

# Ahin Roy

## List of Publications by Year in descending order

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36  
papers

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citations

686830

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642321

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43  
all docs

43  
docs citations

43  
times ranked

897  
citing authors

#	ARTICLE	IF	CITATIONS
1	Growth and analysis of the tetragonal (ST12) germanium nanowires. <i>Nanoscale</i> , 2022, 14, 2030-2040.	2.8	3
2	One-Step Grown Carbonaceous Germanium Nanowires and Their Application as Highly Efficient Lithium-Ion Battery Anodes. <i>ACS Applied Energy Materials</i> , 2022, 5, 1922-1932.	2.5	9
3	Liquid phase exfoliation of nonlayered non-van der Waals iron trifluoride (FeF <sub>3</sub> ) into 2D-platelets for high-capacity lithium storing cathodes. <i>FlatChem</i> , 2022, 33, 100360.	2.8	15
4	Covalently interconnected transition metal dichalcogenide networks via defect engineering for high-performance electronic devices. <i>Nature Nanotechnology</i> , 2021, 16, 592-598.	15.6	74
5	Extending the Cyclability of Alkaline Zinc-Air Batteries: Synergistic Roles of Li <sup>+</sup> and K <sup>+</sup> Ions in Electrodes. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 33112-33122.	4.0	11
6	Characterisation and Defect Analysis of 2D Layered Ternary Chalcogenides. <i>Microscopy and Microanalysis</i> , 2021, 27, 642-643.	0.2	0
7	Postsynthetic treatment of nickel-iron layered double hydroxides for the optimum catalysis of the oxygen evolution reaction. <i>Npj 2D Materials and Applications</i> , 2021, 5, .	3.9	12
8	2D nanosheets from fool's gold by LPE: High performance lithium-ion battery anodes made from stone. <i>FlatChem</i> , 2021, 30, 100295.	2.8	6
9	Charge transport mechanisms in inkjet-printed thin-film transistors based on two-dimensional materials. <i>Nature Electronics</i> , 2021, 4, 893-905.	13.1	52
10	Phase & morphology engineered surface reducibility of MnO <sub>2</sub> nano-heterostructures: Implications on catalytic activity towards CO oxidation. <i>Materials Research Bulletin</i> , 2020, 121, 110615.	2.7	27
11	Fluorophosphates as Efficient Bifunctional Electrocatalysts for Metal-Air Batteries. <i>ACS Catalysis</i> , 2020, 10, 43-50.	5.5	29
12	Production of Quasi-2D Platelets of Nonlayered Iron Pyrite (FeS <sub>2</sub> ) by Liquid-Phase Exfoliation for High Performance Battery Electrodes. <i>ACS Nano</i> , 2020, 14, 13418-13432.	7.3	45
13	Morphology Controlled Low-dimensional Single-crystalline SnSe <sub>2</sub> -graphene Hybrid for near IR Photodetection. <i>Microscopy and Microanalysis</i> , 2020, 26, 2338-2340.	0.2	0
14	Mechanistic Studies of Growth of Ultrathin Pt and Alloy Nanowires. <i>Microscopy and Microanalysis</i> , 2020, 26, 2400-2401.	0.2	0
15	Carrier Dynamics in Ultrathin Gold Nanowires: Role of Auger Processes. <i>Plasmonics</i> , 2020, 15, 1151-1158.	1.8	2
16	Thermal History-Dependent Current Relaxation in hBN/MoS <sub>2</sub> van der Waals Dimers. <i>ACS Nano</i> , 2020, 14, 5909-5916.	7.3	9
17	Polymorphic In-Plane Heterostructures of Monolayer WS <sub>2</sub> for Light-Triggered Field-Effect Transistors. <i>ACS Applied Nano Materials</i> , 2020, 3, 3750-3759.	2.4	5
18	Morphology controlled synthesis of low bandgap SnSe <sub>2</sub> with high photodetectivity. <i>Nanoscale</i> , 2019, 11, 870-877.	2.8	31

