

Katharina Franke

List of Publications by Year in descending order

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103
papers

4,532
citations

87723

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106150

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103
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103
docs citations

103
times ranked

4131
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Quantum Magnetism and Topological Superconductivity in Yu-Shiba-Rusinov Chains. <i>Physical Review Letters</i> , 2022, 128, 036801. | 2.9 | 13 |
| 2 | Real-space anisotropy of the superconducting gap in the charge-density wave material 2H-NbSe ₂ . <i>Npj Quantum Materials</i> , 2022, 7, . | 1.8 | 11 |
| 3 | Shot-noise measurements of single-atom junctions using a scanning tunneling microscope. <i>Review of Scientific Instruments</i> , 2022, 93, 023702. | 0.6 | 2 |
| 4 | Quantum spins and hybridization in artificially-constructed chains of magnetic adatoms on a superconductor. <i>Nature Communications</i> , 2022, 13, 2160. | 5.8 | 20 |
| 5 | Direct observation of intrinsic surface magnetic disorder in amorphous superconducting films. <i>Physical Review B</i> , 2022, 105, . | 1.1 | 5 |
| 6 | Resolution of Intramolecular Dipoles and a Push-Back Effect of Individual Molecules on a Metal Surface. <i>Journal of Physical Chemistry C</i> , 2022, 126, 7667-7673. | 1.5 | 1 |
| 7 | Quantum Yu-Shiba-Rusinov dimers. <i>Physical Review B</i> , 2022, 105, . | 1.1 | 7 |
| 8 | Band Formation at Interfaces Between N-Heteropolycycles and Gold Electrodes. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 947-951. | 2.1 | 7 |
| 9 | Yu-Shiba-Rusinov states in real metals. <i>Physical Review B</i> , 2021, 103, . | 1.1 | 23 |
| 10 | Metal-Organic Superlattices Induced by Long-Range Repulsive Interactions on a Metal Surface. <i>Journal of Physical Chemistry C</i> , 2021, 125, 18494-18500. | 1.5 | 3 |
| 11 | Electronic Properties of Tetraazaperopyrene Derivatives on Au(111): Energy-Level Alignment and Interfacial Band Formation. <i>Journal of Physical Chemistry C</i> , 2021, 125, 19969-19979. | 1.5 | 2 |
| 12 | Moiré Tuning of Spin Excitations: Individual Fe Atoms on MoS ₂ on NbSe ₂ . <i>Physical Review Letters</i> , 2021, 126, 157201. | 1.5 | 1 |
| 13 | Correlated insulator by the slice. <i>Nature Physics</i> , 2020, 16, 128-129. | 6.5 | 2 |
| 14 | Yu-Shiba-Rusinov States in the Charge-Density Modulated Superconductor NbSe ₂ . <i>Nano Letters</i> , 2020, 20, 339-344. | 4.5 | 36 |
| 15 | Resonant Andreev reflections probed by photon-assisted tunnelling at the atomic scale. <i>Nature Physics</i> , 2020, 16, 1222-1226. | 6.5 | 23 |
| 16 | Monolayers of MoS ₂ on Ag(111) as decoupling layers for organic molecules: resolution of electronic and vibronic states of TCNQ. <i>Beilstein Journal of Nanotechnology</i> , 2020, 11, 1062-1071. | 1.5 | 8 |
| 17 | Interfering Tunneling Paths through Magnetic Molecules on Superconductors: Asymmetries of Kondo and Yu-Shiba-Rusinov Resonances. <i>Physical Review Letters</i> , 2020, 125, 256805. | 2.9 | 24 |
| 18 | Surface-orientation- and ligand-dependent quenching of the spin magnetic moment of Co porphyrins adsorbed on Cu substrates. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 12688-12696. | 1.3 | 11 |

