# Alexander S Walton

List of Publications by Year
in descending order



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|---|---|---|---|
| 60 papers | 2,016 citations | 257101 24 h-index | 243296 44 g-index |
| 60 all docs | 60 docs citations | 60 times ranked | 3849 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Corrosion inhibition in acidic environments: key interfacial insights with photoelectron spectroscopy. Faraday Discussions, 2022, 236, 374-388. | 1.6 | 6 |
| 2 | Universal shape of graphene nanobubbles on metallic substrate. Physical Chemistry Chemical Physics, 2022, 24, 6935-6940. | 1.3 | 9 |
| 3 | Direct in situ spectroscopic evidence of the crucial role played by surface oxygen vacancies in the O<sub>2</sub>-sensing mechanism of SnO<sub>2</sub>. Chemical Science, 2022, 13, 6089-6097. | 3.7 | 7 |
| 4 | Nanocubes of Mo<sub>6</sub>S<sub>8</sub> Chevrel phase as active electrode material for aqueous lithium-ion batteries. Nanoscale, 2022, 14, 10125-10135. | 2.8 | 9 |
| 5 | A combined laboratory and synchrotron in-situ photoemission study of the rutile TiO<sub>2</sub> (110)/water interface. Journal Physics D: Applied Physics, 2021, 54, 194001. | 1.3 | 6 |
| 6 | Oleylamine Aging of PtNi Nanoparticles Giving Enhanced Functionality for the Oxygen Reduction Reaction. Nano Letters, 2021, 21, 3989-3996. | 4.5 | 37 |
| 7 | Intrinsic effects of thickness, surface chemistry and electroactive area on nanostructured MoS2 electrodes with superior stability for hydrogen evolution. Electrochimica Acta, 2021, 382, 138257. | 2.6 | 9 |
| 8 | Role of Alkali Cations in Stabilizing Mixed-Cation Perovskites to Thermal Stress and Moisture Conditions. ACS Applied Materials & Interfaces, 2021, 13, 43573-43586. | 4.0 | 16 |
| 9 | Manipulation of Molecular Vibrations on Condensing Er3+ State Densities for 1.5 Î¼m Application. Journal of Physical Chemistry Letters, 2021, 12, 9620-9625. | 2.1 | 1 |
| 10 | High-Performance Nanostructured MoS<sub>2</sub> Electrodes with Spontaneous Ultralow Gold Loading for Hydrogen Evolution. Journal of Physical Chemistry C, 2021, 125, 20940-20951. | 1.5 | 9 |
| 11 | Nanoscale Chevrel-Phase Mo<sub>6</sub>S<sub>8</sub> Prepared by a Molecular Precursor Approach for Highly Efficient Electrocatalysis of the Hydrogen Evolution Reaction in Acidic Media. ACS Applied Energy Materials, 2021, 4, 13015-13026. | 2.5 | 12 |
| 12 | Formation of a U(VI)â€“Persulfide Complex during Environmentally Relevant Sulfidation of Iron (Oxyhydr)oxides. Environmental Science & Technology, 2020, 54, 129-136. | 4.6 | 17 |
| 13 | An Exemplar Imidazoline Surfactant for Corrosion Inhibitor Studies: Synthesis, Characterization, and Physicochemical Properties. Journal of Surfactants and Detergents, 2020, 23, 225-234. | 1.0 | 15 |
| 14 | PtNi bimetallic structure supported on UiO-67 metal-organic framework (MOF) during CO oxidation. Journal of Catalysis, 2020, 391, 522-529. | 3.1 | 7 |
| 15 | Photo-Seebeck study of amorphous germaniumâ€“tellurium-oxide films. Journal of Materials Science: Materials in Electronics, 2020, 31, 22000-22011. | 1.1 | 1 |
| 16 | Intercalation, decomposition, entrapment â€“ a new route to graphene nanobubbles. Physical Chemistry Chemical Physics, 2020, 22, 7606-7615. | 1.3 | 10 |
| 17 | Core level photoemission line shape selection: Atomic adsorbates on iron. Surface and Interface Analysis, 2020, 52, 507-512. | 0.8 | 6 |
| 18 | Hydrogenation of benzoic acid to benzyl alcohol over Pt/SnO2. Applied Catalysis A: General, 2020, 593, 117420. | 2.2 | 15 |

