# Saiful I Khondaker

List of Publications by Year
in descending order



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|---|---|---|---|
| 79 papers | 7,607 citations | 117453 34 h-index | 66788 78 g-index |
| 80 all docs | 80 docs citations | 80 times ranked | 12982 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Graphene based materials: Past, present and future. Progress in Materials Science, 2011, 56, 1178-1271. | 16.0 | 3,063 |
| 2 | Ultralight Multiwalled Carbon Nanotube Aerogel. ACS Nano, 2010, 4, 7293-7302. | 7.3 | 477 |
| 3 | Dispersion of Pristine Carbon Nanotubes Using Conjugated Block Copolymers. Advanced Materials, 2008, 20, 2055-2060. | 11.1 | 228 |
| 4 | Photoluminescence Quenching in Single-Layer MoS<sub>2</sub> via Oxygen Plasma Treatment. Journal of Physical Chemistry C, 2014, 118, 21258-21263. | 1.5 | 228 |
| 5 | Photoluminescence quenching in gold - MoS2 hybrid nanoflakes. Scientific Reports, 2014, 4, 5575. | 1.6 | 217 |
| 6 | Tuning the electrical property via defect engineering of single layer MoS<sub>2</sub> by oxygen plasma. Nanoscale, 2014, 6, 10033-10039. | 2.8 | 202 |
| 7 | Ultrahigh Density Alignment of Carbon Nanotube Arrays by Dielectrophoresis. ACS Nano, 2011, 5, 1739-1746. | 7.3 | 190 |
| 8 | Position dependent photodetector from large area reduced graphene oxide thin films. Applied Physics Letters, 2010, 96, . | 1.5 | 177 |
| 9 | Oxygenated Functional Group Density on Graphene Oxide: Its Effect on Cell Toxicity. Particle and Particle Systems Characterization, 2013, 30, 148-157. | 1.2 | 173 |
| 10 | Efros-Shklovskii variable-range hopping in reduced graphene oxide sheets of varying carbon<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>s</mml:mi><mml:msup><mml:mi>p</mml:mi><mml:mn>2</mml:mn></mml:msup></mml:mrow Physical Review B, 2012, 86, . | 1.1 | 170 |
| 11 | Space charge limited conduction with exponential trap distribution in reduced graphene oxide sheets. Applied Physics Letters, 2010, 97, . | 1.5 | 142 |
| 12 | Reduced Graphene Oxide/Copper Phthalocyanine Composite and Its Optoelectrical Properties. Journal of Physical Chemistry C, 2010, 114, 15129-15135. | 1.5 | 135 |
| 13 | High performance organic phototransistor based on regioregular poly(3-hexylthiophene). Nanotechnology, 2010, 21, 325201. | 1.3 | 134 |
| 14 | Anchoring Ceria Nanoparticles on Reduced Graphene Oxide and Their Electronic Transport Properties. Journal of Physical Chemistry C, 2011, 115, 24494-24500. | 1.5 | 125 |
| 15 | Thermionic Emission and Tunneling at Carbon Nanotubeâ€“Organic Semiconductor Interface. ACS Nano, 2012, 6, 4993-4999. | 7.3 | 116 |
| 16 | Centimeter Scale Patterned Growth of Vertically Stacked Few Layer Only 2D MoS2/WS2 van der Waals Heterostructure. Scientific Reports, 2016, 6, 25456. | 1.6 | 116 |
| 17 | High yield fabrication of chemically reduced graphene oxide field effect transistors by dielectrophoresis. Nanotechnology, 2010, 21, 165202. | 1.3 | 112 |
| 18 | Semiconducting Enriched Carbon Nanotube Aligned Arrays of Tunable Density and Their Electrical Transport Properties. ACS Nano, 2011, 5, 6297-6305. | 7.3 | 91 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Fabrication of nanometer-spaced electrodes using gold nanoparticles. Applied Physics Letters, 2002, 81, 4613-4615. | 1.5 | 90 |
| 20 | A General Strategy to Disperse and Functionalize Carbon Nanotubes Using Conjugated Block Copolymers. Advanced Functional Materials, 2009, 19, 479-483. | 7.8 | 88 |
