

# K W Hipps

## List of Publications by Year in descending order

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78  
papers

3,448  
citations

186265  
28  
h-index

138484  
58  
g-index

79  
all docs

79  
docs citations

79  
times ranked

2858  
citing authors

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | Role of the Supporting Surface in the Thermodynamics and Cooperativity of Axial Ligand Binding to Metalloporphyrins at Interfaces. <i>Current Organic Chemistry</i> , 2022, 26, 553-562.   | 1.6 | 1         |
| 2  | Scanning Tunneling Microscopy Reveals Surface Diffusion of Single Double-Decker Phthalocyanine Molecules at the Solution/Solid Interface. <i>Journal of Physical Chemistry C</i> , 2022, 126, 4140-4149.   | 3.1 | 8         |
| 3  | Single-Molecule Kinetic Analysis of Oxygenation of Co(II) Porphyrin at the Solution/Solid Interface. <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 4918-4923.   | 4.6 | 4         |
| 4  | Mechanical behavior of crystalline ionic porphyrins. , 2021, , 855-866.  |     | 0         |
| 5  | STM Investigation of the Y[C6S-Pc] <sub>2</sub> and Y[C4O-Pc] <sub>2</sub> Complex at the Solution/Solid Interface: Substrate Effects, Submolecular Resolution, and Vacancies. <i>Journal of Physical Chemistry C</i> , 2021, 125, 1421-1431.            | 3.1 | 10        |
| 6  | Quantifying Reversible Nitrogenous Ligand Binding to Co(II) Porphyrin Receptors at the Solution/Solid Interface and in Solution. <i>ECS Meeting Abstracts</i> , 2021, MA2021-01, 788-788.  | 0.0 | 0         |
| 7  | STM Investigation of Y[C6s-Pc] <sub>2</sub> and Y[C4o-Pc] <sub>2</sub> Complexes at the Solution/Solid Interface: Substrate Effects, Sub-Molecular Resolution, and Covalently Saturated Sulfur. <i>ECS Meeting Abstracts</i> , 2021, MA2021-01, 787-787. | 0.0 | 0         |
| 8  | Characterizing the CH <sub>3</sub> SSCH <sub>3</sub> -Au(111) System From Single Molecules To Full Surface Coverage: A Scanning Tunneling Microscopy Study. <i>Journal of Physical Chemistry C</i> , 2021, 125, 21988-21996.                             | 3.1 | 4         |
| 9  | Quantifying reversible nitrogenous ligand binding to Co(II) porphyrin receptors at the solution/solid interface and in solution. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 24226-24235.   | 2.8 | 6         |
| 10 | Cooperative Binding of 1-Phenylimidazole to Cobalt(II) Octaethylporphyrin on Graphite: A Quantitative Imaging and Computational Study at Molecular Resolution. <i>Journal of Physical Chemistry C</i> , 2020, 124, 18639-18649.                          | 3.1 | 8         |
| 11 | Single molecule level studies of reversible ligand binding to metal porphyrins at the solution/solid interface. <i>Journal of Porphyrins and Phthalocyanines</i> , 2020, 24, 993-1002.   | 0.8 | 5         |
| 12 | Structure, Properties, and Reactivity of Porphyrins on Surfaces and Nanostructures with Periodic DFT Calculations. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 740.  | 2.5 | 18        |
| 13 | Alkynyl Linkers as a Design Tool to Gain Control over the Self-Assembly of Meso-Substituted Porphyrins on HOPG. <i>Langmuir</i> , 2020, 36, 4897-4907.   | 3.5 | 4         |
| 14 | Morphology Dependent Conductivity and Photoconductivity of Ionic Porphyrin Crystalline Assemblies. <i>ECS Journal of Solid State Science and Technology</i> , 2020, 9, 061010.   | 1.8 | 3         |
| 15 | Cooperativity and coverage dependent molecular desorption in self-assembled monolayers: computational case study with coronene on Au(111) and HOPG. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 10505-10513.                                  | 2.8 | 11        |
| 16 | Mechanical behavior of crystalline ionic porphyrins. <i>Journal of Porphyrins and Phthalocyanines</i> , 2019, 23, 154-165.   | 0.8 | 2         |
| 17 | Balancing Noncovalent Interactions in the Self-Assembly of Nonplanar Aromatic Carboxylic Acid MOF Linkers at the Solution/Solid Interface: HOPG vs Au(111). <i>Langmuir</i> , 2019, 35, 5271-5280.   | 3.5 | 11        |
| 18 | Tuning the optoelectronic characteristics of ionic organic crystalline assemblies. <i>Journal of Materials Chemistry C</i> , 2018, 6, 4041-4056.   | 5.5 | 15        |