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|----|---|------|-----------|
| 19 | Vibrational Excitation Mechanism in Tunneling Spectroscopy beyond the Franck-Condon Model. <i>Physical Review Letters</i> , 2020, 124, 116804. | 2.9 | 11 |
| 20 | Photon-assisted resonant Andreev reflections: Yu-Shiba-Rusinov and Majorana states. <i>Physical Review B</i> , 2020, 102, . | 1.1 | 14 |
| 21 | Magnetic-field-induced transition in a quantum dot coupled to a superconductor. <i>Physical Review Research</i> , 2020, 2, . | 1.3 | 12 |
| 22 | Mapping the perturbation potential of metallic and dipolar tips in tunneling spectroscopy on MoS_2 . <i>Physical Review B</i> , 2019, 100, . | 1.1 | 3 |
| 23 | $\dot{\text{I}}$ -Radical Formation by Pyrrolic H Abstraction of Phthalocyanine Molecules on Molybdenum Disulfide. <i>ACS Nano</i> , 2019, 13, 7031-7035. | 7.3 | 9 |
| 24 | Correlation of Vibrational Excitations and Electronic Structure with Submolecular Resolution. <i>Journal of Physical Chemistry C</i> , 2019, 123, 7425-7430. | 1.5 | 3 |
| 25 | Direct Imaging of the Induced π Effect in Molecular Self-Assembly. <i>Small</i> , 2019, 15, 1804713. | 5.2 | 3 |
| 26 | Electronic structure of an iron porphyrin derivative on $\text{Au}(111)$. <i>Journal of Physics Condensed Matter</i> , 2019, 31, 044002. | 0.7 | 7 |
| 27 | Control of Oxidation and Spin State in a Single-Molecule Junction. <i>ACS Nano</i> , 2018, 12, 3172-3177. | 7.3 | 18 |
| 28 | Moiré structure of MoS_2 on $\text{Au}(111)$: Local structural and electronic properties. <i>Surface Science</i> , 2018, 678, 136-142. | 0.8 | 45 |
| 29 | Wave-Function Hybridization in Yu-Shiba-Rusinov Dimers. <i>Physical Review Letters</i> , 2018, 120, 156803. | 2.9 | 53 |
| 30 | Single magnetic adsorbates on s-wave superconductors. <i>Progress in Surface Science</i> , 2018, 93, 1-19. | 3.8 | 135 |
| 31 | Tuning the Coupling of an Individual Magnetic Impurity to a Superconductor: Quantum Phase Transition and Transport. <i>Physical Review Letters</i> , 2018, 121, 196803. | 2.9 | 84 |
| 32 | Correlation of Kondo effect and molecular conformation of the acceptor molecule in the TTF-TCNE charge transfer complex. <i>Journal of Physics Condensed Matter</i> , 2018, 30, 454002. | 0.7 | 6 |
| 33 | Visualizing Intramolecular Distortions as the Origin of Transverse Magnetic Anisotropy. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 6563-6567. | 2.1 | 12 |
| 34 | High-Resolution Vibronic Spectra of Molecules on Molybdenum Disulfide Allow for Rotamer Identification. <i>ACS Nano</i> , 2018, 12, 11698-11703. | 7.3 | 21 |
| 35 | Topological states engineered in narrow strips of graphene. <i>Nature</i> , 2018, 560, 175-176. | 13.7 | 9 |
| 36 | Conformational adaptation and manipulation of manganese tetra(4-pyridyl)porphyrin molecules on $\text{Cu}(111)$. <i>Journal of Chemical Physics</i> , 2017, 146, . | 1.2 | 15 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 37 | Exploring a Proximity-Coupled Co Chain on Pb(110) as a Possible Majorana Platform. <i>Nano Letters</i> , 2017, 17, 4473-4477. | 4.5 | 118 |
| 38 | Scaling of Yu-Shiba-Rusinov energies in the weak-coupling Kondo regime. <i>Nature Communications</i> , 2017, 8, 2016. | 5.8 | 45 |
| 39 | Disentangling electron- and electric-field-induced ring-closing reactions in a diarylethene derivative on Ag(111). <i>Journal of Physics Condensed Matter</i> , 2017, 29, 294001. | 0.7 | 18 |
| 40 | Magnetic anisotropy in surface-supported single-ion lanthanide complexes. <i>Physical Review B</i> , 2016, 94, . | 1.1 | 11 |
| 41 | Requirement on Aromatic Precursor for Graphene Formation. <i>Journal of Physical Chemistry C</i> , 2016, 120, 9821-9825. | 1.5 | 11 |
| 42 | Electronic Structure and Luminescence of Quasi-Freestanding MoS ₂ Nanopatches on Au(111). <i>Nano Letters</i> , 2016, 16, 5163-5168. | 4.5 | 61 |
| 43 | Visualizing the Role of Molecular Orbitals in Charge Transport through Individual Diarylethene Isomers. <i>ACS Nano</i> , 2016, 10, 10555-10562. | 7.3 | 32 |
| 44 | Orbital Picture of Yu-Shiba-Rusinov Multiplets. <i>Physical Review Letters</i> , 2016, 117, 186801. | 2.9 | 90 |
| 45 | Electronic States and Exciton Dynamics in Dicyanovinyl-Sexithiophene on Au(111). <i>Journal of Physical Chemistry C</i> , 2016, 120, 27268-27275. | 1.5 | 22 |
| 46 | Self-assembly of tetracyanonaphtho-quinodimethane (TNAP) based metal-organic networks on Pb(111): Structural, electronic, and magnetic properties. <i>Applied Surface Science</i> , 2016, 373, 2-7. | 3.1 | 4 |
| 47 | Tunneling Processes into Localized Subgap States in Superconductors. <i>Physical Review Letters</i> , 2015, 115, 087001. | 2.9 | 113 |
| 48 | Charge Redistribution and Transport in Molecular Contacts. <i>Physical Review Letters</i> , 2015, 115, 136101. | 2.9 | 22 |
| 49 | End States and Subgap Structure in Proximity-Coupled Chains of Magnetic Adatoms. <i>Physical Review Letters</i> , 2015, 115, 197204. | 2.9 | 294 |
| 50 | Magnetic anisotropy in Shiba bound states across a quantum phase transition. <i>Nature Communications</i> , 2015, 6, 8988. | 5.8 | 94 |
| 51 | Diarylethene Molecules on a Ag(111) Surface: Stability and Electron-Induced Switching. <i>Journal of Physical Chemistry C</i> , 2015, 119, 4874-4883. | 1.5 | 30 |
| 52 | Experimental Demonstration of a Two-Band Superconducting State for Lead Using Scanning Tunneling Spectroscopy. <i>Physical Review Letters</i> , 2015, 114, 157001. | 2.9 | 73 |
| 53 | Tuning the Magnetic Anisotropy of Single Molecules. <i>Nano Letters</i> , 2015, 15, 4024-4028. | 4.5 | 98 |
| 54 | Electronic structure and excited state dynamics in a dicyanovinyl-substituted oligothiophene on Au(111). <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 27118-27126. | 1.3 | 25 |