| 21 | Coulomb blockade and hopping conduction in graphene quantum dots array. Physical Review B, 2011, 83, . | 1.1 | 68 |
| 22 | Solvothermal Synthesis of High-Aspect Ratio Alloy Semiconductor Nanowires: Cd<sub>1â^'x</sub>Zn<sub>x</sub>S, a Case Study. Journal of Physical Chemistry C, 2009, 113, 3617-3624. | 1.5 | 66 |
| 23 | Dispersion of carbon nanotubes and polymer nanocomposite fabrication using trifluoroacetic acid as a co-solvent. Nanotechnology, 2007, 18, 415606. | 1.3 | 62 |
| 24 | Electron transport through single phenyleneâ€“ethynylene molecular junctions at low temperature. Applied Physics Letters, 2004, 85, 645-647. | 1.5 | 58 |
| 25 | Local-gated single-walled carbon nanotube field effect transistors assembled by AC dielectrophoresis. Nanotechnology, 2008, 19, 175202. | 1.3 | 57 |
| 26 | High quality solution processed carbon nanotube transistors assembled by dielectrophoresis. Applied Physics Letters, 2010, 96, . | 1.5 | 57 |
| 27 | NanoEHS â€“ defining fundamental science needs: no easy feat when the simple itself is complex. Environmental Science: Nano, 2016, 3, 15-27. | 2.2 | 53 |
| 28 | The fabrication of single-electron transistors using dielectrophoretic trapping of individual gold nanoparticles. Nanotechnology, 2010, 21, 095204. | 1.3 | 50 |
| 29 | Two-dimensional lateral heterojunction through bandgap engineering of MoS<sub>2</sub>via oxygen plasma. Journal of Physics Condensed Matter, 2016, 28, 364002. | 0.7 | 47 |
| 30 | Bandgap Engineering of MoS<sub>2</sub> Flakes via Oxygen Plasma: A Layer Dependent Study. Journal of Physical Chemistry C, 2016, 120, 13801-13806. | 1.5 | 44 |
| 31 | Near-infrared photoresponse sensitization of solvent additive processed poly(3-hexylthiophene)/fullerene solar cells by a low band gap polymer. Applied Physics Letters, 2012, 101, 053308. | 1.5 | 41 |
| 32 | Ordered conjugated polymer nano- and microstructures: Structure control for improved performance of organic electronics. Nano Today, 2014, 9, 705-721. | 6.2 | 37 |
| 33 | Solution processed large area field effect transistors from dielectrophoreticly aligned arrays of carbon nanotubes. Applied Physics Letters, 2009, 94, 113104. | 1.5 | 36 |
| 34 | Fabrication of Organic Field Effect Transistor by Directly Grown Poly(3 Hexylthiophene) Crystalline Nanowires on Carbon Nanotube Aligned Array Electrode. ACS Applied Materials & Interfaces, 2011, 3, 1180-1185. | 4.0 | 36 |
| 35 | Synthesis and Characterization of Reduced Graphene Oxide and Their Application in Dye-Sensitized Solar Cells. ChemEngineering, 2019, 3, 7. | 1.0 | 33 |
| 36 | Schottky diode via dielectrophoretic assembly of reduced graphene oxide sheets between dissimilar metal contacts. New Journal of Physics, 2011, 13, 035021. | 1.2 | 32 |

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|---|---|---|---|
| 37 | Structural Evolution of Reduced Graphene Oxide of Varying Carbon sp<sup>2</sup> Fractions Investigated via Coulomb Blockade Transport. Journal of Physical Chemistry C, 2013, 117, 26776-26782. | 1.5 | 30 |
| 38 | Uniform Vapor-Pressure-Based Chemical Vapor Deposition Growth of MoS<sub>2</sub> Using MoO<sub>3</sub> Thin Film as a Precursor for Coevaporation. ACS Omega, 2018, 3, 18943-18949. | 1.6 | 30 |
| 39 | Scalable lateral heterojunction by chemical doping of 2D TMD thin films. Scientific Reports, 2020, 10, 12970. | 1.6 | 30 |
