

# Mohammad Mahbubur Rahman

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5639832/publications.pdf>

Version: 2024-02-01

57  
papers

1,265  
citations

393982

19  
h-index

395343

33  
g-index

57  
all docs

57  
docs citations

57  
times ranked

1412  
citing authors

#	ARTICLE	IF	CITATIONS
1	Solar absorptance of copper–cobalt oxide thin film coatings with nano-size, grain-like morphology: Optimization and synchrotron radiation XPS studies. <i>Applied Surface Science</i> , 2013, 275, 127-135.	3.1	168
2	Structural, optical, magnetic and antibacterial properties of Nd doped NiO nanoparticles prepared by co-precipitation method. <i>Journal of Alloys and Compounds</i> , 2018, 742, 421-429.	2.8	90
3	Electrodeposition of Polypyrrole and Reduced Graphene Oxide onto Carbon Bundle Fibre as Electrode for Supercapacitor. <i>Nanoscale Research Letters</i> , 2017, 12, 246.	3.1	79
4	Complex permeability of Fe-deficient Ni–Cu–Zn ferrites. <i>Journal of Alloys and Compounds</i> , 2013, 548, 208-215.	2.8	46
5	Influence of calcination on the sol–gel synthesis of lanthanum oxide nanoparticles. <i>Applied Physics A: Materials Science and Processing</i> , 2018, 124, 1.	1.1	46
6	Biocompatibility study of multi-layered hydroxyapatite coatings synthesized on Ti-6Al-4V alloys by RF magnetron sputtering for prosthetic-orthopaedic implant applications. <i>Applied Surface Science</i> , 2019, 463, 292-299.	3.1	42
7	Tailoring the physicochemical and mechanical properties of optical copper–cobalt oxide thin films through annealing treatment. <i>Surface and Coatings Technology</i> , 2014, 239, 212-221.	2.2	40
8	Effects of annealing temperatures on the morphological, mechanical, surface chemical bonding, and solar selectivity properties of sputtered TiAlSiN thin films. <i>Journal of Alloys and Compounds</i> , 2016, 671, 254-266.	2.8	36
9	Surface Electronic Structure and Mechanical Characteristics of Copper–Cobalt Oxide Thin Film Coatings: Soft X-ray Synchrotron Radiation Spectroscopic Analyses and Modeling. <i>Journal of Physical Chemistry C</i> , 2013, 117, 16457-16467.	1.5	35
10	Annealing effects on microstructural, optical, and mechanical properties of sputtered CrN thin film coatings: Experimental studies and finite element modeling. <i>Journal of Alloys and Compounds</i> , 2018, 750, 451-464.	2.8	35
11	Chemical bonding states and solar selective characteristics of unbalanced magnetron sputtered Ti <sub>x</sub> M <sub>1-x</sub> N <sub>y</sub> films. <i>RSC Advances</i> , 2016, 6, 36373-36383.	1.7	34
12	Understanding the shrinkage of optical absorption edges of nanostructured Cd-Zn sulphide films for photothermal applications. <i>Applied Surface Science</i> , 2017, 392, 854-862.	3.1	33
13	Surface structural features and optical analysis of nanostructured Cu-oxide thin film coatings coated via the sol-gel dip coating method. <i>Ceramics International</i> , 2019, 45, 12888-12894.	2.3	31
14	Investigation of the post-annealing electromagnetic response of Cu–Co oxide coatings via optical measurement and computational modelling. <i>RSC Advances</i> , 2017, 7, 16826-16835.	1.7	27
15	Optical properties and thermal durability of copper cobalt oxide thin film coatings with integrated silica antireflection layer. <i>Ceramics International</i> , 2014, 40, 16569-16575.	2.3	26
16	Investigation of aluminum doping on structural and optical characteristics of sol–gel assisted spin-coated nano-structured zinc oxide thin films. <i>Applied Physics A: Materials Science and Processing</i> , 2020, 126, 1.	1.1	25
17	Structural Thermal Stability of Graphene Oxide-Doped Copper–Cobalt Oxide Coatings as a Solar Selective Surface. <i>Journal of Materials Science and Technology</i> , 2016, 32, 1179-1191.	5.6	24
18	Microwave exfoliated graphene-based materials for flexible solid-state supercapacitor. <i>Journal of Molecular Structure</i> , 2020, 1220, 128710.	1.8	23