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|----|---|-----|-----------|
| 55 | Site-specific bonding of copper adatoms to pyridine end groups mediating the formation of two-dimensional coordination networks on metal surfaces. <i>Physical Review B</i> , 2014, 89, . | 1.1 | 21 |
| 56 | Electroluminescence of copper-nitride nanocrystals. <i>Physical Review B</i> , 2014, 90, . | 1.1 | 14 |
| 57 | Orbital Redistribution in Molecular Nanostructures Mediated by Metal-Organic Bonds. <i>ACS Nano</i> , 2014, 8, 10715-10722. | 7.3 | 36 |
| 58 | Change of the Magnetic Coupling of a Metal-Organic Complex with the Substrate by a Stepwise Ligand Reaction. <i>Nano Letters</i> , 2013, 13, 4840-4843. | 4.5 | 78 |
| 59 | Protection of excited spin states by a superconducting energy gap. <i>Nature Physics</i> , 2013, 9, 765-768. | 6.5 | 118 |
| 60 | Charged and metallic molecular monolayers through surface-induced aromatic stabilization. <i>Nature Chemistry</i> , 2013, 5, 187-194. | 6.6 | 187 |
| 61 | Magnetic Coupling of Gd_3 Endohedral Fullerenes to a Substrate. <i>Physical Review Letters</i> , 2013, 111, 167203. | 2.9 | 28 |
| 62 | Atypical charge redistribution over a charge-transfer monolayer on a metal. <i>New Journal of Physics</i> , 2013, 15, 083048. | 1.2 | 16 |
| 63 | Microscopic resolution of the interplay of Kondo screening and superconducting pairing: Mn-phthalocyanine molecules adsorbed on superconducting Pb(111). <i>Physical Review B</i> , 2013, 87, . | 1.1 | 46 |
| 64 | Gating the Charge State of Single Molecules by Local Electric Fields. <i>Physical Review Letters</i> , 2012, 108, 036801. | 2.9 | 62 |
| 65 | Induction of a Photostationary Ring-Opening/Ring-Closing State of Spiropyran Monolayers on the Semimetallic Bi(110) Surface. <i>Physical Review Letters</i> , 2012, 109, 026102. | 2.9 | 32 |
| 66 | Driving a Macroscopic Oscillator with the Stochastic Motion of a Hydrogen Molecule. <i>Science</i> , 2012, 338, 779-782. | 6.0 | 44 |
| 67 | Effects of electron-vibration coupling in transport through single molecules. <i>Journal of Physics Condensed Matter</i> , 2012, 24, 394002. | 0.7 | 52 |
| 68 | Enhanced charge transfer in a monolayer of the organic charge transfer complex TTF-TNAP on Au(111). <i>Journal of Physics Condensed Matter</i> , 2012, 24, 354003. | 0.7 | 14 |
| 69 | Reversible electron-induced <i>cis</i> → <i>trans</i> isomerization mediated by intermolecular interactions. <i>Journal of Physics Condensed Matter</i> , 2012, 24, 394016. | 0.7 | 4 |
| 70 | Ferromagnetic Coupling of Mononuclear Fe Centers in a Self-Assembled Metal-Organic Network on Au(111). <i>Physical Review Letters</i> , 2012, 109, 267207. | 2.9 | 60 |
| 71 | Site-Dependent Coordination Bonding in Self-Assembled Metal-Organic Networks. <i>Journal of Physical Chemistry Letters</i> , 2011, 2, 55-61. | 2.1 | 46 |
| 72 | Modulation of Surface Charge Transfer through Competing Long-Range Repulsive versus Short-Range Attractive Interactions. <i>Journal of Physical Chemistry C</i> , 2011, 115, 18640-18648. | 1.5 | 49 |

