Mohammad Asaduzzaman Chowdhury

List of Publications by Year
in descending order

104 papers	1,740 citations	361413 20 h-index	330143 37 g-index
106 all docs	106 docs citations	106 times ranked	1626 citing authors

#	Article	IF	Citations
1	Immune response in COVID-19: A review. Journal of Infection and Public Health, 2020, 13, 1619-1629.	4.1	281
2	The effect of amplitude of vibration on the coefficient of friction for different materials. Tribology International, 2008, 41, 307-314.	5.9	122
3	Characterization and performance analysis of composite bioplastics synthesized using titanium dioxide nanoparticles with corn starch. Heliyon, 2019, 5, e02009.	3.2	97
4	Effect of nanocatalysts on the transesterification reaction of first, second and third generation biodiesel sources- A mini-review. Chemosphere, 2021, 270, 128642.	8.2	87
5	An overview of green corrosion inhibitors for sustainable and environment friendly industrial development. Journal of Adhesion Science and Technology, 2021, 35, 673-690.	2.6	86
6	Prospect of biobased antiviral face mask to limit the coronavirus outbreak. Environmental Research, 2021, 192, 110294.	7.5	80
7	Synthesis of emerging two-dimensional (2D) materials â€“ Advances, challenges and prospects. FlatChem, 2021, 30, 100305.	5.6	65
8	The effect of frequency of vibration and humidity on the coefficient of friction. Tribology International, 2006, 39, 958-962.	5.9	60
9	Surface characterization and mechanical behavior of aluminum based metal matrix composite reinforced with nano Al2O3, SiC, TiO2 particles. Chemical Data Collections, 2020, 28, 100442.	2.3	58
10	Influences of thermal stability, and lubrication performance of biodegradable oil as an engine oil for improving the efficiency of heavy duty diesel engine. Fuel, 2017, 196, 36-46.	6.4	46
11	The effect of frequency of vibration and humidity on the wear rate. Wear, 2007, 262, 198-203.	3.1	45
12	Prediction of solar irradiation and performance evaluation of grid connected solar 80KWp PV plant in Bangladesh. Energy Reports, 2019, 5, 714-722.	5.1	43
13	Effect of Load and Sliding Velocity on Friction Coefficient of Aluminum Sliding Against Different Pin Materials. American Journal of Materials Science, 2012, 2, 26-31.	2.0	41
14	Effect of duration of rubbing and normal load on friction coefficient for polymer and composite materials. Industrial Lubrication and Tribology, 2011, 63, 320-326.	1.3	40
15	Relationship between Weather Variables and New Daily COVID-19 Cases in Dhaka, Bangladesh. Sustainability, 2020, 12, 8319.	3.2	28
16	Characterization of epoxy composites reinforced with CaCO3-Al2O3-MgO-TiO2/CuO filler materials. AEJ - Alexandria Engineering Journal, 2020, 59, 4121-4137.	6.4	26
17	Terminalia arjuna leaves extract as green corrosion inhibitor for mild steel in HCl solution. Results in Engineering, 2022, 14, 100438.	5.1	25
18	The Effect of Relative Humidity and Roughness on the Friction Coefficient under Horizontal Vibration. The Open Mechanical Engineering Journal, 2008, 2, 128-135.	0.3	24