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|----|---|-----|-----------|
| 19 | Kinetic and Thermodynamic Control in Porphyrin and Phthalocyanine Self-Assembled Monolayers. <i>Langmuir</i> , 2018, 34, 3-17.  | 3.5 | 37        |
| 20 | A Systematic Approach toward Designing Functional Ionic Porphyrin Crystalline Materials. <i>Journal of Physical Chemistry C</i> , 2018, 122, 22803-22820.   | 3.1 | 25        |
| 21 | Structure-Function Correlation of Photoactive Ionic pi-Conjugated Binary Porphyrin Assemblies. <i>MRS Advances</i> , 2017, 2, 2267-2273.  | 0.9 | 0         |
| 22 | Photoconductive behavior of binary porphyrin crystalline assemblies. <i>Journal of Porphyrins and Phthalocyanines</i> , 2017, 21, 569-580.  | 0.8 | 12        |
| 23 | Functional Porphyrin Nanostructures for Molecular Electronics: Structural, Mechanical, and Electronic Properties of Self-Assembled Ionic Metal-Free Porphyrins. , 2016, , 69-103.   |     | 8         |
| 24 | Influence of the Central Metal Ion on the Desorption Kinetics of a Porphyrin from the Solution/HOPG Interface. <i>Journal of Physical Chemistry C</i> , 2016, 120, 18140-18150.   | 3.1 | 18        |
| 25 | Surface directed reversible imidazole ligation to nickel( $\text{Ni}^{2+}$ ) octaethylporphyrin at the solution/solid interface: a single molecule level study. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 20819-20829.   | 2.8 | 23        |
| 26 | Comprehensive structure–function correlation of photoactive ionic $\pi$ -conjugated supermolecular assemblies: an experimental and computational study. <i>Journal of Materials Chemistry C</i> , 2016, 4, 10223-10239.   | 5.5 | 32        |
| 27 | Persistent Conductivity in TPYP:TSPP Organic Nanorods Induced by Ion Bombardment. <i>Journal of Physical Chemistry C</i> , 2016, 120, 14962-14968.  | 3.1 | 5         |
| 28 | A New variable temperature solution-solid interface scanning tunneling microscope. <i>Microscopy and Microanalysis</i> , 2015, 21, 2187-2188.   | 0.4 | 0         |
| 29 | Hyperbranched crystalline nanostructure produced from ionic $\pi$ -conjugated molecules. <i>Chemical Communications</i> , 2015, 51, 2663-2666.  | 4.1 | 23        |
| 30 | Kinetically Trapped Two-Component Self-Assembled Adlayer. <i>Journal of Physical Chemistry C</i> , 2015, 119, 25364-25376.  | 3.1 | 27        |
| 31 | Kinetic and thermodynamic processes of organic species at the solution–solid interface: the view through an STM. <i>Chemical Communications</i> , 2015, 51, 4737-4749.  | 4.1 | 93        |
| 32 | Desorption Kinetics and Activation Energy for Cobalt Octaethylporphyrin from Graphite at the Phenyloctane Solution–Graphite Interface: An STM Study. <i>Journal of Physical Chemistry C</i> , 2015, 119, 9386-9394.   | 3.1 | 26        |
| 33 | Polymorphic, Porous, and Host–Guest Nanostructures Directed by Monolayer–Substrate Interactions: Epitaxial Self-Assembly Study of Cyclic Trinuclear Au(I) Complexes on HOPG at the Solution–Solid Interface. <i>Journal of Physical Chemistry C</i> , 2015, 119, 24844-24858. | 3.1 | 15        |
| 34 | Predicting the Size Distribution in Crystallization of TSPP:TMPyP Binary Porphyrin Nanostructures in a Batch Desupersaturation Experiment. <i>Crystal Growth and Design</i> , 2014, 14, 6599-6606.  | 3.0 | 22        |
| 35 | Correlating elastic properties and molecular organization of an ionic organic nanostructure. <i>Nanoscale</i> , 2014, 6, 316-327.   | 5.6 | 45        |
| 36 | A new variable temperature solution-solid interface scanning tunneling microscope. <i>Review of Scientific Instruments</i> , 2014, 85, 103701.  | 1.3 | 9         |