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|----|--|-----|-----------|
| 73 | Switching ability of nitro-spiropyran on Au(111): electronic structure changes as a sensitive probe during a ring-opening reaction. <i>Journal of Physics Condensed Matter</i> , 2011, 23, 484005. | 0.7 | 36 |
| 74 | Competition of Superconducting Phenomena and Kondo Screening at the Nanoscale. <i>Science</i> , 2011, 332, 940-944. | 6.0 | 339 |
| 75 | Electron Transfer Phenomena at the Molecular Scale. <i>Frontiers of Nanoscience</i> , 2011, 2, 51-75. | 0.3 | 1 |
| 76 | Excitation of Jahn-Teller Active Modes during Electron Transport through Single C ₆₀ Molecules on Metal Surfaces. <i>Journal of Physical Chemistry Letters</i> , 2010, 1, 500-504. | 2.1 | 33 |
| 77 | Origin of Moiré structures in C ₆₀ /Pb(111) and their effect on molecular energy levels. <i>Physical Review B</i> , 2009, 80, . | 4.1 | 11 |
| 78 | Reversing the Thermal Stability of a Molecular Switch on a Gold Surface: Ring-Opening Reaction of Nitrospiropyran. <i>Journal of the American Chemical Society</i> , 2009, 131, 12729-12735. | 6.6 | 65 |
| 79 | Structure and electronic configuration of tetracyanoquinodimethane layers on a Au(111) surface. <i>International Journal of Mass Spectrometry</i> , 2008, 277, 269-273. | 0.7 | 56 |
| 80 | Trans to cis isomerization of an azobenzene derivative on Cu(100) surface. <i>Applied Physics A: Materials Science and Processing</i> , 2008, 93, 241-246. | 1.1 | 53 |
| 81 | Active Intramolecular Conformational Dynamics Controlling the Assembly of Azobenzene Derivatives at Surfaces. <i>ChemPhysChem</i> , 2008, 9, 71-73. | 1.0 | 19 |
| 82 | Vibrational Kondo Effect in Pure Organic Charge-Transfer Assemblies. <i>Physical Review Letters</i> , 2008, 101, 217203. | 2.9 | 133 |
| 83 | Resonant Electron Heating and Molecular Phonon Cooling in Single C ₆₀ Junctions. <i>Physical Review Letters</i> , 2008, 100, 136801. | 2.9 | 120 |
| 84 | Adsorption of N ₂ O on Cu(100): a combined scanning tunneling microscopy and density functional theory study. <i>Physical Chemistry Chemical Physics</i> , 2008, 10, 1640. | 1.3 | 11 |
| 85 | Reducing the Molecule-Substrate Coupling in C ₆₀ -Based Nanostructures by Molecular Interactions. <i>Physical Review Letters</i> , 2008, 100, 036807. | 2.9 | 83 |
| 86 | Spectroscopy of C ₆₀ single molecules: the role of screening on energy level alignment. <i>Journal of Physics Condensed Matter</i> , 2008, 20, 184001. | 0.7 | 91 |
| 87 | Resonant heating and substrate-mediated cooling of a single C ₆₀ molecule in a tunnel junction. <i>New Journal of Physics</i> , 2008, 10, 065005. | 1.2 | 35 |
| 88 | Epitaxial interfaces between half-crystals of quasicrystalline and periodic material. <i>Journal of Physics Condensed Matter</i> , 2008, 20, 314004. | 0.7 | 8 |
| 89 | Dynamic Jahn-Teller effect in electronic transport through single C ₆₀ molecules. <i>Physical Review B</i> , 2008, 78, . | 1.1 | 51 |
| 90 | Formation of Dispersive Hybrid Bands at an Organic-Metal Interface. <i>Physical Review Letters</i> , 2008, 100, 156805. | 2.9 | 105 |