#	ARTICLE	IF	CITATIONS
19	Understanding the impacts of Al <sup>3+</sup> -substitutions on the enhancement of magnetic, dielectric and electrical behaviors of ceramic processed nickel-zinc mixed ferrites: FTIR assisted studies. <i>Materials Research Bulletin</i> , 2018, 97, 444-451.	2.7	22
20	Structural, morphological, compositional and optical studies of plasma polymerized 2-furaldehyde amorphous thin films. <i>Applied Surface Science</i> , 2017, 423, 983-994.	3.1	21
21	Polyethylene glycol assisted facile sol-gel synthesis of lanthanum oxide nanoparticles: Structural characterizations and photoluminescence studies. <i>Ceramics International</i> , 2019, 45, 424-431.	2.3	20
22	Sol-gel derived ITO-based bi-layer and tri-layer thin film coatings for organic solar cells applications. <i>Applied Surface Science</i> , 2020, 530, 147164.	3.1	19
23	Review of Sol-Gel Derived Mixed Metal Oxide Thin Film Coatings with the Addition of Carbon Materials for Selective Surface Applications. <i>Journal of Advanced Physics</i> , 2014, 3, 179-193.	0.4	19
24	Structural, morphological, and optical characterizations of Mo, CrN and Mo:CrN sputtered coatings for potential solar selective applications. <i>Applied Surface Science</i> , 2018, 440, 1001-1010.	3.1	18
25	Solar selective performance of metal nitride/oxynitride based magnetron sputtered thin film coatings: a comprehensive review. <i>Journal of Optics (United Kingdom)</i> , 2018, 20, 033001.	1.0	18
26	Influence of DC magnetron sputtering reaction gas on structural and optical characteristics of Ce-oxide thin films. <i>Ceramics International</i> , 2018, 44, 16450-16458.	2.3	17
27	Experimental and predicted mechanical properties of Cr <sub>x</sub> Al <sub>x</sub> N thin films, at high temperatures, incorporating in situ synchrotron radiation X-ray diffraction and computational modelling. <i>RSC Advances</i> , 2017, 7, 22094-22104.	1.7	16
28	Probing the effects of thermal treatment on the electronic structure and mechanical properties of Ti-doped ITO thin films. <i>Journal of Alloys and Compounds</i> , 2017, 721, 333-346.	2.8	16
29	Understanding the optical behaviours and the power conversion efficiency of novel organic dye and nanostructured TiO <sub>2</sub> based integrated DSSCs. <i>Solar Energy</i> , 2021, 225, 129-147.	2.9	16
30	Understanding the charge carrier conduction mechanisms of plasma-polymerized 2-furaldehyde thin films via DC electrical studies. <i>Thin Solid Films</i> , 2016, 609, 35-41.	0.8	15
31	Improving the optoelectronic properties of titanium-doped indium tin oxide thin films. <i>Semiconductor Science and Technology</i> , 2017, 32, 065011.	1.0	14
32	Understanding Local Bonding Structures of Ni-Doped Chromium Nitride Coatings through Synchrotron Radiation NEXAFS Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2014, 118, 18573-18579.	1.5	13
33	NEXAFS N K-edge study of the bonding structure on Al/Si doped sputtered CrN coatings. <i>Journal of Alloys and Compounds</i> , 2016, 661, 268-273.	2.8	13
34	Development of high-performance ScS <sub>2</sub> monolayer as cathode material: A DFT analysis. <i>Solid State Communications</i> , 2022, 352, 114828.	0.9	13
35	Near-edge X-ray absorption fine structure studies of Cr <sub>x</sub> M <sub>x</sub> N coatings. <i>Journal of Alloys and Compounds</i> , 2013, 578, 362-368.	2.8	12
36	Structural and optical characteristics of pre- and post-annealed sol-gel derived CoCu-oxide coatings. <i>Journal of Alloys and Compounds</i> , 2017, 701, 222-235.	2.8	12

