

Christian Papp

List of Publications by Year in descending order

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123
papers

6,406
citations

109137

35
h-index

66788

78
g-index

130
all docs

130
docs citations

130
times ranked

9096
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Temperature-dependent XPS studies on Ga-In alloys through the melting-point. Surface Science, 2022, 717, 122008. | 0.8 | 4 |
| 2 | A high-resolution X-ray photoelectron spectroscopy study on the adsorption and reaction of ethylene on Rh(1 1 1). Chemical Physics Letters, 2022, 797, 139595. | 1.2 | 1 |
| 3 | Temperature-dependent dielectric anomalies in powder aerosol deposited ferroelectric ceramic films. Journal of Materiomics, 2022, 8, 1239-1250. | 2.8 | 3 |
| 4 | Surface Chemistry of the Molecular Solar Thermal Energy Storage System 2,3-Dicyano-Norbornadiene/Quadricyclane on Ni(111). ChemPhysChem, 2022, 23, . | 1.0 | 7 |
| 5 | Model Catalytic Studies of the LOHC System 2,2-Bipiperidine/2,2-Bipyridine on Ni(111). Journal of Physical Chemistry C, 2021, 125, 8216-8223. | 1.5 | 3 |
| 6 | Key Parameters for the Synthesis of Active and Selective Nanostructured 3d Metal Catalysts Starting from Coordination Compounds – Case Study: Nickel Mediated Reductive Amination. ChemCatChem, 2021, 13, 3257-3261. | 1.8 | 7 |
| 7 | Selective Oxygen and Hydrogen Functionalization of the h-BN/Rh(111) Nanomesh. Chemistry - A European Journal, 2021, 27, 13172-13180. | 1.7 | 2 |
| 8 | Reactivity and Passivation of Fe Nanoclusters on h-BN/Rh(111). Chemistry - A European Journal, 2021, 27, 17087-17093. | 1.7 | 3 |
| 9 | Surface oxidation-induced restructuring of liquid Pd-Ga SCALMS model catalysts. Physical Chemistry Chemical Physics, 2021, 23, 16324-16333. | 1.3 | 3 |
| 10 | Oxidation induced restructuring of Rh-Ga SCALMS model catalyst systems. Journal of Chemical Physics, 2020, 153, 104702. | 1.2 | 9 |
| 11 | Reaction of Hydrogen and Oxygen on h-BN. Journal of Physical Chemistry C, 2020, 124, 18141-18146. | 1.5 | 7 |
| 12 | Ethylene: Its adsorption, reaction, and coking on Pt/h-BN/Rh(111) nanocluster arrays. Journal of Chemical Physics, 2020, 152, 224710. | 1.2 | 5 |
| 13 | Pt-Ga Model SCALMS on Modified HOPG: Thermal Behavior and Stability in UHV and under Near-Ambient Conditions. Journal of Physical Chemistry C, 2020, 124, 2562-2573. | 1.5 | 15 |
| 14 | Model Catalytic Studies of Liquid Organic Hydrogen Carriers: Indole/Indoline/Octahydroindole on Ni(111). Journal of Physical Chemistry C, 2020, 124, 22559-22567. | 1.5 | 11 |
| 15 | Controlled Catalytic Energy Release of the Norbornadiene/Quadricyclane Molecular Solar Thermal Energy Storage System on Ni(111). Journal of Physical Chemistry C, 2019, 123, 7654-7664. | 1.5 | 25 |
| 16 | Advanced and In-Situ Electron Microscopy Investigation of Phase Composition and Phase Transformation in Ga-Rh Liquid Metal Catalysts. Microscopy and Microanalysis, 2019, 25, 1878-1879. | 0.2 | 1 |
| 17 | Dehydrogenation of the liquid organic hydrogen carrier system 2-methylindole/2-methylindoline/2-methyloctahydroindole on Pt(111). Journal of Chemical Physics, 2019, 151, 144711. | 1.2 | 19 |
| 18 | Pt Nanoclusters Sandwiched between Hexagonal Boron Nitride and Nanographene as van der Waals Heterostructures for Optoelectronics. ACS Applied Nano Materials, 2019, 2, 7019-7024. | 2.4 | 9 |

