ballistic electron transport in non-equilibrium warm dense gold. High Energy Density Physics, 2012, 8, 303-306. | 1.5 | 22 |
| 65 | Probing the warm dense copper nano-foil with ultrafast electron shadow imaging and deflectometry. High Energy Density Physics, 2012, 8, 298-302. | 1.5 | 5 |
| 66 | Tungsten Oxide Clathrates for Water Oxidation: A First Principles Study. Chemistry of Materials, 2012, 24, 4252-4260. | 6.7 | 37 |
| 67 | Thermally Stable N<sub>2</sub>-Intercalated WO<sub>3</sub> Photoanodes for Water Oxidation. Journal of the American Chemical Society, 2012, 134, 18318-18324. | 13.7 | 126 |
| 68 | Solution of the Bethe-Salpeter equation without empty electronic states: Application to the absorption spectra of bulk systems. Physical Review B, 2012, 85, . | 3.2 | 49 |
| 69 | Amplification of Ultrashort Laser Pulses by a Resonant Raman Scheme in a Gas-Jet Plasma. Physical Review Letters, 2004, 92, 175007. | 7.8 | 123 |
| 70 | Formation of periodic structures in a laser spark. Physics of Plasmas, 2001, 8, 4174-4179. | 1.9 | 7 |