#	Article	IF	Citations
19	Friction coefficient and wear rate of polymer and composite materials at different sliding speeds. International Journal of Surface Science and Engineering, 2012, 6, 231.	0.4	22
20	3D-Printed Objects for Multipurpose Applications. Journal of Materials Engineering and Performance, 2021, 30, 4756-4767.	2.5	20
21	Band gap formation of 2D materialin graphene: Future prospect and challenges. Results in Engineering, 2022, 15, 100474.	5.1	20
22	The frictional behavior of mild steel under horizontal vibration. Tribology International, 2009, 42, 946-950.	5.9	19
23	Experimental Evaluation of Erosion of Gunmetal under Asymmetrical Shaped Sand Particle. Advances in Tribology, 2015, 2015, 1-31.	2.1	16
24	Experimental analysis of aluminum alloy under solid particle erosion process. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2016, 230, 1516-1541.	1.8	15
25	Characteristics and damage mechanisms of bending fretting fatigue of materials. International Journal of Damage Mechanics, 2018, 27, 453-487.	4.2	14
26	The frictional behavior of composite materials under horizontal vibration. Industrial Lubrication and Tribology, 2009, 61, 246-253.	1.3	13
27	Tribological study of Al-6063-based metal matrix embedded with SiCâ€“Al2O3â€“TiO2 particles. SN Applied Sciences, 2020, 2, 1.	2.9	13
28	The frictional behavior of materials under vertical vibration. Industrial Lubrication and Tribology, 2009, 61, 154-160.	1.3	12
29	Prediction and Optimization of Erosion Rate of Carbon Fiberâ€“Reinforced Ebonite Using Fuzzy Logic. Journal of Testing and Evaluation, 2019, 47, 1244-1258.	0.7	12
30	Paederia Foetida leaves extract as a green corrosion inhibitor for mild steel in hydrochloric acid solution. Current Research in Green and Sustainable Chemistry, 2021, 4, 100191.	5.6	12
31	Erosion characteristics of stainless steels under different percentage of SiC- Al2O3-Fe2O3 solid particles. Tribology International, 2022, 167, 107403.	5.9	12
32	Corrosion behavior of aluminum alloy in NaOH and Syzygium Samarangense solution for environmental sustainability. Current Research in Green and Sustainable Chemistry, 2022, 5, 100254.	5.6	12
33	Improvement of interfacial adhesion performance of the kevlar fiber mat by depositing SiC/TiO2/Al2O3/graphene nanoparticles. Arabian Journal of Chemistry, 2021, 14, 103406.	4.9	11
34	Analysis of Artificial Neural Network for Predicting Erosive Wear of Nylon-12 Polymer. Materials Performance and Characterization, 2019, 8, 20180164.	0.3	11
35	Friction Coefficient and Wear Rate of Different Materials Sliding Against Stainless Steel. International Journal of Surface Engineering and Interdisciplinary Materials Science, 2013, 1, 33-45.	0.4	10
36	Failure Mechanism of Polytetrafluoroethylene Under Friction Fatigue. Journal of Failure Analysis and Prevention, 2019, 19, 245-249.	0.9	10

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37	Influence of external horizontal vibration on the coefficient of friction of aluminium sliding against stainless steel. Industrial Lubrication and Tribology, 2011, 63, 152-157.	1.3	9
38	Fabrication and characterization of jute/cotton bio-composites reinforced with eggshell particles. Polymer Bulletin, 2023, 80, 931-957.	3.3	9
39	Physical, thermal, and mechanical properties of <scp>Al₂O₃</scp>/<scp>SiO₂</scp> infused jute/glass fiber resin composite materials in relation to viscosity. Polymer Composites, 2022, 43, 3971-3982.	4.6	9
40	The Experimental Characteristics and Evaluation of Nylon-12 in Erosion Process. Journal of Testing and Evaluation, 2017, 45, 773-787.	0.7	8
41	Development and analysis of nanoparticle infused plastic products manufactured by machine learning guided 3D printer. Polymer Testing, 2022, 106, 107429.	4.8	8
42	The aspect of the corrosion pitting with fretting fatigue on Aluminum Alloy: A nuclear reactor safety or an aerospace structural failure phenomenon. Results in Engineering, 2022, 15, 100483.	5.1	8
43	Erosion characteristics of Teflon under different operating conditions. Journal of Polymer Engineering, 2015, 35, 889-904.	1.4	7
44	Evaluation of the Effect of Environmental Parameters on the Spread of COVID-19: A Fuzzy Logic Approach. Advances in Fuzzy Systems, 2020, 2020, 1-5.	0.9	7
45	Modeling Fracture Formation, Behavior and Mechanics of Polymeric Materials: A Biomedical Implant Perspective. Journal of Composites Science, 2022, 6, 31.	3.0	7
46	Experimental Investigation on Friction Coefficient of Composite Materials Sliding Against SS 201 and SS 301 Counterfaces. Procedia Engineering, 2015, 105, 858-864.	1.2	6
47	Surface coatings analysis and their effects on reduction of tribological properties of coated aluminum under motion with ML approach. Materials Research Express, 2021, 8, 086508.	1.6	6
48	Sliding Friction of Steel Combinations. The Open Mechanical Engineering Journal, 2014, 8, 364-369.	0.3	6
49	Scope of eco-friendly nanoparticles for anti-microbial activity. Current Research in Green and Sustainable Chemistry, 2021, 4, 100198.	5.6	6
50	The influence of natural frequency of the experimental set-up on the friction coefficient of copper. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2010, 224, 293-298.	1.8	5
51	Effects of Nanoparticles on Viral Infection â€" A Review. Nano, 2020, 15, 2030003.	1.0	5
52	Development of antibacterial nanofibrous wound dressing and conceptual reaction mechanism to deactivate the viral protein by Nigella sativa extract. Advances in Traditional Medicine, 2022, 22, 283-291.	2.0	5
53	A Study on the Corrosion Characteristics of Internal Combustion Engine Materials in Second-Generation Jatropha Curcas Biodiesel. Energies, 2021, 14, 4352.	3.1	5
54	A Multivariate Time Series Approach for Forecasting of Electricity Demand in Bangladesh Using ARIMAX Model. , 2020, , .		5