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|----|---|-----|-----------|
| 19 | Revisiting surface core-level shifts for ionic compounds. <i>Physical Review B</i> , 2019, 100, . | 1.1 | 20 |
| 20 | Highly Effective Propane Dehydrogenation Using Ga–Rh Supported Catalytically Active Liquid Metal Solutions. <i>ACS Catalysis</i> , 2019, 9, 9499-9507. | 5.5 | 76 |
| 21 | Gitteröffnung durch reduktive kovalente Volumenfunktionalisierung von schwarzem Phosphor. <i>Angewandte Chemie</i> , 2019, 131, 5820-5826. | 1.6 | 12 |
| 22 | Lattice Opening upon Bulk Reductive Covalent Functionalization of Black Phosphorus. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 5763-5768. | 7.2 | 60 |
| 23 | Surface chemistry of 2,3-dibromosubstituted norbornadiene/quadracyclane as molecular solar thermal energy storage system on Ni(111). <i>Journal of Chemical Physics</i> , 2019, 150, 184706. | 1.2 | 17 |
| 24 | Oxygen Functionalization of Hexagonal Boron Nitride on Ni(111). <i>Chemistry - A European Journal</i> , 2019, 25, 8884-8893. | 1.7 | 10 |
| 25 | General and selective deoxygenation by hydrogen using a reusable earth-abundant metal catalyst. <i>Science Advances</i> , 2019, 5, eaav3680. | 4.7 | 37 |
| 26 | Growth and stability of Pt nanoclusters from 1 to 50 atoms on h-BN/Rh(111). <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 21287-21295. | 1.3 | 10 |
| 27 | Reactivity of CO and C ₂ H ₄ on Bimetallic Pt _x Ag _{1-x} /Pt(111) Surface Alloys Investigated by High-Resolution X-ray Photoelectron Spectroscopy. <i>ChemPhysChem</i> , 2018, 19, 1432-1440. | 1.0 | 3 |
| 28 | Dehydrogenation of the Liquid Organic Hydrogen Carrier System Indole/Indoline/Octahydroindole on Pt(111). <i>Journal of Physical Chemistry C</i> , 2018, 122, 4470-4479. | 1.5 | 33 |
| 29 | Identifying the Thermal Decomposition Mechanism of Guaiacol on Pt(111): An Integrated X-ray Photoelectron Spectroscopy and Density Functional Theory Study. <i>Journal of Physical Chemistry C</i> , 2018, 122, 4261-4273. | 1.5 | 5 |
| 30 | Reactivity studies of ethylene, benzene and cyclohexane on carbide-modified Mo(110) using high resolution X-ray photoelectron spectroscopy. <i>Surface Science</i> , 2018, 678, 11-19. | 0.8 | 4 |
| 31 | A HR-XPS study of the formation of h-BN on Ni(111) from the two precursors, ammonia borane and borazine. <i>Journal of Chemical Physics</i> , 2018, 149, 164709. | 1.2 | 23 |
| 32 | Solving the Puzzle of the Coexistence of Different Adsorption Geometries of Graphene on Ni(111). <i>Journal of Physical Chemistry C</i> , 2018, 122, 26105-26110. | 1.5 | 9 |
| 33 | Catalysis at the limit. <i>Nature Chemistry</i> , 2018, 10, 995-996. | 6.6 | 5 |
| 34 | Reactivity of CO on Sulfur-Passivated Graphene-Supported Platinum Nanocluster Arrays. <i>Journal of Physical Chemistry C</i> , 2018, 122, 16008-16015. | 1.5 | 7 |
| 35 | Reactivity of CO and C ₂ H ₄ on Bimetallic Pt _x Ag _{1-x} /Pt(111) Surface Alloys Investigated by High-Resolution X-ray Photoelectron Spectroscopy. <i>ChemPhysChem</i> , 2018, 19, 1423-1423. | 1.0 | 0 |
| 36 | Physical vapor deposition of Ga on polycrystalline Au surfaces studied using X-ray photoelectron spectroscopy. <i>Surface Science</i> , 2018, 677, 254-257. | 0.8 | 8 |