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|----|---|------|-----------|
| 37 | A Single Molecule Level Study of the Temperature-Dependent Kinetics for the Formation of Metal Porphyrin Monolayers on Au(111) from Solution. <i>Journal of the American Chemical Society</i> , 2014, 136, 2142-2148.   | 13.7 | 61        |
| 38 | Effect of dispersion on surface interactions of cobalt(II) octaethylporphyrin monolayer on Au(111) and HOPG(0001) substrates: a comparative first principles study. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 14096-14107.   | 2.8  | 58        |
| 39 | Temperature Stability of Three Commensurate Surface Structures of Coronene Adsorbed on Au(111) from Heptanoic Acid in the 0 to 60 °C Range. <i>Journal of Physical Chemistry C</i> , 2013, 117, 2914-2919.  | 3.1  | 32        |
| 40 | Charge transfer induced chemical reaction of tetracyano-p-quinodimethane adsorbed on graphene. <i>RSC Advances</i> , 2012, 2, 10579.  | 3.6  | 24        |
| 41 | Single Molecule Imaging of Oxygenation of Cobalt Octaethylporphyrin at the Solution/Solid Interface: Thermodynamics from Microscopy. <i>Journal of the American Chemical Society</i> , 2012, 134, 14897-14904.  | 13.7 | 83        |
| 42 | Protonation state of core nitrogens in the meso-tetra(4-carboxyphenyl)porphyrin impacts the chemical and physical properties of nanostructures formed in acid solutions. <i>Journal of Porphyrins and Phthalocyanines</i> , 2012, 16, 1233-1243.                                | 0.8  | 17        |
| 43 | A Self-Assembled Two-Dimensional Zwitterionic Structure: H <sub>6</sub> TSPP Studied on Graphite. <i>Journal of Physical Chemistry C</i> , 2011, 115, 3990-3999.  | 3.1  | 38        |
| 44 | Tunneling Spectroscopy of Organic Monolayers and Single Molecules. <i>Topics in Current Chemistry</i> , 2011, 313, 189-215.   | 4.0  | 5         |
| 45 | Temperature Independence of Orbital Mediated Tunneling in Cobalt(II) Phthalocyanine. <i>Journal of Physical Chemistry C</i> , 2010, 114, 13349-13353.   | 3.1  | 8         |
| 46 | Differing HOMO and LUMO Mediated Conduction in a Porphyrin Nanorod. <i>Journal of the American Chemical Society</i> , 2010, 132, 8554-8556.   | 13.7 | 66        |
| 47 | Stability of a Surface Adlayer at Elevated Temperature: 100% Coronene and Heptanoic Acid on Au(111). <i>Journal of Physical Chemistry C</i> , 2008, 112, 2026-2031.   | 3.1  | 49        |
| 48 | Organization of Vanadyl and Metal-Free Tetraphenoxophthalocyanine Complexes on Highly Oriented Pyrolytic Graphite in the Presence of Paraffinic Solvents: A STM Study. <i>Journal of Physical Chemistry C</i> , 2008, 112, 20347-20356.   | 3.1  | 20        |
| 49 | Controlled Manipulation of Self-Organized Ni(II) Octaethylporphyrin Molecules Deposited from Solution on HOPG with a Scanning Tunneling Microscope. <i>Journal of Physical Chemistry C</i> , 2007, 111, 17516-17520.  | 3.1  | 32        |
| 50 | Scanning Tunneling Microscopy and Orbital-Mediated Tunneling Spectroscopy Study of 1,5-Di(octyloxy)anthracene Adsorbed on Highly Ordered Pyrolytic Graphite from Various Solvents and in Different Environments. <i>Journal of Physical Chemistry C</i> , 2007, 111, 7735-7740. | 3.1  | 19        |
| 51 | A Scanning Tunneling Microscopy Study of Self-Assembled Nickel(II) Octaethylporphyrin Deposited from Solutions on HOPG. <i>Langmuir</i> , 2006, 22, 5697-5701.  | 3.5  | 55        |
| 52 | Electron Tunneling, a Quantum Probe for the Quantum World of Nanotechnology. <i>Journal of Chemical Education</i> , 2005, 82, 704.  | 2.3  | 33        |
| 53 | Supramolecular Structures of Coronene and Alkane Acids at the Au(111) Solution Interface: A Scanning Tunneling Microscopy Study. <i>Langmuir</i> , 2005, 21, 919-923.   | 3.5  | 65        |
| 54 | Physical Chemistry at the Nanometer Scale. <i>Journal of Chemical Education</i> , 2005, 82, 693.  | 2.3  | 3         |

