

Tom Willhammar

List of Publications by Year in descending order

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Version: 2024-02-01

55
papers

2,187
citations

257450

24
h-index

223800

46
g-index

61
all docs

61
docs citations

61
times ranked

2828
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 1 | ZSM-5 Zeolite Single Crystals with <i>b</i> -Axis-Aligned Mesoporous Channels as an Efficient Catalyst for Conversion of Bulky Organic Molecules. <i>Journal of the American Chemical Society</i> , 2012, 134, 4557-4560. | 13.7 | 264 |
| 2 | Structure and catalytic properties of the most complex intergrown zeolite ITQ-39 determined by electron crystallography. <i>Nature Chemistry</i> , 2012, 4, 188-194. | 13.6 | 178 |
| 3 | Gel-based morphological design of zirconium metal-organic frameworks. <i>Chemical Science</i> , 2017, 8, 3939-3948. | 7.4 | 177 |
| 4 | Luminescent CuInS ₂ Quantum Dots by Partial Cation Exchange in Cu ₂ S Nanocrystals. <i>Chemistry of Materials</i> , 2015, 27, 621-628. | 6.7 | 127 |
| 5 | A Robust and Biocompatible Bismuth Ellagate MOF Synthesized Under Green Ambient Conditions. <i>Journal of the American Chemical Society</i> , 2020, 142, 16795-16804. | 13.7 | 115 |
| 6 | A Titanium(IV)-Based Metal-Organic Framework Featuring Defect-Rich TiO Sheets as an Oxidative Desulfurization Catalyst. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 9160-9165. | 13.8 | 99 |
| 7 | A priori control of zeolite phase competition and intergrowth with high-throughput simulations. <i>Science</i> , 2021, 374, 308-315. | 12.6 | 90 |
| 8 | A New Aluminosilicate Molecular Sieve with a System of Pores between Those of ZSM-5 and Beta Zeolite. <i>Journal of the American Chemical Society</i> , 2011, 133, 9497-9505. | 13.7 | 86 |
| 9 | Synthesis Design and Structure of a Multipore Zeolite with Interconnected 12- and 10-MR Channels. <i>Journal of the American Chemical Society</i> , 2012, 134, 6473-6478. | 13.7 | 75 |
| 10 | EMM-23: A Stable High-Silica Multidimensional Zeolite with Extra-Large Trilobe-Shaped Channels. <i>Journal of the American Chemical Society</i> , 2014, 136, 13570-13573. | 13.7 | 71 |
| 11 | A Tunable Multivariate Metal-Organic Framework as a Platform for Designing Photocatalysts. <i>Journal of the American Chemical Society</i> , 2021, 143, 6333-6338. | 13.7 | 69 |
| 12 | Local Crystallinity in Twisted Cellulose Nanofibers. <i>ACS Nano</i> , 2021, 15, 2730-2737. | 14.6 | 53 |
| 13 | Structural Determination of Ordered Porous Solids by Electron Crystallography. <i>Advanced Functional Materials</i> , 2014, 24, 182-199. | 14.9 | 51 |
| 14 | Self-Assembly of Pluronic F127-Silica Spherical Core-Shell Nanoparticles in Cubic Close-Packed Structures. <i>Chemistry of Materials</i> , 2015, 27, 5161-5169. | 6.7 | 47 |
| 15 | Three-dimensional electron diffraction for porous crystalline materials: structural determination and beyond. <i>Chemical Science</i> , 2021, 12, 1206-1219. | 7.4 | 44 |
| 16 | Synthesis and characterization of pure silica zeolite beta obtained by an aging-drying method. <i>Microporous and Mesoporous Materials</i> , 2011, 143, 196-205. | 4.4 | 40 |
| 17 | Structure and vacancy distribution in copper telluride nanoparticles influence plasmonic activity in the near-infrared. <i>Nature Communications</i> , 2017, 8, 14925. | 12.8 | 38 |
| 18 | A Titanium(IV)-Based Metal-Organic Framework Featuring Defect-Rich TiO Sheets as an Oxidative Desulfurization Catalyst. <i>Angewandte Chemie</i> , 2019, 131, 9258-9263. | 2.0 | 37 |