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19	Reduced SrTiO <sub>3</sub> -supported Pt–Cu alloy nanoparticles for preferential oxidation of CO in excess hydrogen. <i>Nanoscale</i> , 2019, 11, 22423-22431.	2.8	13
20	Ba-addition induced enhanced surface reducibility of SrTiO <sub>3</sub> : implications on catalytic aspects. <i>Nanoscale Advances</i> , 2019, 1, 4938-4946.	2.2	7
21	Removal of U(VI) from aqueous solution by adsorption onto synthesized silica and zinc silicate nanotubes: Equilibrium and kinetic aspects with application to real samples. <i>Environmental Nanotechnology, Monitoring and Management</i> , 2018, 10, 127-139.	1.7	8
22	Scalable faceted voids with luminescent enhanced edges in WS <sub>2</sub> monolayers. <i>Nanoscale</i> , 2018, 10, 16321-16331.	2.8	11
23	Manipulation of Optoelectronic Properties and Band Structure Engineering of Ultrathin Te Nanowires by Chemical Adsorption. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 19462-19469.	4.0	9
24	Nanostructural characterization of artificial pinning centers in PLD-processed REBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-<math>\delta</math></sub> films. <i>Ultramicroscopy</i> , 2017, 176, 151-160.	0.8	8
25	Negative differential resistance in armchair silicene nanoribbons. <i>Nanotechnology</i> , 2017, 28, 275402.	1.3	6
26	Ambient Dependent Formation of Zn <sub>2</sub> SiO <sub>4</sub> and SiO <sub>2</sub> from Core-shell ZnO@SiO <sub>2</sub> . <i>Microscopy and Microanalysis</i> , 2017, 23, 1758-1759.	0.2	1
27	Wet-chemical Synthesis of Electrochromic WO <sub>3</sub> and W <sub>x</sub> Mo <sub>1-x</sub> O <sub>3</sub> Nanomaterials with Phase and Morphology Control. <i>Microscopy and Microanalysis</i> , 2017, 23, 1876-1877.	0.2	0
28	Insights into nucleation, growth and phase selection of WO <sub>3</sub> : morphology control and electrochromic properties. <i>Journal of Materials Chemistry C</i> , 2017, 5, 7307-7316.	2.7	34
29	Ultra-high sensitivity infra-red detection and temperature effects in a graphene–tellurium nanowire binary hybrid. <i>Nanoscale</i> , 2017, 9, 9284-9290.	2.8	31
30	Transmission Electron Microscopic Analysis of One-dimensional Metal Nanowire: The Case of Tellurium and Gold. <i>Materia Japan</i> , 2016, 55, 603-603.	0.1	0
31	Effect of ambient on electrical transport properties of ultra-thin Au nanowires. <i>Applied Physics Letters</i> , 2016, 109, 253108.	1.5	4
32	Synthesis of Hollow Nanotubes of Zn <sub>2</sub> SiO <sub>4</sub> or SiO <sub>2</sub> : Mechanistic Understanding and Uranium Adsorption Behavior. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 26430-26436.	4.0	39
33	Semiconductor-like Sensitivity in Metallic Ultrathin Gold Nanowire-Based Sensors. <i>Journal of Physical Chemistry C</i> , 2014, 118, 18676-18682.	1.5	17
34	Wrinkling of Atomic Planes in Ultrathin Au Nanowires. <i>Nano Letters</i> , 2014, 14, 4859-4866.	4.5	35
35	Single crystalline ultrathin gold nanowires: Promising nanoscale interconnects. <i>AIP Advances</i> , 2013, 3, .	0.6	25
36	Mechanistic Understanding of Formation of Ultrathin Single-Crystalline Pt Nanowires. <i>Journal of Physical Chemistry C</i> , 0, .	1.5	2