

# Mohammad Rahman

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

31  
papers

1,673  
citations

17  
h-index

36  
g-index

36  
ext. papers

2,035  
ext. citations

13.7  
avg, IF

5.82  
L-index

#	Paper	IF	Citations
31	On the Mechanistic Understanding of Photovoltage Loss in Iron Pyrite Solar Cells. <i>Advanced Materials</i> , <b>2020</b> , 32, e1905653	24	12
30	Surface polarity, water adhesion and wettability behaviors of iron pyrite. <i>Materials Today: Proceedings</i> , <b>2020</b> , 33, 2465-2469	1.4	1
29	Metal-free photocatalysts for hydrogen evolution. <i>Chemical Society Reviews</i> , <b>2020</b> , 49, 1887-1931	58.5	190
28	Biochar for electrochemical applications. <i>Current Opinion in Green and Sustainable Chemistry</i> , <b>2020</b> , 23, 25-30	7.9	16
27	Rational design and resolution of the mystery of the structure of Cyclo[18]carbon. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 8234-8237	13	9
26	Revisiting the Limiting Factors for Overall Water-Splitting on Organic Photocatalysts. <i>Angewandte Chemie</i> , <b>2020</b> , 132, 16418	3.6	
25	Revisiting the Limiting Factors for Overall Water-Splitting on Organic Photocatalysts. <i>Angewandte Chemie - International Edition</i> , <b>2020</b> , 59, 16278-16293	16.4	30
24	Evaluation of Two Potassium-Based Activation Agents for the Production of Oxygen- and Nitrogen-Doped Porous Carbons. <i>Energy &amp; Fuels</i> , <b>2020</b> , 34, 6101-6112	4.1	6
23	X-ray diffraction and Raman spectroscopy for lead halide perovskites <b>2020</b> , 23-47		1
22	Carbon Nitride Transforms into a High Lithium Storage Capacity Nitrogen-Rich Carbon. <i>ACS Nano</i> , <b>2019</b> , 13, 9279-9291	16.7	32
21	How to Make a Most Stable Perovskite Solar Cell. <i>Matter</i> , <b>2019</b> , 1, 562-564	12.7	10
20	What Is Limiting Pyrite Solar Cell Performance?. <i>Joule</i> , <b>2019</b> , 3, 2290-2293	27.8	8
19	Understanding Charge Transport in Carbon Nitride for Enhanced Photocatalytic Solar Fuel Production. <i>Accounts of Chemical Research</i> , <b>2019</b> , 52, 248-257	24.3	65
18	Carbon, nitrogen and phosphorus containing metal-free photocatalysts for hydrogen production: progress and challenges. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 1305-1322	13	125
17	Topological carbon nitride: localized photon absorption and delocalized charge carrier separation at intertwined photocatalyst interfaces. <i>Materials Horizons</i> , <b>2018</b> , 5, 553-559	14.4	25
16	Reduced recombination and low-resistive transport of electrons for photo-redox reactions in metal-free hybrid photocatalyst. <i>Applied Physics Letters</i> , <b>2018</b> , 112, 253902	3.4	17
15	Tuning the Intrinsic Properties of Carbon Nitride for High Quantum Yield Photocatalytic Hydrogen Production. <i>Advanced Science</i> , <b>2018</b> , 5, 1800820	13.6	72

14	Enabling Pt-free photocatalytic hydrogen evolution on polymeric melon: Role of amorphization for overcoming the limiting factors. <i>Physical Review Materials</i> , <b>2018</b> , 2,	3.2	6
13	p-Type BP nanosheet photocatalyst with AQE of 3.9% in the absence of a noble metal cocatalyst: investigation and elucidation of photophysical properties. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 18403-18408	13	18
12	Advent of 2D Rhenium Disulfide (ReS <sub>2</sub> ): Fundamentals to Applications. <i>Advanced Functional Materials</i> , <b>2017</b> , 27, 1606129	15.6	224
11	Counteracting Blueshift Optical Absorption and Maximizing Photon Harvest in Carbon Nitride Nanosheet Photocatalyst. <i>Small</i> , <b>2017</b> , 13, 1700376	11	31
10	A Benchmark Quantum Yield for Water Photoreduction on Amorphous Carbon Nitride. <i>Advanced Functional Materials</i> , <b>2017</b> , 27, 1702384	15.6	94
9	Graphene oxide coupled carbon nitride homo-heterojunction photocatalyst for enhanced hydrogen production. <i>Materials Chemistry Frontiers</i> , <b>2017</b> , 1, 562-571	7.8	27
8	2D phosphorene as a water splitting photocatalyst: fundamentals to applications. <i>Energy and Environmental Science</i> , <b>2016</b> , 9, 709-728	35.4	420
7	Surface activated carbon nitride nanosheets with optimized electro-optical properties for highly efficient photocatalytic hydrogen production. <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 2445-2452	13	105
6	Advances in surface passivation and emitter optimization techniques of c-Si solar cells. <i>Renewable and Sustainable Energy Reviews</i> , <b>2014</b> , 30, 734-742	16.2	41
5	Emissions through solar PV systems - a review. <i>International Journal of Renewable Energy Technology</i> , <b>2014</b> , 5, 323	0.1	
4	Correlation of Fe-Rich Defect Centre and Minority Carrier Lifetime in p-Type Multicrystalline Silicon. <i>Applied Mechanics and Materials</i> , <b>2013</b> , 440, 82-87	0.3	2
3	Multitude of progress and unmediated problems of solar PV in Bangladesh. <i>Renewable and Sustainable Energy Reviews</i> , <b>2012</b> , 16, 466-473	16.2	17
2	Advances in surface passivation of c-Si solar cells. <i>Materials for Renewable and Sustainable Energy</i> , <b>2012</b> , 1, 1	4.7	55
1	Hole utilization in solar hydrogen production. <i>Nature Reviews Chemistry</i> ,	34.6	1