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55	Scope of 2D materials for immune response-a review. Results in Engineering, 2022, 14, 100413.	5.1	5
56	The effect of natural frequency of the experimental setâ€up on the wear rate. Industrial Lubrication and Tribology, 2010, 62, 356-360.	1.3	4
57	Experimental study of friction coefficient and wear rate of turned and ground mild steel surfaces sliding against smooth and rough SS304 counterfaces. Australian Journal of Mechanical Engineering, 2014, 12, 291-304.	2.1	4
58	Erosion of Mild Steel for Engineering Design and Applications. Journal of Bio- and Tribo-Corrosion, 2017, 3, 1.	2.6	4
59	Study of erosive surface characterization of copper alloys under different test conditions. Surfaces and Interfaces, 2017, 9, 245-259.	3.0	4
60	Study of erosion characterization of carbon fiber reinforced composite material. AIP Conference Proceedings, 2017, , .	0.4	4
61	Experimental investigation on flexure and impact properties of injection molded polypropylene-nylon 6-glass fiber polymer composites. IOP Conference Series: Materials Science and Engineering, 2018, 342, 012102.	0.6	4
62	On the diversity in design for different bending fretting fatigue mechanism. SN Applied Sciences, 2019, 1, 1.	2.9	4
63	Multiphysical analysis of nanoparticles and their effects on plants. Biotechnology and Applied Biochemistry, 2020, , .	3.1	4
64	Friction coefficient and performance evaluation of plain journal bearing using SAE 5W-30 engine oil. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2020, 234, 1222-1232.	1.8	4
65	Friction and wear characteristics of ceramics composite under multidirectional motions. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2022, 236, 867-880.	1.8	4
66	Recent machine learning guided material research - A review. Computational Condensed Matter, 2021, 29, e00597.	2.1	4
67	The Effect of Gas Flow Rate on the Thin Film Deposition Rate on Carbon Steel Using Thermal CVD. International Journal of Chemical Reactor Engineering, 2011, 9, .	1.1	3
68	Estimation of the friction coefficient in turning process of metals through model experiment. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2018, 232, 685-692.	1.8	3
69	Deposition behavior and tribological properties of diamond-like carbon coatings on stainless steels via chemical vapor deposition. International Journal of Minerals, Metallurgy and Materials, 2018, 25, 1335-1343.	4.9	3
70	Effect of size and shape of copper alloys particles on the mechanical and tribological behavior of friction materials. Mechanics and Industry, 2020, 21, 613.	1.3	3
71	Electrocatalysis of 2,6-Dinitrophenol Based on Wet-Chemically Synthesized PbO-ZnO Microstructures. Catalysts, 2022, 12, 727.	3.5	3
72	Variation of thin film deposition rate on SS 314 with the variation of gas flow rate using CVD. Industrial Lubrication and Tribology, 2011, 63, 433-439.	1.3	2