| 40 | Centimeter-Scale 2D van der Waals Vertical Heterostructures Integrated on Deformable Substrates Enabled by Gold Sacrificial Layer-Assisted Growth. Nano Letters, 2017, 17, 6157-6165. | 4.5 | 28 |
| 41 | Controlled electroplating and electromigration in nickel electrodes for nanogap formation. Nanotechnology, 2010, 21, 445304. | 1.3 | 26 |
| 42 | One pot synthesis of RGO/PbS nanocomposite and its near infrared photoresponse study. Applied Physics A: Materials Science and Processing, 2012, 107, 995-1001. | 1.1 | 24 |
| 43 | Near-infrared photoresponse in single-walled carbon nanotube/polymer composite films. Carbon, 2010, 48, 1539-1544. | 5.4 | 22 |
| 44 | Sub 10nm conjugated polymer transistors for chemical sensing. Sensors and Actuators B: Chemical, 2006, 113, 539-544. | 4.0 | 21 |
| 45 | Low pressure sulfurization and characterization of multilayer MoS2 for potential applications in supercapacitors. Energy, 2020, 203, 117918. | 4.5 | 21 |
| 46 | Correlated electrical breakdown in arrays of high density aligned carbon nanotubes. Applied Physics Letters, 2011, 98, 243121. | 1.5 | 20 |
| 47 | Enhanced electrochemical performance of solution-processed single-wall carbon nanotube reinforced polyvinyl alcohol nanocomposite synthesized via solution-cast method. Nano Express, 2020, 1, 030013. | 1.2 | 20 |
| 48 | Diffusion mediated photoconduction in multiwalled carbon nanotube films. Journal of Applied Physics, 2009, 106, 074307. | 1.1 | 19 |
| 49 | High-performance short channel organic transistors using densely aligned carbon nanotube array electrodes. Applied Physics Letters, 2012, 100, . | 1.5 | 18 |
| 50 | High performance semiconducting enriched carbon nanotube thin film transistors using metallic carbon nanotubes as electrodes. Nanoscale, 2014, 6, 4896. | 2.8 | 18 |
| 51 | Controlled fabrication of single electron transistors from single-walled carbon nanotubes. Applied Physics Letters, 2008, 92, 262107. | 1.5 | 15 |
| 52 | Evaluating Defects in Solution-Processed Carbon Nanotube Devices via Low-Temperature Transport Spectroscopy. ACS Nano, 2010, 4, 2659-2666. | 7.3 | 14 |
| 53 | Fabrication of Aligned Carbon Nanotube Array Electrodes for Organic Electronic Devices. Materials Express, 2011, 1, 80-85. | 0.2 | 14 |
| 54 | The electronic transport properties of ternary Cd<sub>1â^'x</sub>Zn<sub>x</sub>S nanowire networks. Nanotechnology, 2009, 20, 445204. | 1.3 | 12 |

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|---|---|---|---|
| 55 | The effect of carbon nanotube/organic semiconductor interfacial area on the performance of organic transistors. Applied Physics Letters, 2012, 101, . | 1.5 | 12 |
| 56 | A general approach for high yield fabrication of CMOS-compatible all-semiconducting carbon nanotube field effect transistors. Nanotechnology, 2012, 23, 125201. | 1.3 | 12 |
| 57 | Towards parallel fabrication of single electron transistors using carbon nanotubes. Nanoscale, 2015, 7, 9786-9792. | 2.8 | 12 |
| 58 | Electrical properties tunability of large area MoS2 thin films by oxygen plasma treatment. Applied Physics Letters, 2020, 116, . | 1.5 | 12 |
| 59 | Low pressure CVD growth of 2D PdSe<sub>2</sub> thin film and its application in PdSe<sub>2</sub>-MoSe<sub>2</sub> vertical heterostructure. 2D Materials, 2022, 9, 025025. | 2.0 | 12 |
