

# Joachim Schnadt

## List of Publications by Year in descending order

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103  
papers

4,537  
citations

76196

40  
h-index

110170

64  
g-index

105  
all docs

105  
docs citations

105  
times ranked

5874  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Experimental evidence for sub-3-fs charge transfer from an aromatic adsorbate to a semiconductor. <i>Nature</i> , 2002, 418, 620-623.  | 13.7 | 346       |
| 2  | A low-spin Fe(III) complex with 100-ps ligand-to-metal charge transfer photoluminescence. <i>Nature</i> , 2017, 543, 695-699.  | 13.7 | 287       |
| 3  | Controlling the catalytic bond-breaking selectivity of Ni surfaces by step blocking. <i>Nature Materials</i> , 2005, 4, 160-162.   | 13.3 | 263       |
| 4  | A Cu/Pt Near-Surface Alloy for Water-Gas Shift Catalysis. <i>Journal of the American Chemical Society</i> , 2007, 129, 6485-6490.  | 6.6  | 233       |
| 5  | High-Coverage Structures of Carbon Monoxide Adsorbed on Pt(111) Studied by High-Pressure Scanning Tunneling Microscopy. <i>Journal of Physical Chemistry B</i> , 2004, 108, 14497-14502.   | 1.2  | 144       |
| 6  | Revisiting the Structure of the $\sqrt{3}\times\sqrt{3}$ Surface Oxide on Ag(111). <i>Physical Review Letters</i> , 2006, 96, 146101.  | 2.9  | 144       |
| 7  | The new ambient-pressure X-ray photoelectron spectroscopy instrument at MAX-lab. <i>Journal of Synchrotron Radiation</i> , 2012, 19, 701-704.  | 1.0  | 119       |
| 8  | Ethylene dissociation on flat and stepped Ni(111): A combined STM and DFT study. <i>Surface Science</i> , 2006, 600, 66-77.  | 0.8  | 98        |
| 9  | Structural study of adsorption of isonicotinic acid and related molecules on rutile TiO <sub>2</sub> (110) II: XPS. <i>Surface Science</i> , 2003, 544, 74-86.   | 0.8  | 95        |
| 10 | Experimental and theoretical study of oxygen adsorption structures on Ag(111). <i>Physical Review B</i> , 2009, 80, .  | 1.1  | 90        |
| 11 | The adsorption of iron phthalocyanine on graphite: A scanning tunnelling microscopy study. <i>Surface Science</i> , 2007, 601, 3661-3667.  | 0.8  | 82        |
| 12 | Photoemission, resonant photoemission, and x-ray absorption of a Ru(II) complex adsorbed on rutile TiO <sub>2</sub> (110) prepared by <i>in situ</i> electro-spray deposition. <i>Journal of Chemical Physics</i> , 2008, 129, 114701. | 1.2  | 80        |
| 13 | CO Intercalation of Graphene on Ir(111) in the Millibar Regime. <i>Journal of Physical Chemistry C</i> , 2013, 117, 16438-16447.   | 1.5  | 79        |
| 14 | Covalent immobilization of molecularly imprinted polymer nanoparticles on a gold surface using carbodiimide coupling for chemical sensing. <i>Journal of Colloid and Interface Science</i> , 2016, 461, 1-8.                           | 5.0  | 70        |
| 15 | Fluorescent Boronic Acid Polymer Grafted on Silica Particles for Affinity Separation of Saccharides. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 1406-1414.   | 4.0  | 69        |
| 16 | A versatile instrument for ambient pressure x-ray photoelectron spectroscopy: The Lund cell approach. <i>Surface Science</i> , 2016, 646, 160-169.   | 0.8  | 69        |
| 17 | N <sub>1s</sub> x-ray absorption study of the bonding interaction of bi-isonicotinic acid adsorbed on rutile TiO <sub>2</sub> (110). <i>Journal of Chemical Physics</i> , 2000, 112, 3945-3948.  | 1.2  | 68        |
| 18 | Implementation of Molecularly Imprinted Polymer Beads for Surface Enhanced Raman Detection. <i>Analytical Chemistry</i> , 2015, 87, 5056-5061.   | 3.2  | 67        |