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|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 19 | A Novel Porous TiO ₂ /Squarate as Efficient Photocatalyst in the Overall Water Splitting Reaction under Simulated Sunlight Irradiation. <i>Advanced Materials</i> , 2021, 33, e2106627. | 21.0 | 35 |
| 20 | Facile Processing of Transparent Wood Nanocomposites with Structural Color from Plasmonic Nanoparticles. <i>Chemistry of Materials</i> , 2021, 33, 3736-3745. | 6.7 | 32 |
| 21 | Microcavity-like exciton-polaritons can be the primary photoexcitation in bare organic semiconductors. <i>Nature Communications</i> , 2021, 12, 6519. | 12.8 | 32 |
| 22 | Transmission electron microscopy as an important tool for characterization of zeolite structures. <i>Inorganic Chemistry Frontiers</i> , 2018, 5, 2836-2855. | 6.0 | 29 |
| 23 | Mesoscale Transformation of Amorphous Calcium Carbonate to Porous Vaterite Microparticles with Morphology Control. <i>Crystal Growth and Design</i> , 2019, 19, 5075-5087. | 3.0 | 27 |
| 24 | Introducing the crystalline phase of dicalcium phosphate monohydrate. <i>Nature Communications</i> , 2020, 11, 1546. | 12.8 | 26 |
| 25 | Hierarchical micro-reactor as electrodes for water splitting by metal rod tipped carbon nanocapsule self-assembly in carbonized wood. <i>Applied Catalysis B: Environmental</i> , 2020, 264, 118536. | 20.2 | 25 |
| 26 | Single-walled zeolitic nanotubes. <i>Science</i> , 2022, 375, 62-66. | 12.6 | 25 |
| 27 | Synthesis and Structure of a 22 Å × 12 Å × 12 Extra-Large Pore Zeolite ITQ-56 Determined by 3D Electron Diffraction. <i>Journal of the American Chemical Society</i> , 2021, 143, 8713-8719. | 13.7 | 22 |
| 28 | Structure of the active pharmaceutical ingredient bismuth subsalicylate. <i>Nature Communications</i> , 2022, 13, 1984. | 12.8 | 22 |
| 29 | Influence of Synthesis Routes on the Crystallography, Morphology, and Electrochemistry of Li ₂ MnO ₃ . <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 5939-5950. | 8.0 | 20 |
| 30 | Gas sorption properties and kinetics of porous bismuth-based metal-organic frameworks and the selective CO ₂ and SF ₆ sorption on a new bismuth trimesate-based structure UU-200. <i>Microporous and Mesoporous Materials</i> , 2022, 329, 111548. | 4.4 | 19 |
| 31 | NH ₃ -SCR catalysts for heavy-duty diesel vehicles: Preparation of CHA-type zeolites with low-cost templates. <i>Applied Catalysis B: Environmental</i> , 2022, 303, 120928. | 20.2 | 18 |
| 32 | Tunable CHA/AEI Zeolite Intergrowths with A Priori Biselective Organic Structureâ€ Directing Agents: Controlling Enrichment and Implications for Selective Catalytic Reduction of NO _x . <i>Angewandte Chemie - International Edition</i> , 2022, 61, . | 13.8 | 18 |
| 33 | Postsynthetic High-Alumina Zeolite Crystal Engineering in Organic-Free Hyper-Alkaline Media. <i>Chemistry of Materials</i> , 2017, 29, 629-638. | 6.7 | 17 |
| 34 | Synthesis of Alâ€Si-beta and Tiâ€Si-beta by the agingâ€ drying method. <i>Microporous and Mesoporous Materials</i> , 2012, 150, 38-46. | 4.4 | 15 |
| 35 | High-Throughput Synthesis and Structure of Zeolite ZSM-43 with Two-Directional 8-Ring Channels. <i>Inorganic Chemistry</i> , 2017, 56, 8856-8864. | 4.0 | 15 |
| 36 | A structure determination protocol based on combined analysis of 3D-ED data, powder XRD data, solid-state NMR data and DFT-D calculations reveals the structure of a new polymorph of <i>scp</i> -tyrosine. <i>Chemical Science</i> , 2022, 13, 5277-5288. | 7.4 | 15 |

