

# Arne Wittstock

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2461188/publications.pdf>

Version: 2024-02-01

36  
papers

3,493  
citations

331670

21  
h-index

361022

35  
g-index

37  
all docs

37  
docs citations

37  
times ranked

3764  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Nanoporous Gold Catalysts for Selective Gas-Phase Oxidative Coupling of Methanol at Low Temperature. <i>Science</i> , 2010, 327, 319-322.  | 12.6 | 1,022     |
| 2  | Surface-chemistry-driven actuation in nanoporous gold. <i>Nature Materials</i> , 2009, 8, 47-51.   | 27.5 | 488       |
| 3  | Nanoporous gold: a new material for catalytic and sensor applications. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 12919.   | 2.8  | 306       |
| 4  | Ultralow Loading Pt Nanocatalysts Prepared by Atomic Layer Deposition on Carbon Aerogels. <i>Nano Letters</i> , 2008, 8, 2405-2409.  | 9.1  | 244       |
| 5  | Nanoporous Au: An Unsupported Pure Gold Catalyst?. <i>Journal of Physical Chemistry C</i> , 2009, 113, 5593-5600.  | 3.1  | 232       |
| 6  | ALD Functionalized Nanoporous Gold: Thermal Stability, Mechanical Properties, and Catalytic Activity. <i>Nano Letters</i> , 2011, 11, 3085-3090.   | 9.1  | 212       |
| 7  | Silver residues as a possible key to a remarkable oxidative catalytic activity of nanoporous gold. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 4529.  | 2.8  | 121       |
| 8  | Catalysis by Unsupported Skeletal Gold Catalysts. <i>Accounts of Chemical Research</i> , 2014, 47, 731-739.  | 15.6 | 114       |
| 9  | Nanoporous Gold as a Platform for a Building Block Catalyst. <i>ACS Catalysis</i> , 2012, 2, 2199-2215.  | 11.2 | 108       |
| 10 | Oxygen-Mediated Coupling of Alcohols over Nanoporous Gold Catalysts at Ambient Pressures. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 1698-1701.  | 13.8 | 106       |
| 11 | Nanoporous gold: a new gold catalyst with tunable properties. <i>Faraday Discussions</i> , 2011, 152, 87.  | 3.2  | 82        |
| 12 | Quantitative determination of residual silver distribution in nanoporous gold and its influence on structure and catalytic performance. <i>Journal of Catalysis</i> , 2017, 352, 52-58.                  | 6.2  | 45        |
| 13 | Effect of Surface Chemistry on the Stability of Gold Nanostructures. <i>Langmuir</i> , 2010, 26, 13736-13740.  | 3.5  | 40        |
| 14 | A comparative study of alcohol oxidation over nanoporous gold in gas and liquid phase. <i>Journal of Catalysis</i> , 2017, 353, 99-106.  | 6.2  | 40        |
| 15 | Steam reforming of methanol over oxide decorated nanoporous gold catalysts: a combined in situ FTIR and flow reactor study. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 8880-8888.            | 2.8  | 37        |
| 16 | Maximizing Activity and Stability by Turning Gold Catalysis Upside Down: Oxide Particles on Nanoporous Gold. <i>ChemCatChem</i> , 2013, 5, 2037-2043.  | 3.7  | 35        |
| 17 | <i>In Situ</i> Ptychography of Heterogeneous Catalysts using Hard X-Rays: High Resolution Imaging at Ambient Pressure and Elevated Temperature. <i>Microscopy and Microanalysis</i> , 2016, 22, 178-188. | 0.4  | 31        |
| 18 | A versatile sol-gel coating for mixed oxides on nanoporous gold and their application in the water gas shift reaction. <i>Catalysis Science and Technology</i> , 2016, 6, 5311-5319.                     | 4.1  | 30        |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 19 | Nanoporous Gold-Supported Ceria for the Water-Gas Shift Reaction: UHV Inspired Design for Applied Catalysis. <i>Journal of Physical Chemistry C</i> , 2014, 118, 29270-29277.  | 3.1 | 27        |