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|----|--|-----|-----------|
| 37 | Sulfur oxidation on graphene-supported platinum nanocluster arrays. <i>Chemical Physics Letters</i> , 2018, 708, 165-169. | 1.2 | 1 |
| 38 | Bimetallic Pd-Pt alloy nanocluster arrays on graphene/Rh(111): formation, stability, and dynamics. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 21294-21301. | 1.3 | 6 |
| 39 | Reactivity of CO on Sulfur-Passivated Graphene-Supported Palladium Nanocluster Arrays. <i>Journal of Physical Chemistry C</i> , 2017, 121, 1734-1741. | 1.5 | 2 |
| 40 | Growth of Stable Surface Oxides on Pt(111) at Near-Ambient Pressures. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 2594-2598. | 7.2 | 47 |
| 41 | Surface Reaction of CO on Carbide-Modified Mo(110). <i>Journal of Physical Chemistry C</i> , 2017, 121, 3133-3142. | 1.5 | 1 |
| 42 | Catalytically Triggered Energy Release from Strained Organic Molecules: The Surface Chemistry of Quadricyclane and Norbornadiene on Pt(111). <i>Chemistry - A European Journal</i> , 2017, 23, 1613-1622. | 1.7 | 31 |
| 43 | Decoupling of graphene from Ni(111) via formation of an interfacial NiO layer. <i>Carbon</i> , 2017, 121, 10-16. | 5.4 | 34 |
| 44 | Photochemical Energy Storage and Electrochemically Triggered Energy Release in the Norbornadiene-Quadricyclane System: UV-Photochemistry and IR Spectroelectrochemistry in a Combined Experiment. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 2819-2825. | 2.1 | 56 |
| 45 | Liquid Organic Hydrogen Carriers (LOHCs): Toward a Hydrogen-free Hydrogen Economy. <i>Accounts of Chemical Research</i> , 2017, 50, 74-85. | 7.6 | 698 |
| 46 | From Flat Surfaces to Nanoparticles: In Situ Studies of the Reactivity of Model Catalysts. <i>Catalysis Letters</i> , 2017, 147, 2-19. | 1.4 | 19 |
| 47 | Focused electron beam based direct-write fabrication of graphene and amorphous carbon from oxo-functionalized graphene on silicon dioxide. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 2683-2686. | 1.3 | 3 |
| 48 | Spectroscopic Observation and Molecular Dynamics Simulation of Ga Surface Segregation in Liquid Pd-Ga Alloys. <i>Chemistry - A European Journal</i> , 2017, 23, 17701-17706. | 1.7 | 19 |
| 49 | Gallium-rich Pd-Ga phases as supported liquid metal catalysts. <i>Nature Chemistry</i> , 2017, 9, 862-867. | 6.6 | 234 |
| 50 | Model Catalytic Studies of Novel Liquid Organic Hydrogen Carriers: Indole, Indoline and Octahydroindole on Pt(111). <i>Chemistry - A European Journal</i> , 2017, 23, 14806-14818. | 1.7 | 24 |
| 51 | Hydrogenation and hydrogen intercalation of hexagonal boron nitride on Ni(111): reactivity and electronic structure. <i>2D Materials</i> , 2017, 4, 035026. | 2.0 | 28 |
| 52 | On the platinum-oxide formation under gas-phase and electrochemical conditions. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2017, 221, 44-57. | 0.8 | 12 |
| 53 | Reactivity of TiO ₂ Nanotube-Supported Platinum Particles in the CO Oxidation Reaction. <i>ChemCatChem</i> , 2017, 9, 564-572. | 1.8 | 9 |
| 54 | Frontispiece: Spectroscopic Observation and Molecular Dynamics Simulation of Ga Surface Segregation in Liquid Pd-Ga Alloys. <i>Chemistry - A European Journal</i> , 2017, 23, . | 1.7 | 0 |