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|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 37 | 3D reconstruction of atomic structures from high angle annular dark field (HAADF) STEM images and its application on zeolite silicalite-1. <i>Dalton Transactions</i> , 2014, 43, 14158-14163. | 3.3 | 12 |
| 38 | EMM-25: The Structure of Two-Dimensional 11 Å– 10 Medium-Pore Borosilicate Zeolite Unraveled Using 3D Electron Diffraction. <i>Chemistry of Materials</i> , 2021, 33, 4146-4153. | 6.7 | 11 |
| 39 | Solving complex open-framework structures from X-ray powder diffraction by direct-space methods using composite building units. <i>Journal of Applied Crystallography</i> , 2013, 46, 1094-1104. | 4.5 | 10 |
| 40 | A Stacking Faults-Containing Silicogermanate with 24-Ring Channels and Unbranched Zweier Silica Double Chains. <i>Crystal Growth and Design</i> , 2012, 12, 3714-3719. | 3.0 | 9 |
| 41 | Post-synthesis bromination of benzene bridged PMO as a way to create a high potential hybrid material. <i>Microporous and Mesoporous Materials</i> , 2016, 236, 244-249. | 4.4 | 9 |
| 42 | Influence of the substitution pattern of four naphthalenedicarboxylic acids on the structures and properties of group 13 metal-organic frameworks and coordination polymers. <i>Dalton Transactions</i> , 2020, 49, 4861-4868. | 3.3 | 9 |
| 43 | Small Pore Aluminosilicate EMM-37: Synthesis and Structure Determination Using Continuous Rotation Electron Diffraction. <i>Inorganic Chemistry</i> , 2019, 58, 12854-12858. | 4.0 | 7 |
| 44 | Structure-property relationships in organic battery anode materials: exploring redox reactions in crystalline Na- and Li-benzene diacrylate using combined crystallography and density functional theory calculations. <i>Materials Advances</i> , 2021, 2, 1024-1034. | 5.4 | 7 |
| 45 | Metal-biomolecule frameworks (BioMOFs): a novel approach for green-optoelectronic applications. <i>Chemical Communications</i> , 2022, 58, 677-680. | 4.1 | 7 |
| 46 | A Germanate with a Collapsible Open-Framework. <i>Crystal Growth and Design</i> , 2016, 16, 6967-6973. | 3.0 | 4 |
| 47 | Detailed Structural Survey of the Zeolite ITQ-39 by Electron Crystallography. <i>Crystal Growth and Design</i> , 2017, 17, 1910-1917. | 3.0 | 4 |
| 48 | Design and degradation of permanently porous vitamin C and zinc-based metal-organic framework. <i>Communications Chemistry</i> , 2022, 5, . | 4.5 | 4 |
| 49 | Phase Transformation Behavior of a Two-Dimensional Zeolite. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 10230-10235. | 13.8 | 3 |
| 50 | An adsorbent with flexible nanoscopic pores. <i>Science</i> , 2022, 376, 457-458. | 12.6 | 3 |
| 51 | Aluminosilicate Zeolite EMM-28 Containing Supercavities Determined by Continuous Rotation Electron Diffraction. <i>Inorganic Chemistry</i> , 2022, 61, 11103-11109. | 4.0 | 2 |
| 52 | Scan Strategies for Electron Energy Loss Spectroscopy at Optical and Vibrational Energies in Perylene Diimide Nanobelts. <i>Microscopy and Microanalysis</i> , 2019, 25, 1738-1739. | 0.4 | 1 |
| 53 | Phase Transformation Behavior of a Two-Dimensional Zeolite. <i>Angewandte Chemie</i> , 2019, 131, 10336-10341. | 2.0 | 1 |
| 54 | Tunable CHA/AEI Zeolite Intergrowths with A Priori Biselective Organic Structure-Directing Agents: Controlling Enrichment and Implications for Selective Catalytic Reduction of NOx. <i>Angewandte Chemie</i> , 0, , . | 2.0 | 1 |

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|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 55 | Two-Dimensional Cationic Aluminoborate as a New Paradigm for Highly Selective and Efficient Cr(VI) Capture from Aqueous Solution. <i>Jacs Au</i> , 2022, 2, 1669-1678. | 7.9 | 1 |