# Ilke Arslan

## List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/10817376/publications.pdf

Version: 2024-02-01

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|---|---|---|---|
| 49 papers | 3,422 citations | 218677 26 h-index | 233421 45 g-index |
| 52 all docs | 52 docs citations | 52 times ranked | 4628 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Photo-induced ultrafast phase transition in twisted bilayer graphene. Microscopy and Microanalysis, 2021, 27, 2954-2956. | 0.4 | 0 |
| 2 | Iridium Atoms Bonded to Crystalline Powder MgO: Characterization by Imaging and Spectroscopy. Journal of Physical Chemistry C, 2020, 124, 459-468. | 3.1 | 10 |
| 3 | Ultrafast formation of a transient two-dimensional diamondlike structure in twisted bilayer graphene. Physical Review B, 2020, 102, . | 3.2 | 8 |
| 4 | Porosity and Fractality of MoS2 and MoS2/Co-catalytic Spheres. , 2019, , 151-166. | | 0 |
| 5 | Beating Heterogeneity of Single-Site Catalysts: MgO-Supported Iridium Complexes. ACS Catalysis, 2018, 8, 3489-3498. | 11.2 | 64 |
| 6 | Perfect Strain Relaxation in Metamorphic Epitaxial Aluminum on Silicon through Primary and Secondary Interface Misfit Dislocation Arrays. ACS Nano, 2018, 12, 6843-6850. | 14.6 | 17 |
| 7 | Metamorphic growth of relaxed single crystalline aluminum on silicon (111). Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2017, 35, . | 2.1 | 17 |
| 8 | Recovering fine details from under-resolved electron tomography data using higher order total variation<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si0004.gif" overflow="scroll"><mml:msub subscriptshift="65%"><mml:mrow><mml:mo>â„“</mml:mo></mml:mrow><mml:mrow><mml:mn>1</mml:mn></mml:mrow></mml:ms Ultramicroscopy, 2017, 174, 97-105. | 1.9 | 24 |
| 9 | Electron tomography and fractal aspects of MoS2 and MoS2/Co spheres. Scientific Reports, 2017, 7, 12322. | 3.3 | 12 |
| 10 | Nucleation and growth of metamorphic epitaxial aluminum on silicon (111) 7 Ã— 7 and surfaces. Journal of Materials Research, 2017, 32, 4067-4075. | 2.6 | 5 |
| 11 | Improved Three-Dimensional (3D) Resolution of Electron Tomograms Using Robust Mathematical Data-Processing Techniques. Microscopy and Microanalysis, 2017, 23, 1121-1129. | 0.4 | 4 |
| 12 | In-situ, Ex-situ, and 3-D Imaging of Nanomaterials in the STEM. Microscopy and Microanalysis, 2017, 23, 1870-1871. | 0.4 | 0 |
| 13 | Current status and future directions for in situ transmission electron microscopy. Ultramicroscopy, 2016, 170, 86-95. | 1.9 | 181 |
| 14 | Improving Stability of Zeolites in Aqueous Phase via Selective Removal of Structural Defects. Journal of the American Chemical Society, 2016, 138, 4408-4415. | 13.7 | 79 |
| 15 | Gaining Control over Radiolytic Synthesis of Uniform Sub-3-nanometer Palladium Nanoparticles: Use of Aromatic Liquids in the Electron Microscope. Langmuir, 2016, 32, 1468-1477. | 3.5 | 47 |
| 16 | Controlled Radiolytic Synthesis in the Fluid Stage. Towards Understanding the Effect of the Electron Beam in Liquids. Microscopy and Microanalysis, 2015, 21, 2125-2126. | 0.4 | 0 |
| 17 | Genesis of Delaminated-Zeolite Morphology: 3-D Characterization of Changes by STEM Tomography. Journal of Physical Chemistry Letters, 2015, 6, 2598-2602. | 4.6 | 5 |
| 18 | Impact of Aqueous Medium on Zeolite Framework Integrity. Chemistry of Materials, 2015, 27, 3533-3545. | 6.7 | 50 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | The potential for Bayesian compressive sensing to significantly reduce electron dose in high-resolution STEM images. Microscopy (Oxford, England), 2014, 63, 41-51. | 1.5 | 140 |
| 20 | Material profile influences in bulk-heterojunctions. Journal of Polymer Science, Part B: Polymer Physics, 2014, 52, 1291-1300. | 2.1 | 9 |
| 21 | In-Situ Electrochemical Transmission Electron Microscopy for Battery Research. Microscopy and Microanalysis, 2014, 20, 484-492. | 0.4 | 45 |
| 22 | In Situ Observation of Directed Nanoparticle Aggregation During the Synthesis of Ordered Nanoporous Metal in Soft Templates. Chemistry of Materials, 2014, 26, 1426-1433. | 6.7 | 14 |
| 23 | Direct Observation of Aggregative Nanoparticle Growth: Kinetic Modeling of the Size Distribution and Growth Rate. Nano Letters, 2014, 14, 373-378. | 9.1 | 172 |
| 24 | Probing the Degradation Mechanisms in Electrolyte Solutions for Li-Ion Batteries by in Situ Transmission Electron Microscopy. Nano Letters, 2014, 14, 1293-1299. | 9.1 | 137 |
| 25 | Demonstration of an Electrochemical Liquid Cell for Operando Transmission Electron Microscopy Observation of the Lithiation/Delithiation Behavior of Si Nanowire Battery Anodes. Nano Letters, 2013, 13, 6106-6112. | 9.1 | 265 |
| 26 | Experimental procedures to mitigate electron beam induced artifacts during in situ fluid imaging of nanomaterials. Ultramicroscopy, 2013, 127, 53-63. | 1.9 | 176 |
| 27 | ThreeâEDimensional Concentration Mapping of Organic Blends. Advanced Functional Materials, 2013, 23, 2115-2122. | 14.9 | 64 |
| 28 | Atomic-Scale Imaging and Spectroscopy for In Situ Liquid Scanning Transmission Electron Microscopy. Microscopy and Microanalysis, 2012, 18, 621-627. | 0.4 | 125 |
| 29 | Direct in Situ Observation of Nanoparticle Synthesis in a Liquid Crystal Surfactant Template. ACS Nano, 2012, 6, 3589-3596. | 14.6 | 93 |
| 30 | Direct in Situ Determination of the Mechanisms Controlling Nanoparticle Nucleation and Growth. ACS Nano, 2012, 6, 8599-8610. | 14.6 | 378 |
| 31 | Visualizing macromolecular complexes with in situ liquid scanning transmission electron microscopy. Micron, 2012, 43, 1085-1090. | 2.2 | 89 |
| 32 | Seeing atoms in three dimensions. Nature Materials, 2012, 11, 911-912. | 27.5 | 11 |
| 33 | Controlled Growth of Nanoparticles from Solution with In Situ Liquid Transmission Electron Microscopy. Nano Letters, 2011, 11, 2809-2813. | 9.1 | 332 |
| 34 | Three-Dimensional Pore Evolution of Nanoporous Metal Particles for Energy Storage. Journal of the American Chemical Society, 2011, 133, 9144-9147. | 13.7 | 41 |
| 35 | III-nitride nanowires: growth, properties, and applications. , 2010, , . | | 0 |
| 36 | Scalable synthesis of nanoporous palladium powders. International Journal of Hydrogen Energy, 2009, 34, 5585-5591. | 7.1 | 31 |