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|----|--|------|-----------|
| 73 | Carbon Dioxide Capture by an Amine Functionalized Ionic Liquid: Fundamental Differences of Surface and Bulk Behavior. <i>Journal of the American Chemical Society</i> , 2014, 136, 436-441. | 6.6 | 109 |
| 74 | Graphene-Supported Pd Nanoclusters Probed by Carbon Monoxide Adsorption. <i>Journal of Physical Chemistry C</i> , 2014, 118, 25097-25103. | 1.5 | 15 |
| 75 | Graphene-Templated Growth of Pd Nanoclusters. <i>Journal of Physical Chemistry C</i> , 2014, 118, 15934-15939. | 1.5 | 27 |
| 76 | Size and Structure Effects Controlling the Stability of the Liquid Organic Hydrogen Carrier Dodecahydro- <i>N</i> -ethylcarbazole during Dehydrogenation over Pt Model Catalysts. <i>Journal of Physical Chemistry Letters</i> , 2014, 5, 1498-1504. | 2.1 | 69 |
| 77 | Effects of Support and Rh Additive on Co-Based Catalysts in the Ethanol Steam Reforming Reaction. <i>ACS Catalysis</i> , 2014, 4, 1205-1218. | 5.5 | 130 |
| 78 | Heterographenes. , 2014, , 1-15. | | 0 |
| 79 | Near ambient pressure XPS investigation of the interaction of ethanol with Co/CeO ₂ (111). <i>Journal of Catalysis</i> , 2013, 307, 132-139. | 3.1 | 105 |
| 80 | Adsorption and reaction of acetylene on clean and oxygen-precovered Pd(100) studied with high-resolution X-ray photoelectron spectroscopy. <i>Journal of Chemical Physics</i> , 2013, 139, 164706. | 1.2 | 7 |
| 81 | Gold intercalation of boron-doped graphene on Ni(111): XPS and DFT study. <i>Journal of Physics Condensed Matter</i> , 2013, 25, 445002. | 0.7 | 12 |
| 82 | In situ high-resolution X-ray photoelectron spectroscopy "Fundamental insights in surface reactions. <i>Surface Science Reports</i> , 2013, 68, 446-487. | 3.8 | 90 |
| 83 | Integrated X-ray photoelectron spectroscopy and DFT characterization of benzene adsorption on Pt(111), Pt(355) and Pt(322) surfaces. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 20662. | 1.3 | 25 |
| 84 | Growth and electronic structure of boron-doped graphene. <i>Physical Review B</i> , 2013, 87, . | 1.1 | 113 |
| 85 | Wet Chemical Synthesis of Graphene. <i>Advanced Materials</i> , 2013, 25, 3583-3587. | 11.1 | 453 |
| 86 | Growth and oxidation of graphene on Rh(111). <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 19625. | 1.3 | 57 |
| 87 | Ultrafast x-ray photoelectron spectroscopy in the microsecond time domain. <i>Review of Scientific Instruments</i> , 2013, 84, 093103. | 0.6 | 10 |
| 88 | Dehydrogenation of Dodecahydro- <i>N</i> -ethylcarbazole on Pt(111). <i>ChemSusChem</i> , 2013, 6, 974-977. | 3.6 | 73 |
| 89 | Dehydrogenation Mechanism of Liquid Organic Hydrogen Carriers: Dodecahydro- <i>N</i> -ethylcarbazole on Pd(111). <i>Chemistry - A European Journal</i> , 2013, 19, 10854-10865. | 1.7 | 79 |
| 90 | Kinetics of the sulfur oxidation on palladium: A combined in situ x-ray photoelectron spectroscopy and density-functional study. <i>Journal of Chemical Physics</i> , 2012, 136, 094702. | 1.2 | 19 |

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|-----|--|------|-----------|
| 91 | Growth and electronic structure of nitrogen-doped graphene on Ni(111). <i>Physical Review B</i> , 2012, 86, . | 1.1 | 77 |
| 92 | Nondestructive characterization of a TiN metal gate: Chemical and structural properties by means of standing-wave hard x-ray photoemission spectroscopy. <i>Journal of Applied Physics</i> , 2012, 112, . | 1.1 | 12 |
| 93 | Production of Nitrogen-Doped Graphene by Low-Energy Nitrogen Implantation. <i>Journal of Physical Chemistry C</i> , 2012, 116, 5062-5066. | 1.5 | 96 |
| 94 | Graphene on Ni(111): Coexistence of Different Surface Structures. <i>Journal of Physical Chemistry Letters</i> , 2011, 2, 759-764. | 2.1 | 158 |
| 95 | Probing bulk electronic structure with hard X-ray angle-resolved photoemission. <i>Nature Materials</i> , 2011, 10, 759-764. | 13.3 | 153 |
| 96 | Adsorption and reaction of SO ₂ on clean and oxygen precovered Pd(100) – a combined HR-XPS and DF study. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 16227. | 1.3 | 18 |
| 97 | Oxidation of stepped Pt(111) studied by x-ray photoelectron spectroscopy and density functional theory. <i>Physical Review B</i> , 2011, 83, . | 1.1 | 35 |
| 98 | Covalent bulk functionalization of graphene. <i>Nature Chemistry</i> , 2011, 3, 279-286. | 6.6 | 596 |
| 99 | Dehydrogenation of Dodecahydro-1,3,5,7,9-pentazacyclododecane on Pd/Al ₂ O ₃ Model Catalysts. <i>Chemistry - A European Journal</i> , 2011, 17, 11542-11552. | 1.7 | 89 |
| 100 | Fabrication of layered nanostructures by successive electron beam induced deposition with two precursors: protective capping of metallic iron structures. <i>Nanotechnology</i> , 2011, 22, 475304. | 1.3 | 8 |
| 101 | Determination of layer-resolved composition, magnetization, and electronic structure of an Fe/MgO tunnel junction by standing-wave core and valence photoemission. <i>Physical Review B</i> , 2011, 84, . | 1.1 | 31 |
| 102 | Band mapping in x-ray photoelectron spectroscopy: An experimental and theoretical study of W(110) with 1.25 keV excitation. <i>Physical Review B</i> , 2011, 84, . | 1.1 | 34 |
| 103 | Hard x-ray photoemission using standing-wave excitation applied to the MgO/Fe interface. <i>Physical Review B</i> , 2011, 83, . | 1.1 | 19 |
| 104 | [<i>cis</i> -1,3-Diene] ₂ W(CO) ₂ Complexes as MOCVD Precursors for the Deposition of Thin Tungsten – Tungsten Carbide Films. <i>Chemical Vapor Deposition</i> , 2010, 16, 239-247. | 1.4 | 4 |
| 105 | Methane Activation by Platinum: Critical Role of Edge and Corner Sites of Metal Nanoparticles. <i>Chemistry - A European Journal</i> , 2010, 16, 6530-6539. | 1.7 | 126 |
| 106 | SO ₂ adsorption and thermal evolution on clean and oxygen precovered Pt(111). <i>Chemical Physics Letters</i> , 2010, 494, 188-192. | 1.2 | 26 |
| 107 | Interface properties of magnetic tunnel junction $\frac{1}{L} \int_0^L \dots$ <i>Physical Review B</i> , 2010, 82, . | 1.1 | 71 |
| 108 | Ethene adsorption and dehydrogenation on clean and oxygen precovered Ni(111) studied by high resolution x-ray photoelectron spectroscopy. <i>Journal of Chemical Physics</i> , 2010, 133, 014706. | 1.2 | 25 |

