# Matiar M R Howlader

List of Publications by Year
in descending order

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|---|---|---|---|
| 54<br>papers | 1,901<br>citations | 279798<br>23<br>h-index | 254184<br>43<br>g-index |
| 55<br>all docs | 55<br>docs citations | 55<br>times ranked | 2296<br>citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Electrochemical sensing: A prognostic tool in the fight against COVID-19. TrAC - Trends in Analytical Chemistry, 2021, 136, 116198. | 11.4 | 40 |
| 2 | Thermoelectric generation via tellurene for wearable applications: recent advances, research challenges, and future perspectives. Materials Today Energy, 2021, 20, 100625. | 4.7 | 23 |
| 3 | Nonenzymatic electrochemical sensors via Cu native oxides (CuNOx) for sweat glucose monitoring. Sensing and Bio-Sensing Research, 2021, 34, 100453. | 4.2 | 15 |
| 4 | Glutamate sensing in biofluids: recent advances and research challenges of electrochemical sensors. Analyst, The, 2020, 145, 321-347. | 3.5 | 63 |
| 5 | Fabrication of highly sensitive Bisphenol A electrochemical sensor amplified with chemically modified multiwall carbon nanotubes and Î²-cyclodextrin. Sensors and Actuators B: Chemical, 2020, 320, 128319. | 7.8 | 74 |
| 6 | Electrochemical Sensing of Cannabinoids in Biofluids: A Noninvasive Tool for Drug Detection. ACS Sensors, 2020, 5, 620-636. | 7.8 | 50 |
| 7 | Electrochemical sensing of lead in drinking water using Î²-cyclodextrin-modified MWCNTs. Sensors and Actuators B: Chemical, 2019, 296, 126632. | 7.8 | 49 |
| 8 | Sweat Glucose Sensing by Directly Bonded Thin Films. , 2019, , . | | 0 |
| 9 | Integration of Two-Dimensional Materials: Recent Advances and Challenges. , 2019, , . | | 1 |
| 10 | Polymers and organic materials-based pH sensors for healthcare applications. Progress in Materials Science, 2018, 96, 174-216. | 32.8 | 122 |
| 11 | Copper and liquid crystal polymer bonding towards lead sensing. Japanese Journal of Applied Physics, 2018, 57, 02BB03. | 1.5 | 6 |
| 12 | Direct bonding of copper and liquid crystal polymer. Materials Letters, 2018, 212, 214-217. | 2.6 | 11 |
| 13 | Electrochemical sensing of acetaminophen using multi-walled carbon nanotube and Î²-cyclodextrin. Sensors and Actuators B: Chemical, 2018, 254, 896-909. | 7.8 | 154 |
| 14 | Integrated water quality monitoring system with pH, free chlorine, and temperature sensors. Sensors and Actuators B: Chemical, 2018, 255, 781-790. | 7.8 | 72 |
| 15 | Tailoring MWCNTs and Î²-Cyclodextrin for Sensitive Detection of Acetaminophen and Estrogen. ACS Applied Materials & Interfaces, 2018, 10, 21411-21427. | 8.0 | 66 |
| 16 | Integration of Heterogeneous Materials for Wearable Sensors. Polymers, 2018, 10, 60. | 4.5 | 18 |
| 17 | Morphology and electrical properties of inkjet-printed palladium/palladium oxide. Journal of Materials Chemistry C, 2017, 5, 1893-1902. | 5.5 | 7 |
| 18 | Bonding mechanism and electrochemical impedance of directly bonded liquid crystal polymer and copper. , 2017, , . | | 2 |