#	ARTICLE	IF	CITATIONS
37	Extraction, optical properties, and aging studies of natural pigments of various flower plants. <i>Heliyon</i> , 2020, 6, e05104.	1.4	12
38	Synthesis and aging effect of plasma-polymerized 2-furancarboxaldehyde amorphous thin films. <i>Materials Chemistry and Physics</i> , 2019, 232, 209-220.	2.0	11
39	Investigation of magnetic, dielectric and electrical properties of Ba-hexaferrites. <i>Indian Journal of Physics</i> , 2012, 86, 1065-1072.	0.9	10
40	Thermo-mechanical properties of cubic lanthanide oxides. <i>Thin Solid Films</i> , 2018, 653, 37-48.	0.8	10
41	Very-few-layer graphene obtained from facile two-step shear exfoliation in aqueous solution. <i>Chemical Engineering Science</i> , 2021, 245, 116848.	1.9	10
42	Towards Urban City with Sustainable Buildings: A Model for Dhaka City, Bangladesh. <i>Environment and Urbanization ASIA</i> , 2014, 5, 119-130.	0.9	8
43	Structural, optical, and mechanical properties of cobalt copper oxide coatings synthesized from low concentrations of sol-gel process. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2016, 213, 3205-3213.	0.8	8
44	A holistic approach to optical characterizations of vacuum deposited Cu <sub>2</sub> ZnSnS <sub>4</sub> thin film coatings for solar absorbing layers. <i>Journal of Alloys and Compounds</i> , 2021, 859, 157830.	2.8	8
45	Surface modification and improvements of wicking properties and dyeability of grey jute-cotton blended fabrics using low-pressure glow discharge air plasma. <i>Heliyon</i> , 2021, 7, e07893.	1.4	8
46	Influence of the variation in the Hubbard parameter ( $U$ ) on activation energies of CeO <sub>2</sub> -catalysed reactions. <i>Canadian Journal of Physics</i> , 2020, 98, 385-389.	0.4	7
47	Heat treatment effect on the structural, morphological, and optical properties of plasma polymerized furan-2-carbaldehyde thin films. <i>Results in Physics</i> , 2020, 16, 103014.	2.0	6
48	Conductive composites of tapioca based bioplastic and electrochemical-mechanical liquid exfoliation (emle) graphene. <i>IOP Conference Series: Materials Science and Engineering</i> , 2018, 345, 012026.	0.3	5
49	Studies of annealing impact on the morphological, opto-dielectric and mechanical behaviors of molybdenum-doped CrN coatings. <i>Thin Solid Films</i> , 2019, 677, 119-129.	0.8	5
50	A holistic analysis of surface, chemical bonding states and mechanical properties of sol-gel synthesized CoZn-oxide coatings complemented by finite element modeling. <i>Ceramics International</i> , 2019, 45, 10882-10898.	2.3	5
51	A first-principles study of the electronic, structural, and optical properties of CrN and Mo:CrN clusters. <i>Ceramics International</i> , 2019, 45, 17094-17102.	2.3	4
52	Understanding the enhancement of the optical and electronic attributes of iodine-doped vacuum deposited tetramethylaniline (PPTMA) thin film coatings. <i>Journal of Alloys and Compounds</i> , 2021, 874, 159989.	2.8	4
53	Surface structural and solar absorptance features of nitrate-based copper-cobalt oxides composite coatings: Experimental studies and molecular dynamic simulation. <i>Ceramics International</i> , 2018, 44, 15274-15280.	2.3	3
54	Nanorose-like ZnCo <sub>2</sub> O <sub>4</sub> coatings synthesized via sol-gel route: morphology, grain growth and DFT simulations. <i>Journal of Sol-Gel Science and Technology</i> , 2019, 90, 450-464.	1.1	3

#	ARTICLE	IF	CITATIONS
55	Graphene Nanosheets (GNs) Addition on the Palm Oil Fuel Ash (POFA) Based Geopolymer with KOH Activator. Journal of Physics: Conference Series, 2019, 1351, 012101.	0.3	3
56	Order-Disorder Phase Transition and Lattice Parameter of Ni-Pt Alloys. Journal of Advanced Physics, 2013, 2, 29-35.	0.4	1
57	Magnetic and Dielectric Properties of M-Type Sr-Hexaferrites with the Addition of Calcium Oxide and Silicon-Di-Oxide. Journal of Advanced Physics, 2012, 1, 136-139.	0.4	0