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|-----|--|-----|-----------|
| 109 | Standing-wave excited soft x-ray photoemission microscopy: Application to Co microdot magnetic arrays. Applied Physics Letters, 2010, 97, . | 1.5 | 24 |
| 110 | Influence of Steps on the Adsorption and Thermal Evolution of SO ₂ on Clean and Oxygen Precovered Pt Surfaces. Journal of Physical Chemistry C, 2010, 114, 19734-19743. | 1.5 | 10 |
| 111 | Band Gap and Electronic Structure of an Epitaxial, Semiconducting Cr _{0.80} Al _{0.20} Thin Film. Physical Review Letters, 2010, 105, 236404. | 2.9 | 12 |
| 112 | Interaction between silver nanowires and CO on a stepped platinum surface. Journal of Chemical Physics, 2009, 131, 064702. | 1.2 | 10 |
| 113 | Site blocking and CO/sulfur site exchange processes on stepped Pt surfaces. Journal of Physics Condensed Matter, 2009, 21, 134018. | 0.7 | 14 |
| 114 | Sulfur Oxidation on Pt(355): It Is the Steps!. Angewandte Chemie - International Edition, 2009, 48, 9743-9746. | 7.2 | 29 |
| 115 | Kinetic passivation of steps with sulfur and CO/S site exchange processes on stepped Pt surfaces. Chemical Physics Letters, 2008, 452, 94-98. | 1.2 | 6 |
| 116 | Influence of Steps on the Adsorption of Methane on Platinum Surfaces. Journal of Physical Chemistry C, 2007, 111, 2177-2184. | 1.5 | 32 |
| 117 | Adsorption and Reaction of Cyclohexene on a Ni(111) Surface. Langmuir, 2007, 23, 5541-5547. | 1.6 | 20 |
| 118 | Kinetic isotope effects and reaction intermediates in the decomposition of methyl on flat and stepped platinum (1 1 1) surfaces. Chemical Physics Letters, 2007, 442, 176-181. | 1.2 | 16 |
| 119 | The dissimilar twins – a comparative, site-selective in situ study of CO adsorption and desorption on Pt(322) and Pt(355). Surface Science, 2007, 601, 1108-1117. | 0.8 | 48 |
| 120 | A site-selective in situ study of CO adsorption and desorption on Pt(355). Journal of Chemical Physics, 2006, 124, 074712. | 1.2 | 51 |
| 121 | A detailed analysis of vibrational excitations in x-ray photoelectron spectra of adsorbed small hydrocarbons. Journal of Chemical Physics, 2006, 125, 204706. | 1.2 | 45 |
| 122 | Site selectivity of benzene adsorption on Ni(111) studied by high-resolution x-ray photoelectron spectroscopy. Physical Review B, 2006, 73, . | 1.1 | 25 |
| 123 | Activated adsorption of methane on Pt(111) – an in situ XPS study. New Journal of Physics, 2005, 7, 107-107. | 1.2 | 67 |