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|---|---|---|---|
| 19 | Nanocrystalline diamond films prepared by pulsed electron beam ablation on different substrates. Journal of Materials Research, 2016, 31, 1964-1971. | 2.6 | 1 |
| 20 | Inkjet-printed bifunctional carbon nanotubes for pH sensing. Materials Letters, 2016, 176, 68-70. | 2.6 | 58 |
| 21 | Paper-Based, Hand-Drawn Free Chlorine Sensor with Poly(3,4-ethylenedioxythiophene):Poly(styrenesulfonate). Analytical Chemistry, 2016, 88, 10384-10389. | 6.5 | 25 |
| 22 | Low-temperature solution processing of palladium/palladium oxide films and their pH sensing performance. Talanta, 2016, 146, 517-524. | 5.5 | 23 |
| 23 | Inkjet Printing of a Highly Loaded Palladium Ink for Integrated, Lowâ€Cost pH Sensors. Advanced Functional Materials, 2016, 26, 4923-4933. | 14.9 | 76 |
| 24 | Low-Temperature Bonding for Silicon-Based Micro-Optical Systems. Photonics, 2015, 2, 1164-1201. | 2.0 | 12 |
| 25 | Nanobonding: A key technology for emerging applications in health and environmental sciences. Japanese Journal of Applied Physics, 2015, 54, 030201. | 1.5 | 8 |
| 26 | Materials analyses and electrochemical impedance of implantable metal electrodes. Physical Chemistry Chemical Physics, 2015, 17, 10135-10145. | 2.8 | 22 |
| 27 | Microfabricated electrochemical pH and free chlorine sensors for water quality monitoring: recent advances and research challenges. RSC Advances, 2015, 5, 69086-69109. | 3.6 | 144 |
| 28 | Future nano- and micro-systems using nanobonding technologies. , 2014, , . | | 1 |
| 29 | Nanobonding - A key technology for emerging applications in health and environmental sciences. , 2014, , . | | 0 |
| 30 | Polymer integration for packaging of implantable sensors. Sensors and Actuators B: Chemical, 2014, 202, 758-778. | 7.8 | 136 |
| 31 | Formation of gallium arsenide nanostructures in Pyrex glass. Nanotechnology, 2013, 24, 315301. | 2.6 | 9 |
| 32 | Charge transfer and stability of implantable electrodes on flexible substrate. Sensors and Actuators B: Chemical, 2013, 178, 132-139. | 7.8 | 24 |
| 33 | Oxygen Plasma and Humidity Dependent Surface Analysis of Silicon, Silicon Dioxide and Glass for Direct Wafer Bonding. ECS Journal of Solid State Science and Technology, 2013, 2, P515-P523. | 1.8 | 109 |
| 34 | Low temperature nanointegration for emerging biomedical applications. Microelectronics Reliability, 2012, 52, 361-374. | 1.7 | 7 |
| 35 | Annealing Temperature-Dependent Interfacial Behavior of Sequentially Plasma-Activated Silicon Bonded Wafers. Journal of Microelectromechanical Systems, 2011, 20, 17-20. | 2.5 | 10 |
| 36 | Influence of nitrogen microwave radicals on sequential plasma activated bonding. Materials Letters, 2010, 64, 445-448. | 2.6 | 18 |

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|---|---|---|---|
| 37 | Hybrid plasma bonding of germanium and glass wafers at low temperature. Materials Letters, 2010, 64, 1532-1535. | 2.6 | 15 |
| 38 | Void-free strong bonding of surface activated silicon wafers from room temperature to annealing at 600Â°C. Thin Solid Films, 2010, 519, 804-808. | 1.8 | 36 |
| 39 | Investigation of bonding strength and sealing behavior of aluminum/stainless steel bonded at room temperature. Vacuum, 2010, 84, 1334-1340. | 3.5 | 27 |
| 40 | Surface and Interface Characterization of Sequentially Plasma Activated Silicon, Silicon dioxide and Germanium Wafers for Low Temperature Bonding Applications. ECS Transactions, 2010, 33, 329-338. | 0.5 | 17 |
| 41 | Comprehensive investigation of sequential plasma activated Si/Si bonded interfaces for nano-integration on the wafer scale. Nanotechnology, 2010, 21, 134011. | 2.6 | 28 |
| 42 | Hybrid plasma bonding for void-free strong bonded interface of silicon/glass at 200Â°C. Talanta, 2010, 82, 508-515. | 5.5 | 33 |
| 43 | Annealed proton-exchanged LiNbO 3 ridge waveguide for photonics application. , 2010, , . | | 2 |
| 44 | Sequential Plasma-Activated Bonding Mechanism of Silicon/Silicon Wafers. Journal of Microelectromechanical Systems, 2010, 19, 840-848. | 2.5 | 16 |
| 45 | Role of Heating on Plasma-Activated Silicon Wafers Bonding. Journal of the Electrochemical Society, 2009, 156, H846. | 2.9 | 25 |
| 46 | Surface-Activated Bonding of Aluminum/Stainless Steel and Its Seal Characteristics. Journal of the Japan Society for Technology of Plasticity, 2006, 47, 596-600. | 0.3 | 0 |
| 47 | Room temperature wafer level glass/glass bonding. Sensors and Actuators A: Physical, 2006, 127, 31-36. | 4.1 | 70 |
| 48 | Wafer Level Surface Activated Bonding Tool for MEMS Packaging. Journal of the Electrochemical Society, 2004, 151, G461. | 2.9 | 67 |
| 49 | Electrical conductivity of Wesgo AL995 alumina under fast electron irradiation in a high voltage electron microscope. Journal of Applied Physics, 2002, 92, 1995-1999. | 2.5 | 13 |
| 50 | Characterization of the bonding strength and interface current of p-Si/n-InP wafers bonded by surface activated bonding method at room temperature. Journal of Applied Physics, 2002, 91, 3062-3066. | 2.5 | 48 |
| 51 | Role of specimen thickness on the electrical conductivity of single crystalline alumina under electron irradiation. Journal of Applied Physics, 2001, 89, 1612. | 2.5 | 3 |
| 52 | In situ measurement of electrical conductivity of Zircaloy oxides and their formation mechanism under electron irradiation. Journal of Nuclear Materials, 1999, 265, 100-107. | 2.7 | 8 |
| 53 | The electrical conductivity of zircaloy oxide films. Journal of Nuclear Materials, 1998, 253, 149-155. | 2.7 | 18 |
| 54 | In situ measurement of electrical conductivity of alumina under electron irradiation in a high voltage electron microscope. Journal of Nuclear Materials, 1996, 239, 245-252. | 2.7 | 17 |