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|---|---|---|---|
| 37 | Using Electrons As a High-Resolution Probe of Optical Modes in Individual Nanowires. Nano Letters, 2009, 9, 4073-4077. | 9.1 | 20 |
| 38 | Towards better 3-D reconstructions by combining electron tomography and atom-probe tomography. Ultramicroscopy, 2008, 108, 1579-1585. | 1.9 | 112 |
| 39 | Toward Three-Dimensional Nanoengineering of Heterogeneous Catalysts. Journal of the American Chemical Society, 2008, 130, 5716-5719. | 13.7 | 63 |
| 40 | Three-Dimensional Visualization of Surface Defects in Coreâ^'Shell Nanowires. Journal of Physical Chemistry C, 2008, 112, 11093-11097. | 3.1 | 18 |
| 41 | A novel dual-axis iterative algorithm for electron tomography. Journal of Structural Biology, 2006, 153, 55-63. | 2.8 | 70 |
| 42 | Nano-metrology of platinum-ruthenium bimetallic catalysts and the cluster-to-crystal transformation. Journal of Physics: Conference Series, 2006, 26, 207-210. | 0.4 | 3 |
| 43 | Reducing the missing wedge: High-resolution dual axis tomography of inorganic materials. Ultramicroscopy, 2006, 106, 994-1000. | 1.9 | 144 |
| 44 | Atomic scale defect analysis in the scanning transmission electron microscope. Microscopy Research and Technique, 2006, 69, 330-342. | 2.2 | 2 |
| 45 | Highly aligned, template-free growth and characterization of vertical GaN nanowires on sapphire by metalâ€“organic chemical vapour deposition. Nanotechnology, 2006, 17, 5773-5780. | 2.6 | 159 |
| 46 | Atomic and Electronic Structure of Mixed and Partial Dislocations in GaN. Physical Review Letters, 2005, 94, 025504. | 7.8 | 59 |
| 47 | Direct visualisation, by aberration-corrected electron microscopy, of the crystallisation of bimetallic nanoparticle catalysts. Chemical Communications, 2005, , 5805. | 4.1 | 19 |
| 48 | The Chemical Application of High-Resolution Electron Tomography: Bright Field or Dark Field?. Angewandte Chemie - International Edition, 2004, 43, 6745-6747. | 13.8 | 64 |
| 49 | Examining Elemental Surface Enrichment in Ultrafine Aerosol Particles Using Analytical Scanning Transmission Electron Microscopy. Aerosol Science and Technology, 2004, 38, 365-381. | 3.1 | 21 |