| 20 | Quantitative Phase Composition of TiO <sub>2</sub> -Coated Nanoporous Au Monoliths by X-ray Absorption Spectroscopy and Correlations to Catalytic Behavior. <i>Journal of Physical Chemistry C</i> , 2014, 118, 4078-4084.                                   | 3.1 | 22        |
| 21 | Independent control over residual silver content of nanoporous gold by galvanodynamically controlled dealloying. <i>Nanoscale</i> , 2018, 10, 17166-17173.   | 5.6 | 22        |
| 22 | A versatile nanoreactor for complementary <i>in situ</i> X-ray and electron microscopy studies in catalysis and materials science. <i>Journal of Synchrotron Radiation</i> , 2019, 26, 1769-1781.  | 2.4 | 22        |
| 23 | Influence of gas atmospheres and ceria on the stability of nanoporous gold studied by environmental electron microscopy and <i>in situ</i> ptychography. <i>RSC Advances</i> , 2016, 6, 83031-83043.   | 3.6 | 18        |
| 24 | Influence of distortions of recorded diffraction patterns on strain analysis by nano-beam electron diffraction. <i>Ultramicroscopy</i> , 2019, 196, 74-82.   | 1.9 | 15        |
| 25 | A versatile synthetic strategy for nanoporous gold-organic hybrid materials for electrochemistry and photocatalysis. <i>Tetrahedron</i> , 2014, 70, 6127-6133.   | 1.9 | 14        |
| 26 | Synergistic Effect in Zinc Phthalocyanine-Nanoporous Gold Hybrid Materials for Enhanced Photocatalytic Oxidations. <i>Catalysts</i> , 2019, 9, 555.  | 3.5 | 11        |
| 27 | Measurement of local crystal lattice strain variations in dealloyed nanoporous gold. <i>Materials Research Letters</i> , 2018, 6, 84-92.   | 8.7 | 10        |
| 28 | Morphological analysis of cerium oxide stabilized nanoporous gold catalysts by soft X-ray SAXS. <i>RSC Advances</i> , 2017, 7, 45344-45350.  | 3.6 | 8         |
| 29 | Nanoporous gold functionalized with praseodymium-titania mixed oxides as a stable catalyst for the water-gas shift reaction. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 3278-3286.   | 2.8 | 8         |
| 30 | Aerobic Methanol Oxidation over Unsupported Nanoporous Gold: The Influence of an Added Base. <i>Catalysts</i> , 2019, 9, 416.  | 3.5 | 7         |
| 31 | A versatile heterogeneous photocatalyst: nanoporous gold powder modified with a zinc(II) phthalocyanine derivative for singlet oxygen [ <sup>1</sup> O <sub>2</sub> ] cycloadditions. <i>Photochemical and Photobiological Sciences</i> , 2021, 20, 547-558. | 2.9 | 5         |
| 32 | Photocatalytic coatings based on a zinc(ii) phthalocyanine derivative immobilized on nanoporous gold leaves with various pore sizes. <i>RSC Advances</i> , 2020, 10, 53-59.  | 3.6 | 4         |
| 33 | Nanoporous Gold Catalyst for the Oxidative N-Dealkylation of Drug Molecules: A Method for Synthesis of N-Dealkylated Metabolites. <i>ChemMedChem</i> , 2022, , .   | 3.2 | 3         |
| 34 | Impact of photosensitizer orientation on the distance dependent photocatalytic activity in zinc phthalocyanine-nanoporous gold hybrid systems. <i>RSC Advances</i> , 2020, 10, 23203-23211.  | 3.6 | 2         |
| 35 | Comparison of the photocatalytic activity of novel hybrid photocatalysts based on phthalocyanines, subphthalocyanines and porphyrins immobilized onto nanoporous gold. <i>RSC Advances</i> , 2021, 11, 11364-11372.  | 3.6 | 2         |
| 36 | Investigation of a Nanoporous Gold / TiO <sub>2</sub> Catalyst by Electron Microscopy and Tomography. <i>Materials Research Society Symposia Proceedings</i> , 2013, 1504, 1.  | 0.1 | 0         |