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|----|---|-----|-----------|
| 19 | Hydrogen-Bond Induced Surface Core-Level Shift in Isonicotinic Acid. <i>Journal of Physical Chemistry B</i> , 2001, 105, 1917-1920.   | 1.2 | 61        |
| 20 | HIPPIE: a new platform for ambient-pressure X-ray photoelectron spectroscopy at the MAX IV Laboratory. <i>Journal of Synchrotron Radiation</i> , 2021, 28, 624-636.   | 1.0 | 60        |
| 21 | Tuning the spin state of iron phthalocyanine by ligand adsorption. <i>Journal of Physics Condensed Matter</i> , 2010, 22, 472002.   | 0.7 | 59        |
| 22 | Present and new frontiers in materials research by ambient pressure x-ray photoelectron spectroscopy. <i>Journal of Physics Condensed Matter</i> , 2020, 32, 413003.  | 0.7 | 54        |
| 23 | Structural study of adsorption of isonicotinic acid and related molecules on rutile TiO <sub>2</sub> (110) I: XAS and STM. <i>Surface Science</i> , 2003, 540, 39-54.   | 0.8 | 52        |
| 24 | X-ray absorption and photoemission spectroscopy of zinc protoporphyrin adsorbed on rutile TiO <sub>2</sub> (110) prepared by in situ electrospray deposition. <i>Journal of Chemical Physics</i> , 2010, 132, 084703. | 1.2 | 52        |
| 25 | Adsorption of L-cysteine on rutile TiO <sub>2</sub> (110). <i>Surface Science</i> , 2011, 605, 179-186.   | 0.8 | 52        |
| 26 | Covalent immobilization of molecularly imprinted polymer nanoparticles using an epoxy silane. <i>Journal of Colloid and Interface Science</i> , 2015, 445, 277-284.   | 5.0 | 50        |
| 27 | Hydrogen-bond induced surface core-level shift in pyridine carboxylic acids. <i>Surface Science</i> , 2001, 486, 157-166.   | 0.8 | 49        |
| 28 | CO Desorption Rate Dependence on CO Partial Pressure over Platinum Fuel Cell Catalysts. <i>Fuel Cells</i> , 2004, 4, 309-319.   | 1.5 | 49        |
| 29 | Comparison of the Carbonyl and Nitrosyl Complexes Formed by Adsorption of CO and NO on Monolayers of Iron Phthalocyanine on Au(111). <i>Journal of Physical Chemistry C</i> , 2011, 115, 24718-24727.                 | 1.5 | 49        |
| 30 | Excited-state charge transfer dynamics in systems of aromatic adsorbates on TiO <sub>2</sub> studied with resonant core techniques. <i>Journal of Chemical Physics</i> , 2003, 119, 12462-12472.                      | 1.2 | 48        |
| 31 | High-Coverage Oxygen-Induced Surface Structures on Ag(111). <i>Journal of Physical Chemistry C</i> , 2014, 118, 15324-15331.  | 1.5 | 46        |
| 32 | Self-cleaning and surface chemical reactions during hafnium dioxide atomic layer deposition on indium arsenide. <i>Nature Communications</i> , 2018, 9, 1412.   | 5.8 | 46        |
| 33 | Titanium dioxide thin-film growth on silicon (111) by chemical vapor deposition of titanium(IV) isopropoxide. <i>Journal of Applied Physics</i> , 2002, 92, 3381-3387.  | 1.1 | 45        |
| 34 | Near Ambient Pressure X-ray Photoelectron Spectroscopy Study of the Atomic Layer Deposition of TiO <sub>2</sub> on RuO <sub>2</sub> (110). <i>Journal of Physical Chemistry C</i> , 2016, 120, 243-251.               | 1.5 | 45        |
| 35 | Core level shifts of intercalated graphene. <i>2D Materials</i> , 2017, 4, 015013.  | 2.0 | 45        |
| 36 | Alignment of valence photoemission, x-ray absorption, and substrate density of states for an adsorbate on a semiconductor surface. <i>Physical Review B</i> , 2003, 67, .   | 1.1 | 43        |