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|---|---|---|---|
| 19 | Use of titanocalix[4]arenes in the ring opening polymerization of cyclic esters. Catalysis Science and Technology, 2020, 10, 1619-1639. | 2.1 | 25 |
| 20 | Room-Temperature Production of Nanocrystalline Molybdenum Disulfide (MoS<sub>2</sub>) at the Liquidâ˜Liquid Interface. Chemistry of Materials, 2019, 31, 5384-5391. | 3.2 | 16 |
| 21 | Air-Stable Methylammonium Lead Iodide Perovskite Thin Films Fabricated via Aerosol-Assisted Chemical Vapor Deposition from a Pseudohalide Pb(SCN)<sub>2</sub> Precursor. ACS Applied Energy Materials, 2019, 2, 6012-6022. | 2.5 | 13 |
| 22 | Modulating Crystallization in Semitransparent Perovskite Films Using Submicrometer Spongelike Polymer Colloid Particles to Improve Solar Cell Performance. ACS Applied Energy Materials, 2019, 2, 6624-6633. | 2.5 | 14 |
| 23 | Adsorption site, orientation and alignment of NO adsorbed on Au(100) using 3D-velocity map imaging, X-ray photoelectron spectroscopy and density functional theory. Physical Chemistry Chemical Physics, 2019, 21, 10939-10946. | 1.3 | 11 |
| 24 | Structure and Stability of Au-Supported Layered Cobalt Oxide Nanoislands in Ambient Conditions. Journal of Physical Chemistry C, 2019, 123, 9176-9182. | 1.5 | 14 |
| 25 | Optical Study of p-Doping in GaAs Nanowires for Low-Threshold and High-Yield Lasing. Nano Letters, 2019, 19, 362-368. | 4.5 | 24 |
| 26 | Phase Transitions of Cobalt Oxide Bilayers on Au(111) and Pt(111): The Role of Edge Sites and Substrate Interactions. Journal of Physical Chemistry B, 2018, 122, 561-571. | 1.2 | 26 |
| 27 | Water-induced reordering in ultrathin ionic liquid films. Journal of Physics Condensed Matter, 2018, 30, 334003. | 0.7 | 8 |
| 28 | Decoupling Structure and Composition of CH<sub>3</sub>NH<sub>3</sub>PbI<sub>3â€“x</sub>Br<sub>x</sub> Films Prepared by Combined One-Step and Two-Step Deposition. ACS Applied Energy Materials, 2018, 1, 5567-5578. | 2.5 | 9 |
| 29 | Understanding the CO Oxidation on Pt Nanoparticles Supported on MOFs by Operando XPS. ChemCatChem, 2018, 10, 4238-4242. | 1.8 | 35 |
| 30 | Ambient-air-stable inorganic Cs<sub>2</sub>SnI<sub>6</sub>double perovskite thin filmsviaaerosol-assisted chemical vapour deposition. Journal of Materials Chemistry A, 2018, 6, 11205-11214. | 5.2 | 85 |
| 31 | Edge reactivity and water-assisted dissociation on cobalt oxide nanoislands. Nature Communications, 2017, 8, 14169. | 5.8 | 117 |
| 32 | In situ investigation of degradation at organometal halide perovskite surfaces by X-ray photoelectron spectroscopy at realistic water vapour pressure. Chemical Communications, 2017, 53, 5231-5234. | 2.2 | 78 |
| 33 | Gold-supported two-dimensional cobalt oxyhydroxide (CoOOH) and multilayer cobalt oxide islands. Physical Chemistry Chemical Physics, 2017, 19, 2425-2433. | 1.3 | 38 |
| 34 | The offset droplet: a new methodology for studying the solid/water interface using x-ray photoelectron spectroscopy. Journal of Physics Condensed Matter, 2017, 29, 454001. | 0.7 | 17 |
| 35 | Comparative Analysis of Cobalt Oxide Nanoisland Stability and Edge Structures on Three Related Noble Metal Surfaces: Au(111), Pt(111) and Ag(111). Topics in Catalysis, 2017, 60, 503-512. | 1.3 | 29 |
| 36 | Nanostructured Aptamer-Functionalized Black Phosphorus Sensing Platform for Label-Free Detection of Myoglobin, a Cardiovascular Disease Biomarker. ACS Applied Materials & Interfaces, 2016, 8, 22860-22868. | 4.0 | 208 |