| 60 | Electrical transport properties of peptide nanotubes coated with gold nanoparticles via peptide-induced biomineralization. Nanotechnology, 2011, 22, 095202. | 1.3 | 11 |
| 61 | Recent progress in parallel fabrication of individual single walled carbon nanotube devices using dielectrophoresis. Materials Express, 2014, 4, 263-278. | 0.2 | 11 |
| 62 | High yield assembly and electron transport investigation of semiconducting-rich local-gated single-walled carbon nanotube field effect transistors. Nanotechnology, 2011, 22, 415201. | 1.3 | 10 |
| 63 | CVD Growth of Monolayer MoS2 on Sapphire Substrates by using MoO3 Thin Films as a Precursor for Co-Evaporation. MRS Advances, 2019, 4, 587-592. | 0.5 | 8 |
| 64 | Rapid Degradation of the Electrical Properties of 2D MoS<sub>2</sub> Thin Films under Long-Term Ambient Exposure. ACS Omega, 2021, 6, 24075-24081. | 1.6 | 8 |
| 65 | Can Metals Other than Au be Used for Large Area Exfoliation of MoS<sub>2</sub> Monolayers?. Advanced Materials Interfaces, 2022, 9, . | 1.9 | 8 |
| 66 | Optoelectronic Properties of MoS2/Graphene Heterostructures Prepared by Dry Transfer for Light-Induced Energy Applications. Journal of Electronic Materials, 2022, 51, 4257-4269. | 1.0 | 8 |
| 67 | Temperature dependent charge transport in poly(3-hexylthiophene)-block polystyrene copolymer field-effect transistor. Synthetic Metals, 2012, 162, 1531-1536. | 2.1 | 6 |
| 68 | Charge Transfer Doping of 2D PdSe<sub>2</sub> Thin Film and Its Application in Fabrication of Heterostructures. Advanced Electronic Materials, 2021, 7, 2001057. | 2.6 | 6 |
| 69 | Correlated KPFM and TERS imaging to elucidate defect-induced inhomogeneities in oxygen plasma treated 2D MoS2 nanosheets. Journal of Applied Physics, 2022, 131, . | 1.1 | 6 |
| 70 | Dielectrophoretic Assembly of Single Gold Nanoparticle into Nanogap Electrodes. Journal of Nanoscience and Nanotechnology, 2008, 8, 3427-3433. | 0.9 | 5 |
| 71 | Negative differential resistance in ZnO coated peptide nanotube. Applied Physics A: Materials Science and Processing, 2013, 112, 305-310. | 1.1 | 5 |
| 72 | Huge volume expansion and structural transformation of carbon nanotube aligned arrays during electrical breakdown in vacuum. Carbon, 2012, 50, 1635-1643. | 5.4 | 4 |

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|---|---|---|---|
| 73 | Lower activation energy in organic field effect transistors with carbon nanotube contacts. Solid-State Electronics, 2014, 99, 55-58. | 0.8 | 4 |
| 74 | Comparative study of organic transistors with different graphene electrodes fabricated using a simple patterning method. Applied Physics Letters, 2017, 111, . | 1.5 | 4 |
| 75 | Elucidation of the growth mechanism of MoS2 during the CVD process. MRS Advances, 2019, 4, 581-586. | 0.5 | 3 |
| 76 | Tailoring the Potential Landscape and Electrical Properties of 2D MoS<sub>2</sub> using Gold Nanostructures of Different Coverage Density. Journal of Physical Chemistry C, 2020, 124, 6461-6466. | 1.5 | 3 |
| 77 | Synthesis of highly dense MoO2/MoS2 coreâ€“shell nanoparticles via chemical vapor deposition. Nanotechnology, 2021, 32, 055605. | 1.3 | 3 |
| 78 | High photoresponsivity and light-induced carrier conversion in RGO/TSCuPc hybrid phototransistors. Journal of Materials Research, 2018, 33, 3999-4006. | 1.2 | 1 |
| 79 | Parallel Fabrication of CMOS Compatible Single Walled Carbon Nanotube Devices. Reviews in Nanoscience and Nanotechnology, 2012, 1, 187-199. | 0.4 | 0 |