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73	Deposition on SS 316 at Different Gas Flow Rates Using Thermal CVD. Advanced Materials Research, 0, 576, 594-597.	0.3	2
74	Influence of normal loads and sliding velocities on friction properties of engineering plastics sliding against rough counterfaces. IOP Conference Series: Materials Science and Engineering, 2016, 114, 012112.	0.6	2
75	Effect of loading parameter on fretting fatigue. AIP Conference Proceedings, 2017, , .	0.4	2
76	Wear mechanisms of different engineering systems under higher solicitations: Overview and case studies. Engineering Failure Analysis, 2018, 94, 165-181.	4.0	2
77	Water and brine absorption capacity of epoxy based glass fiber composite modified with CaCO3â€“Al2O3â€“MgOâ€“TiO2/CuO filler materials. Materials Research Express, 2019, 6, 115311.	1.6	2
78	Thermal analysis of hybrid composites reinforced with Al2O3 and SiO2 filler particles. Materials Research Express, 2019, 6, 125361.	1.6	2
79	Fretting & friction induced fatigue failure: damage criterion of polytetrafluoroethylene. Heliyon, 2020, 6, e04066.	3.2	2
80	Improvement of corrosion resistance of galvanization/nickel/chrome plating low carbon steels in H₂SO₄under dynamic condition. Surface Topography: Metrology and Properties, 2021, 9, 035018.	1.6	2
81	Effects of Self-Lubricant Coating and Motion on Reduction of Friction and Wear of Mild Steel and Data Analysis from Machine Learning Approach. Materials, 2021, 14, 5732.	2.9	2
82	Investigation and Characterization of Gamma Radiation Shielding Capacity of Heavy Minerals-Based Composite Materials. Journal of Nuclear Engineering and Radiation Science, 2020, 6, .	0.4	2
83	Friction Coefficient of Polymer and Composite Materials Sliding against Stainless Steel. Advanced Materials Research, 0, 576, 590-593.	0.3	1
84	Investigation of thin film deposition on stainless steel 304 substrates under different operating conditions. IOP Conference Series: Materials Science and Engineering, 2016, 114, 012029.	0.6	1
85	Erosive wear characteristics of multi-fiber reinforced polyester under different operating conditions. IOP Conference Series: Materials Science and Engineering, 2016, 114, 012113.	0.6	1
86	Effects of Acetylene on Deposition Rate of Stainless Steels Using Thermal Chemical Vapor Deposition. International Journal of Engineering Research in Africa, 0, 23, 7-12.	0.7	1
87	Deposition rates on stainless steel substrates of different surface roughnesses under different operating conditions using thermal CVD. International Journal of Surface Science and Engineering, 2016, 10, 282.	0.4	1
88	Experimental and characterisation of eroded surfaces of T-glass fibre embedded in polyester matrix. International Journal of Materials Engineering Innovation, 2017, 8, 159.	0.5	1
89	Investigation of sustainability of lubricated journal bearing under relevant design parameters. Industrial Lubrication and Tribology, 2018, 70, 789-804.	1.3	1
90	Stature Estimation Using Ulnar Length and Shoulder Elbow Length in a Bangladeshi Population. SN Comprehensive Clinical Medicine, 2020, 2, 2754-2762.	0.6	1

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91	Performance and Characterization of Two-Dimensional Material Graphene Conductivityâ€"A Review. Materials Performance and Characterization, 2019, 8, 183-196.	0.3	1
92	Study of Erosion Performance and Characterization of Ebonite Reinforced With Carbon Fibers. Materials Performance and Characterization, 2016, 5, 20160091.	0.3	1
93	Investigation on Microstructure and Hardness of Aluminium-Aluminium Oxide Functionally Graded Material. Lecture Notes in Mechanical Engineering, 2020, , 478-483.	0.4	1
94	Investigation of the combined effect of notch and fretting on bending fatigue. Theoretical and Applied Mechanics, 2020, 47, 113-122.	0.3	1
95	Improvement of Mechanical, Thermal, and Physical Behaviors of Jute/Cotton Biocomposites Reinforced by Spent Tea Leaf Particles. Journal of Composites Science, 2022, 6, 145.	3.0	1
96	The Effect of Sound on Diamond Hot Filament Chemical Vapor Deposition. International Journal of Chemical Reactor Engineering, 2009, 7, .	1.1	0
97	Influence of Sound Vibration on Diamond-Like Carbon Deposition Rate. ISRN Mechanical Engineering, 2012, 2012, 1-8.	0.9	0
98	Experimental Investigation on Friction Coefficient of Engineering Polymers Sliding against Different Counterface Materials. Advanced Materials Research, 2014, 903, 90-95.	0.3	0
99	Frictional Characteristics of Steel Materials Sliding against Mild Steel. Advanced Materials Research, 2014, 903, 33-38.	0.3	0
100	Friction and wear of non-ferrous materials under artificially created vibration for machine design. International Journal of Materials Engineering Innovation, 2017, 8, 96.	0.5	0
101	Experimental investigation of refrigerator compressor piston material. AIP Conference Proceedings, 2019, , .	0.4	0
102	Effect of Lubricating Oil on Sliding Loss and Power Loss of Nylon Gear. Lecture Notes in Mechanical Engineering, 2020, , 596-602.	0.4	0
103	Development and Characterization of Kevlar-Reinforced Ceramic Composite Materials. Journal of Testing and Evaluation, 2021, 49, 1631-1650.	0.7	0
104	Influence of Glass Fiber Content on the Flexural Properties of Polyamide 6-Polypropylene Blend Composites. Lecture Notes in Mechanical Engineering, 2020, , 466-471.	0.4	0