Rajith Illathvalappil

List of Publications by Year
in descending order

30 papers	1,575 citations	471509 17 h-index	477307 29 g-index
30 all docs	30 docs citations	30 times ranked	2875 citing authors

#	Article	IF	Citations
1	Hydrogenâ€Bonded Organic Frameworks (HOFs): A New Class of Porous Crystalline Protonâ€Conducting Materials. Angewandte Chemie - International Edition, 2016, 55, 10667-10671.	13.8	334
2	Low Band Gap Benzimidazole COF Supported Ni₃N as Highly Active OER Catalyst. Advanced Energy Materials, 2016, 6, 1601189.	19.5	182
3	Nanoporous graphene by quantum dots removal from graphene and its conversion to a potential oxygen reduction electrocatalyst via nitrogen doping. Energy and Environmental Science, 2014, 7, 1059.	30.8	156
4	Imidazole-Linked Crystalline Two-Dimensional Polymer with Ultrahigh Proton-Conductivity. Journal of the American Chemical Society, 2019, 141, 14950-14954.	13.7	148
5	Graphene Oxide Sheathed ZIF-8 Microcrystals: Engineered Precursors of Nitrogen-Doped Porous Carbon for Efficient Oxygen Reduction Reaction (ORR) Electrocatalysis. ACS Applied Materials & Interfaces, 2016, 8, 29373-29382.	8.0	139
6	Nitrogen-Induced Surface Area and Conductivity Modulation of Carbon Nanohorn and Its Function as an Efficient Metal-Free Oxygen Reduction Electrocatalyst for Anion-Exchange Membrane Fuel Cells. Small, 2015, 11, 352-360.	10.0	83
7	Hydrogenâ€Bonded Organic Frameworks (HOFs): A New Class of Porous Crystalline Protonâ€Conducting Materials. Angewandte Chemie, 2016, 128, 10825-10829.	2.0	76
8	Carbon Nanohorn-Derived Graphene Nanotubes as a Platinum-Free Fuel Cell Cathode. ACS Applied Materials & Interfaces, 2015, 7, 24256-24264.	8.0	67
9	New approach of blending polymeric ionic liquid with polybenzimidazole (PBI) for enhancing physical and electrochemical properties. Journal of Materials Chemistry A, 2014, 2, 14449.	10.3	49
10	Surface-modified single wall carbon nanohorn as an effective electrocatalyst for platinum-free fuel cell cathodes. Journal of Materials Chemistry A, 2015, 3, 4361-4367.	10.3	47
11	Layer-separated MoS₂bearing reduced graphene oxide formed by an in situ intercalation-cum-anchoring route mediated by Co(OH)₂as a Pt-free electrocatalyst for oxygen reduction. Nanoscale, 2015, 7, 16729-16736.	5.6	36
12	Carbon Derived from Soft Pyrolysis of a Covalent Organic Framework as a Support for Small-Sized RuO₂ Showing Exceptionally Low Overpotential for Oxygen Evolution Reaction. ACS Omega, 2019, 4, 13465-13473.	3.5	33
13	Nitrogen-doped graphene anchored with mixed growth patterns of CuPt alloy nanoparticles as a highly efficient and durable electrocatalyst for the oxygen reduction reaction in an alkaline medium. Nanoscale, 2017, 9, 9009-9017.	5.6	25
14	Layer-separated distribution of nitrogen doped graphene by wrapping on carbon nitride tetrapods for enhanced oxygen reduction reactions in acidic medium. Chemical Communications, 2014, 50, 13769-13772.	4.1	24
15	Preparation and investigations of ABPBI membrane for HT-PEMFC by immersion precipitation method. Journal of Membrane Science, 2018, 564, 211-217.	8.2	22
16	Hierarchical Nanoflower Arrays of Co₉S₈â€Ni₃S₂ on Nickel Foam: Aâ€‰Highly Efficient Binderâ€Free Electrocatalyst for Overall Water Splitting. Chemistry - A European Journal, 2020, 26, 7900-7911.	3.3	22
17	Melamine formaldehydeâ€“metal organic gel interpenetrating polymer network derived intrinsic Feâ€“N-doped porous graphitic carbon electrocatalysts for oxygen reduction reaction. New Journal of Chemistry, 2018, 42, 18690-18701.	2.8	19
18	Layered TiO₂ Nanosheetâ€Supported NiCo₂O₄ Nanoparticles as Bifunctional Electrocatalyst for Overall Water Splitting. ChemElectroChem, 2018, 5, 4000-4007.	3.4	18

#	Article	IF	Citations
19	NiCo₂O₄ nanoarray on CNT sponge: a bifunctional oxygen electrode material for rechargeable Znâ€“air batteries. Nanoscale Advances, 2019, 1, 3243-3251.	4.6	16
20	Coexisting Few-Layer Assemblies of NiO and MoO₃ Deposited on Vulcan Carbon as an Efficient and Durable Electrocatalyst for Water Oxidation. ACS Applied Energy Materials, 2019, 2, 4987-4998.	5.1	15
21	Template assisted synthesis of Ni,N co-doped porous carbon from Ni incorporated ZIF-8 frameworks for electrocatalytic oxygen reduction reaction. New Journal of Chemistry, 2020, 44, 12343-12354.	2.8	15
22	Chitosan Intercalated Metal Organic Gel as a Green Precursor of Fe Entrenched and Fe Distributed N-Doped Mesoporous Graphitic Carbon for Oxygen Reduction Reaction. ChemistrySelect, 2017, 2, 8762-8770.	1.5	12
23	Water mediated proton conductance in a hydrogen-bonded Ni(<scp>ii</scp>)-bipyridine-glycoluril chloride self-assembled framework. CrystEngComm, 2018, 20, 1094-1100.	2.6	11
24	Morphological Ensembles of Nâ€Ðoped Porous Carbon Derived from ZIFâ€8/Feâ€Graphene Nanocomposites: Processing and Electrocatalytic Studies. ChemistrySelect, 2018, 3, 8688-8697.	1.5	8
25	Synthesis of a Highly Electron-Deficient, Water-Stable, Large Ionic Box: Multielectron Accumulation and Proton Conductivity. Organic Letters, 2022, 24, 3038-3042.	4.6	5
26	Fe3+ stabilized 3D cross-linked glycine-melamine formaldehyde networks as precursor for highly efficient oxygen reduction catalyst in alkaline media. Materials Letters, 2020, 264, 127365.	2.6	4
27	Understanding the electron transfer process in ZnOâ€“naphthol azobenzoic acid composites from photophysical characterisation. Physical Chemistry Chemical Physics, 2016, 18, 22179-22187.	2.8	3
28	Co 9 S 8 Nanoparticleâ€Supported Nitrogenâ€doped Carbon as a Robust Catalyst for Oxygen Reduction Reaction in Both Acidic and Alkaline Conditions. ChemElectroChem, 2020, 7, 3123-3134.	3.4	3
29	Enhanced proton conductivity in amino acid based self-assembled non-porous hydrogen-bonded organic frameworks. Chemical Communications, 2022, , .	4.1	2
30	Ultrahigh Ionic Conduction in Water-Stable Close-Packed Metal-Carbonate Frameworks. Inorganic Chemistry, 2017, 56, 9710-9715.	4.0	1