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|----|--|-----|-----------|
| 37 | Metalorganic chemical vapor deposition of anatase titanium dioxide on Si: Modifying the interface by pre-oxidation. <i>Surface Science</i> , 2003, 530, 63-70.                             | 0.8 | 42        |
| 38 | Epoxidation of olefins with molecular oxygen as the oxidant using gold catalysts supported on polyoxometalates. <i>Green Chemistry</i> , 2014, 16, 1586.                                   | 4.6 | 42        |
| 39 | Lack of surface oxide layers and facile bulk oxide formation on Pd(110). <i>Physical Review B</i> , 2009, 80, .  | 1.1 | 41        |
| 40 | Ammonia adsorption on iron phthalocyanine on Au(111): Influence on adsorbate-substrate coupling and molecular spin. <i>Journal of Chemical Physics</i> , 2011, 134, 114710.                | 1.2 | 40        |
| 41 | Extended One-Dimensional Supramolecular Assembly on a Stepped Surface. <i>Physical Review Letters</i> , 2008, 100, 046103.   | 2.9 | 38        |
| 42 | The SPECIES beamline at the MAX IV Laboratory: a facility for soft X-ray RIXS and APXPS. <i>Journal of Synchrotron Radiation</i> , 2017, 24, 344-353.                                      | 1.0 | 38        |
| 43 | Adsorption and Charge-Transfer Study of Bi-isonicotinic Acid on In Situ-Grown Anatase TiO <sub>2</sub> Nanoparticles. <i>Journal of Physical Chemistry B</i> , 2004, 108, 3114-3122.       | 1.2 | 35        |
| 44 | The Adsorption Structure of NO on Pd(111) at High Pressures Studied by STM and DFT. <i>Journal of Physical Chemistry B</i> , 2005, 109, 14262-14265.                                       | 1.2 | 35        |
| 45 | Pyridine Adsorption on Single-Layer Iron Phthalocyanine on Au(111). <i>Journal of Physical Chemistry C</i> , 2011, 115, 20201-20208.   | 1.5 | 34        |
| 46 | Comparison of the size of excitonic effects in molecular $\pi$ - $\pi^*$ systems as measured by core and valence spectroscopies. <i>Chemical Physics</i> , 2005, 312, 39-45.               | 0.9 | 32        |
| 47 | Stressing Pd atoms: Initial oxidation of the Pd(110) surface. <i>Surface Science</i> , 2008, 602, 2440-2447.   | 0.8 | 31        |
| 48 | Formation of Trioctylamine from Octylamine On Au(111). <i>Journal of the American Chemical Society</i> , 2008, 130, 5388-5389.   | 6.6 | 30        |
| 49 | Electron spectroscopy study of the initial stages of iron phthalocyanine growth on highly oriented pyrolytic graphite. <i>Journal of Chemical Physics</i> , 2009, 131, 214709.             | 1.2 | 29        |
| 50 | Interplay of adsorbate-adsorbate and adsorbate-substrate interactions in self-assembled molecular surface nanostructures. <i>Nano Research</i> , 2010, 3, 459-471.                         | 5.8 | 29        |
| 51 | Charge-Transfer Dynamics at Model Metal-Organic Solar Cell Surfaces. <i>Journal of Physical Chemistry C</i> , 2007, 111, 16646-16655.  | 1.5 | 28        |
| 52 | Photoconjugation of Molecularly Imprinted Polymer Nanoparticles for Surface-Enhanced Raman Detection of Propranolol. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 27479-27485. | 4.0 | 28        |
| 53 | Stroboscopic operando spectroscopy of the dynamics in heterogeneous catalysis by event-averaging. <i>Nature Communications</i> , 2021, 12, 6117.   | 5.8 | 27        |
| 54 | Adsorption of a Ru(II) dye complex on the Au(111) surface: Photoemission and scanning tunneling microscopy. <i>Journal of Chemical Physics</i> , 2009, 130, 164704.                        | 1.2 | 25        |