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|---|---|---|---|
| 37 | Investigation of the Differential Capacitance of Highly Ordered Pyrolytic Graphite as a Model Material of Graphene. Langmuir, 2016, 32, 11448-11455. | 1.6 | 43 |
| 38 | Controlling the Electrical Transport Properties of Nanocontacts to Nanowires. Nano Letters, 2015, 15, 4248-4254. | 4.5 | 34 |
| 39 | Interface Controlled Oxidation States in Layered Cobalt Oxide Nanoislands on Gold. ACS Nano, 2015, 9, 2445-2453. | 7.3 | 78 |
| 40 | Vanadyl calix[6]arene complexes: synthesis, structural studies and ethylene homo-(co-)polymerization capability. Dalton Transactions, 2015, 44, 12292-12303. | 1.6 | 27 |
| 41 | In Situ Detection of Active Edge Sites in Single-Layer MoS<sub>2</sub> Catalysts. ACS Nano, 2015, 9, 9322-9330. | 7.3 | 144 |
| 42 | ZnO nanowires with Au contacts characterised in the as-grown real device configuration using a local multi-probe method. Nanotechnology, 2014, 25, 425706. | 1.3 | 11 |
| 43 | Patchiness of ion-exchanged mica revealed by DNA binding dynamics at short length scales. Nanotechnology, 2014, 25, 025704. | 1.3 | 10 |
| 44 | Examining the crystal growth that influences the electronic device output from vertical arrays of ZnO nanowires. Materials Research Society Symposia Proceedings, 2014, 1659, 101-106. | 0.1 | 0 |
| 45 | Reversible metallisation of soft UV patterned substrates. Journal of Materials Chemistry C, 2014, 2, 5916-5923. | 2.7 | 4 |
| 46 | Structure and Electronic Properties of In Situ Synthesized Single-Layer MoS<sub>2</sub> on a Gold Surface. ACS Nano, 2014, 8, 6788-6796. | 7.3 | 136 |
| 47 | MoS2 nanoparticle morphologies in hydrodesulfurization catalysis studied by scanning tunneling microscopy. Journal of Catalysis, 2013, 308, 306-318. | 3.1 | 101 |
| 48 | Vanadium(iii) phenoxyimine complexes for ethylene or Îµ-caprolactone polymerization: mononuclear versus binuclear pre-catalysts. Catalysis Science and Technology, 2013, 3, 152-160. | 2.1 | 36 |
| 49 | Factors that determine and limit the resistivity of high-quality individual ZnO nanowires. Nanotechnology, 2013, 24, 435706. | 1.3 | 39 |
| 50 | Highly Active, Thermally Stable, Ethylene-Polymerisation Pre-Catalysts Based on Niobium/Tantalumï£¿Imine Systems. Chemistry - A European Journal, 2013, 19, 8884-8899. | 1.7 | 22 |
| 51 | An investigation of the growth of bismuth whiskers and nanowires during physical vapour deposition. Journal Physics D: Applied Physics, 2012, 45, 435304. | 1.3 | 22 |
| 52 | Origin of significant visible-light absorption properties of Mn-doped TiO2 thin films. Acta Materialia, 2012, 60, 1974-1985. | 3.8 | 56 |
| 53 | Low-Temperature Preparation of Single Crystal Titanium Carbide Nanofibers in Molten Salts. Crystal Growth and Design, 2011, 11, 3122-3129. | 1.4 | 30 |
| 54 | Evaporation and decomposition of acrylic acid grafted luminescent silicon quantum dots in ultrahigh vacuum. Journal of Physics: Conference Series, 2011, 286, 012039. | 0.3 | 0 |

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|---|---|---|---|
| 55 | Zirconium as a Boron Sink in Crystalline CoFeB/MgO/CoFeB Magnetic Tunnel Junctions. Applied Physics Express, 2011, 4, 013002. | 1.1 | 19 |
| 56 | Synthesis of Highâ€Surfaceâ€Area Platinum Nanotubes Using a Viral Template. Advanced Functional Materials, 2010, 20, 1295-1300. | 7.8 | 118 |
| 57 | Photoelectric Properties of Electrodeposited Copper(I) Oxide Nanowires. Journal of the Electrochemical Society, 2009, 156, K191. | 1.3 | 13 |
| 58 | Four-probe electrical characterization of Pt-coated TMV-based nanostructures. Nanotechnology, 2008, 19, 165704. | 1.3 | 32 |
| 59 | Magnetic field enhanced nano-tip fabrication for four-probe STM studies. Nanotechnology, 2008, 19, 085201. | 1.3 | 11 |
| 60 | Four-probe electrical transport measurements on individual metallic nanowires. Nanotechnology, 2007, 18, 065204. | 1.3 | 71 |