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| 91 | Surface characterization of Mn_xGe_{1-x} and $CrMn_xGe_{1-x}$ dilute magnetic semiconductors. Physical Review B, 2007, 75, . | 1.1 | 32 |
| 92 | Achieving Epitaxy between Incommensurate Materials by Quasicrystalline Interlayers. Physical Review Letters, 2007, 99, 036103. | 2.9 | 15 |
| 93 | Inducing the Rotation of a Single Phenyl Ring with Tunneling Electrons. Journal of Physical Chemistry C, 2007, 111, 14843-14848. | 1.5 | 72 |
| 94 | Long-Range Repulsive Interaction between Molecules on a Metal Surface Induced by Charge Transfer. Physical Review Letters, 2007, 99, 176103. | 2.9 | 163 |
| 95 | Spontaneous Formation of Triptycene Supramolecules on Surfaces. Journal of Physical Chemistry B, 2006, 110, 20089-20092. | 1.2 | 10 |
| 96 | Nucleation of ordered Fe islands on $Al_2O_3/Ni_3Al(111)$. Surface Science, 2006, 600, 1804-1808. | 0.8 | 40 |
| 97 | Investigation of the twofold decagonal $Al_{71.8}Ni_{14.8}Co_{13.4}(10000)$ surface by SPA-LEED and He diffraction. Surface Science, 2004, 561, 121-126. | 0.8 | 11 |
| 98 | Surface phonons in quasicrystals. Progress in Surface Science, 2004, 75, 227-236. | 3.8 | 10 |
| 99 | Structure and morphology of the tenfold surface of decagonal $Al_{71.8}Ni_{14.8}Co_{13.4}$ in its low-temperature random tiling type-I modification. Physical Review B, 2004, 70, . | 1.1 | 23 |
| 100 | Electronic valence bands in decagonal Al-Ni-Co. Physical Review B, 2003, 68, . | 1.1 | 9 |
| 101 | Low-energy surface phonons of decagonal and icosahedral quasicrystals by inelastic He-atom scattering. Physical Review B, 2003, 68, . | 1.1 | 8 |
| 102 | Quasicrystalline Epitaxial Single Element Monolayers on Icosahedral Al-Pd-Mn and Decagonal Al-Ni-Co Quasicrystal Surfaces. Physical Review Letters, 2002, 89, 156104. | 2.9 | 124 |
| 103 | LEED study of the potassium-induced reconstruction of $Cu(110)$. Journal of Physics Condensed Matter, 2001, 13, 3961-3967. | 0.7 | 2 |