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|----|--|-----|-----------|
| 55 | Unconventional Zwitterionic State of $\alpha$ -Cysteine. <i>Journal of Physical Chemistry Letters</i> , 2011, 2, 1677-1681.  | 2.1 | 25        |
| 56 | Polymer-Supported Palladium(II) Carbene Complexes: Catalytic Activity, Recyclability, and Selectivity in $C-H$ Acetoxylation of Arenes. <i>Chemistry - A European Journal</i> , 2017, 23, 8457-8465.   | 1.7 | 25        |
| 57 | Atomic Layer Deposition of Hafnium Oxide on InAs: Insight from Time-Resolved in Situ Studies. <i>ACS Applied Electronic Materials</i> , 2020, 2, 3915-3922.  | 2.0 | 23        |
| 58 | X-ray photoelectron spectroscopy of low surface concentration mass-selected Ag clusters. <i>Journal of Chemical Physics</i> , 2000, 113, 9233-9238.  | 1.2 | 22        |
| 59 | Role of Deprotonation and Cu Adatom Migration in Determining the Reaction Pathways of Oxalic Acid Adsorption on Cu(111). <i>Journal of Physical Chemistry C</i> , 2011, 115, 21177-21182.  | 1.5 | 22        |
| 60 | Nature of the bias-dependent symmetry reduction of iron phthalocyanine on Cu(111). <i>Physical Review B</i> , 2015, 92, .  | 1.1 | 22        |
| 61 | Adsorption and charge transfer dynamics of bi-isonicotinic acid on Au(111). <i>Journal of Chemical Physics</i> , 2007, 127, 134707.  | 1.2 | 21        |
| 62 | Oxidation of Ultrathin FeO(111) Grown on Pt(111): Spectroscopic Evidence for Hydroxylation. <i>Topics in Catalysis</i> , 2016, 59, 506-515.  | 1.3 | 21        |
| 63 | Dissociation of water on oxygen-covered Rh{111}. <i>Journal of Chemical Physics</i> , 2009, 131, 214707.   | 1.2 | 20        |
| 64 | Adsorption of CO on the Fe <sub>3</sub> O <sub>4</sub> (001) Surface. <i>Journal of Physical Chemistry B</i> , 2018, 122, 721-729.   | 1.2 | 20        |
| 65 | Iron phthalocyanine on Cu(111): Coverage-dependent assembly and symmetry breaking, temperature-induced homocoupling, and modification of the adsorbate-surface interaction by annealing. <i>Journal of Chemical Physics</i> , 2016, 144, 094702.   | 1.2 | 19        |
| 66 | Upgrade of the SPECIES beamline at the MAX IV Laboratory. <i>Journal of Synchrotron Radiation</i> , 2021, 28, 588-601.   | 1.0 | 19        |
| 67 | Electron dynamics within Ru-2,2'-bipyridine complexes—an N1s core level excitation study. <i>Chemical Physics</i> , 2002, 285, 167-176.  | 0.9 | 18        |
| 68 | Controlled short-linkage assembly of functional nano-objects. <i>Applied Surface Science</i> , 2014, 300, 22-28.   | 3.1 | 18        |
| 69 | Adsorption and Reaction of CO and NO on Ir(111) Under Near Ambient Pressure Conditions. <i>Topics in Catalysis</i> , 2016, 59, 487-496.  | 1.3 | 18        |
| 70 | Bulk and surface charge states of K <sub>3</sub> C <sub>60</sub> . <i>Physical Review B</i> , 2005, 71, .  | 1.1 | 17        |
| 71 | Adsorption of ammonia on multilayer iron phthalocyanine. <i>Journal of Chemical Physics</i> , 2011, 134, 114711.   | 1.2 | 17        |
| 72 | A Pd <sup>II</sup> Carbene Complex with Anthracene Side-Arms for $\pi$ -Stacking on Reduced Graphene Oxide (rGO): Activity towards Undirected $C-H$ Oxygenation of Arenes. <i>European Journal of Inorganic Chemistry</i> , 2018, 2018, 4742-4746. | 1.0 | 17        |

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|----|--|-----|-----------|
| 73 | Intramolecular vibronic dynamics in molecular solids:C60. Physical Review B, 2005, 72, .   | 1.1 | 16        |
| 74 | In Situ Study of CO Oxidation on HOPG-supported Pt Nanoparticles. ChemPhysChem, 2013, 14, 1553-1557.   | 1.0 | 16        |
| 75 | Coverage-dependent oxidation and reduction of vanadium supported on anatase TiO <sub>2</sub> (110). Journal of Catalysis, 2018, 360, 118-126.  | 3.1 | 16        |
| 76 | Electronic structure and excited state properties of iron carbene photosensitizers – A combined X-ray absorption and quantum chemical investigation. Chemical Physics Letters, 2017, 683, 559-566.     | 1.2 | 14        |
| 77 | Directed C-H Halogenation Reactions Catalysed by Pd(II) Supported on Polymers under Batch and Continuous Flow Conditions. Chemistry - A European Journal, 2019, 25, 13591-13597.                       | 1.7 | 14        |
| 78 | Electron-spectroscopy study ofLiC60:Charge transfer and dimer formation. Physical Review B, 2000, 62, 4253-4256.   | 1.1 | 13        |
| 79 | In situ characterization of the deposition of anatase TiO <sub>2</sub> on rutile TiO <sub>2</sub> (110). Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2018, 36, .           | 0.9 | 13        |
| 80 | How Surface Species Drive Product Distribution during Ammonia Oxidation: An STM and Operando APXPS Study. ACS Catalysis, 2021, 11, 8261-8273.  | 5.5 | 13        |
| 81 | Site-Selective Orbital Interactions in an Ultrathin Iron-Carbene Photosensitizer Film. Journal of Physical Chemistry A, 2020, 124, 1603-1609.  | 1.1 | 12        |
| 82 | Interaction of Sulfur Dioxide and Near-Ambient Pressures of Water Vapor with Cuprous Oxide Surfaces. Journal of Physical Chemistry C, 2017, 121, 24011-24024.  | 1.5 | 11        |
| 83 | Molecular damage in bi-isonicotinic acid adsorbed on rutile TiO <sub>2</sub> (110). Surface Science, 2008, 602, 1693-1698.   | 0.8 | 10        |
| 84 | Real-Time Study of CVD Growth of Silicon Oxide on Rutile TiO <sub>2</sub> (110) Using Tetraethyl Orthosilicate. Journal of Physical Chemistry C, 2015, 119, 19149-19161.                               | 1.5 | 10        |
| 85 | Ambient pressure phase transitions over Ir(110): at the onset of CO oxidation. Journal of Physics Condensed Matter, 2017, 29, 444002.  | 0.7 | 10        |
| 86 | Experimental and theoretical gas phase electronic structure study of tetrakis(dimethylamino) complexes of Ti(IV) and Hf(IV). Journal of Electron Spectroscopy and Related Phenomena, 2019, 234, 80-85. | 0.8 | 9         |
| 87 | Gas Pulse X-Ray Probe Ambient Pressure Photoelectron Spectroscopy with Submillisecond Time Resolution. ACS Applied Materials & Interfaces, 2021, 13, 47629-47641.                                      | 4.0 | 9         |
| 88 | Ambient pressure x-ray photoelectron spectroscopy setup for synchrotron-based in situ and operando atomic layer deposition research. Review of Scientific Instruments, 2022, 93, 013905.               | 0.6 | 9         |
| 89 | Beamline-induced chromium structure in carbon K-edge absorption spectra. Nuclear Instruments & Methods in Physics Research B, 2001, 184, 609-614.  | 0.6 | 8         |
| 90 | UHV and Ambient Pressure XPS: Potentials for Mg, MgO, and Mg(OH) <sub>2</sub> Surface Analysis. Jom, 2016, 68, 3070-3077.  | 0.9 | 8         |