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|----|---|------|-----------|
| 55 | Spontaneous Solution-Phase Redox Deposition of a Dense Cobalt(II) Phthalocyanine Monolayer on Gold. <i>Journal of Physical Chemistry B</i> , 2004, 108, 17003-17006.  | 2.6  | 24        |
| 56 | Nanomechanical properties of ordered phthalocyanine Langmuir-Blodgett layers. <i>Journal of Materials Research</i> , 2004, 19, 1461-1470.   | 2.6  | 14        |
| 57 | A Self-Organized Two-Dimensional Bimolecular Structure. <i>Journal of Physical Chemistry B</i> , 2003, 107, 2903-2909.  | 2.6  | 124       |
| 58 | Optimization of Film Stresses Utilized in Composite Piezoelectric Membrane Microgenerators. <i>Materials Research Society Symposia Proceedings</i> , 2003, 795, 493.  | 0.1  | 5         |
| 59 | Scanning Tunneling Microscopy, Orbital-Mediated Tunneling Spectroscopy, and Ultraviolet Photoelectron Spectroscopy of Nickel(II) Octaethylporphyrin Deposited from Vapor. <i>Journal of Physical Chemistry B</i> , 2002, 106, 996-1003.   | 2.6  | 133       |
| 60 | A Self-Organized 2-Dimensional Bifunctional Structure Formed by Supramolecular Design. <i>Journal of the American Chemical Society</i> , 2002, 124, 2126-2127.  | 13.7 | 172       |
| 61 | MOLECULAR ELECTRONICS: It's All About Contacts. <i>Science</i> , 2001, 294, 536-537.  | 12.6 | 191       |
| 62 | Scanning Tunneling Microscopy, Orbital-Mediated Tunneling Spectroscopy, and Ultraviolet Photoelectron Spectroscopy of Metal(II) Tetraphenylporphyrins Deposited from Vapor. <i>Journal of the American Chemical Society</i> , 2001, 123, 4073-4080.   | 13.7 | 246       |
| 63 | Physical Properties and Metal Ion Specific Scanning Tunneling Microscopy Images of Metal(II) Tetraphenylporphyrins Deposited from Vapor onto Gold (111). <i>Journal of Physical Chemistry B</i> , 2000, 104, 11899-11905.   | 2.6  | 198       |
| 64 | Orbital Mediated Tunneling in Vanadyl Phthalocyanine Observed in both Tunnel Diode and STM Environments. <i>Journal of Physical Chemistry B</i> , 2000, 104, 2444-2447.   | 2.6  | 75        |
| 65 | A Scanning Tunneling Microscopy and Spectroscopy Study of Vanadyl Phthalocyanine on Au(111): The Effect of Oxygen Binding and Orbital Mediated Tunneling on the Apparent Corrugation. <i>Journal of Physical Chemistry B</i> , 2000, 104, 5993-6000.  | 2.6  | 131       |
| 66 | The formation of transition aluminas during oxidation of AlN. <i>Journal of Materials Science Letters</i> , 1999, 18, 877-879.  | 0.5  | 11        |
| 67 | Scanning Tunneling Microscopy of Metal Phthalocyanines: d6 and d8 Cases. <i>Journal of Physical Chemistry B</i> , 1997, 101, 5391-5396.   | 2.6  | 268       |
| 68 | Scanning Tunneling Microscopy of Metal Phthalocyanines: d7 and d9 Cases. <i>Journal of the American Chemical Society</i> , 1996, 118, 7197-7202.  | 13.7 | 359       |
| 69 | Metal d-Orbital Occupation-Dependent Images in the Scanning Tunneling Microscopy of Metal Phthalocyanines. <i>The Journal of Physical Chemistry</i> , 1996, 100, 11207-11210.   | 2.9  | 183       |
| 70 | Interaction of wide band gap single crystals with 248 nm excimer laser radiation. IV. Positive ion emission from MgO and NaNO <sub>3</sub> . <i>Journal of Applied Physics</i> , 1996, 80, 6452-6466.   | 2.5  | 49        |
| 71 | EPR, Electronic, and Vibrational Spectra of the CuCl <sub>6</sub> <sup>4-</sup> Anion in [tris(2-aminoethyl)amineH <sub>4</sub> ] <sub>2</sub> [CuCl <sub>6</sub> ]Cl <sub>4</sub> ·2H <sub>2</sub> O and Crystal Structure of the Complex. <i>Inorganic Chemistry</i> , 1996, 35, 5300-5303. | 4.0  | 28        |
| 72 | Scanning Conduction Microscopy: A Method of Probing Abrasion of Insulating Thin Films on Conducting Substrates. <i>Materials Research Society Symposia Proceedings</i> , 1995, 385, 221.  | 0.1  | 0         |

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|----|--|------|-----------|
| 73 | Chemical Effects of substrate Temperature and Feed Gas Composition on Ion Beam Deposited AlN and AlN:H. Materials Research Society Symposia Proceedings, 1995, 388, 367. | 0.1  | 1         |
| 74 | A scanning conduction microscopic method for probing abrasion of insulating thin films. Tribology Letters, 1995, 1, 159.   | 2.6  | 1         |
| 75 | The use of scanning conduction microscopy to probe abrasion of insulating thin films. Review of Scientific Instruments, 1995, 66, 3802-3806.                             | 1.3  | 5         |
| 76 | Amorphous or nanocrystalline AlN thin films formed from AlN: H. Journal of Materials Research, 1994, 9, 1449-1455.   | 2.6  | 15        |
| 77 | Gold-coated tungsten tips for scanning tunneling microscopy. Review of Scientific Instruments, 1993, 64, 1495-1501.  | 1.3  | 13        |
| 78 | Tunnelling reveals forbidden transitions. Nature, 1987, 326, 107-108.  | 27.8 | 3         |