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|-----|--|-----|-----------|
| 91  | Insulating surface layer on single crystal K <sub>3</sub> C <sub>60</sub> . European Physical Journal B, 2004, 41, 435-438.  | 0.6 | 6         |
| 92  | Bulk electronic structure of K <sub>3</sub> C <sub>60</sub> revealed by soft x-rays. Physical Review B, 2007, 75, .  | 1.1 | 6         |
| 93  | Modification of the Size of Supported Clusters by Coadsorption of an Organic Compound: Gold and Cysteine on Rutile TiO <sub>2</sub> (110). Langmuir, 2011, 27, 11466-11474.  | 1.6 | 6         |
| 94  | Oxygen relocation during HfO <sub>2</sub> ALD on InAs. Faraday Discussions, 2022, 236, 71-85.  | 1.6 | 6         |
| 95  | Sonogashira cross-coupling over Au(111): from UHV to ambient pressure. Journal of Physics Condensed Matter, 2017, 29, 444005.  | 0.7 | 5         |
| 96  | Spin propensity in resonant photoemission of transition metal complexes. Physical Review Research, 2021, 3, .  | 1.3 | 5         |
| 97  | Role of Temperature, Pressure, and Surface Oxygen Migration in the Initial Atomic Layer Deposition of HfO <sub>2</sub> on Anatase TiO <sub>2</sub> (101). Journal of Physical Chemistry C, 2022, 126, 12210-12221. | 1.5 | 5         |
| 98  | Time Resolved Ambient Pressure X-ray Photoelectron Spectroscopy. ACS Symposium Series, 0, , 219-248.   | 0.5 | 4         |
| 99  | Ultra-fast intramolecular vibronic coupling revealed by RIXS and RPES maps of an aromatic adsorbate on TiO <sub>2</sub> (110). Journal of Chemical Physics, 2018, 148, 204705.                                     | 1.2 | 2         |
| 100 | Use of astigmatic re-focusing at HP-XPS end-station. Journal of Physics: Conference Series, 2013, 425, 152005.   | 0.3 | 1         |
| 101 | Thin-Film Growth and Oxidation of Surfaces Under Relevant Pressure Conditions. , 2018, , 699-710.  |     | 1         |
| 102 | Resonant X-ray photo-oxidation of light-harvesting iron (II/III) N-heterocyclic carbene complexes. Scientific Reports, 2021, 11, 22144.  | 1.6 | 1         |
| 103 | Adsorption of 3-(triethoxysilyl)propionitrile on a rutile TiO <sub>2</sub> (110) surface: An x-ray photoelectron spectroscopy study. AIP Conference Proceedings, 2020, , .   | 0.3 | 0         |