

# Moni Datta

## List of Publications by Year in descending order

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49  
papers

2,845  
citations

172457

29  
h-index

206112

48  
g-index

52  
all docs

52  
docs citations

52  
times ranked

4442  
citing authors

#	ARTICLE	IF	CITATIONS
1	Constitutional under-potential plating (CUP) – New insights for predicting the morphological stability of deposited lithium anodes in lithium metal batteries. <i>Journal of Power Sources</i> , 2020, 467, 228243.	7.8	7
2	Electrochemically active and robust cobalt doped copper phosphosulfide electro-catalysts for hydrogen evolution reaction in electrolytic and photoelectrochemical water splitting. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 7855-7871.	7.1	37
3	Active and robust novel bilayer photoanode architectures for hydrogen generation via direct non-electric bias induced photo-electrochemical water splitting. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 13158-13176.	7.1	22
4	Cobalt based nanostructured alloys: Versatile high performance robust hydrogen evolution reaction electro-catalysts for electrolytic and photo-electrochemical water splitting. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 17049-17062.	7.1	35
5	Silicon–Carbon Core–Shell Hollow Nanotubular Configuration High-Performance Lithium-Ion Anodes. <i>Journal of Physical Chemistry C</i> , 2017, 121, 9662-9671.	3.1	29
6	Highly active robust oxide solid solution electro-catalysts for oxygen reduction reaction for proton exchange membrane fuel cell and direct methanol fuel cell cathodes. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 24079-24089.	7.1	14
7	Water-soluble-template-derived nanoscale silicon nanoflake and nano-rod morphologies: Stable architectures for lithium-ion battery anodes. <i>Nano Research</i> , 2017, 10, 4284-4297.	10.4	7
8	Fluorine substituted (Mn,Ir)O <sub>2</sub> :F high performance solid solution oxygen evolution reaction electro-catalysts for PEM water electrolysis. <i>RSC Advances</i> , 2017, 7, 17311-17324.	3.6	53
9	Pulsed Current Electrodeposition of Silicon Thin Films Anodes for Lithium Ion Battery Applications. <i>Inorganics</i> , 2017, 5, 27.	2.7	11
10	Vanadium nitride supercapacitors: Effect of Processing Parameters on electrochemical charge storage behavior. <i>Electrochimica Acta</i> , 2016, 207, 37-47.	5.2	62
11	Study of fluorine doped (Nb,Ir)O <sub>2</sub> solid solution electro-catalyst powders for proton exchange membrane based oxygen evolution reaction. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2016, 212, 101-108.	3.5	18
12	Noble metal-free bifunctional oxygen evolution and oxygen reduction acidic media electro-catalysts. <i>Scientific Reports</i> , 2016, 6, 28367.	3.3	94
13	Flexible sulfur wires (Flex-SWs) – A new versatile platform for lithium-sulfur batteries. <i>Electrochimica Acta</i> , 2016, 212, 286-293.	5.2	12
14	Vertically aligned nitrogen doped (Sn,Nb)O <sub>2</sub> nanotubes – Robust photoanodes for hydrogen generation by photoelectrochemical water splitting. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2016, 208, 1-14.	3.5	25
15	Nanostructured robust cobalt metal alloy based anode electro-catalysts exhibiting remarkably high performance and durability for proton exchange membrane fuel cells. <i>Journal of Materials Chemistry A</i> , 2015, 3, 14015-14032.	10.3	27
16	High performance and durable nanostructured TiN supported Pt <sub>50</sub> –Ru <sub>50</sub> anode catalyst for direct methanol fuel cell (DMFC). <i>Journal of Power Sources</i> , 2015, 293, 437-446.	7.8	88
17	Effects of grain refinement on the biocorrosion and in vitro bioactivity of magnesium. <i>Materials Science and Engineering C</i> , 2015, 57, 294-303.	7.3	66
18	Synthesis and electrochemical study of Mg <sub>1.5</sub> MnO <sub>3</sub> : A defect spinel cathode for rechargeable magnesium battery. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2015, 202, 8-14.	3.5	9

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19	WO <sub>3</sub> based solid solution oxide “ promising proton exchange membrane fuel cell anode electro-catalyst. Journal of Materials Chemistry A, 2015, 3, 18296-18309.	10.3	28
20	Nitrogen and cobalt co-doped zinc oxide nanowires “ Viable photoanodes for hydrogen generation via photoelectrochemical water splitting. Journal of Power Sources, 2015, 299, 11-24.	7.8	72
21	Guar gum: Structural and electrochemical characterization of natural polymer based binder for silicon“carbon composite rechargeable Li-ion battery anodes. Journal of Power Sources, 2015, 298, 331-340.	7.8	87
22	Nanostructured (Ir,Sn)O <sub>2</sub> :F “ Oxygen Evolution Reaction Anode Electro-Catalyst Powders for PEM Based Water Electrolysis. Journal of the Electrochemical Society, 2014, 161, F868-F875.	2.9	20
23	A Complexed Sol-Gel (CSG) Approach to High Surface Area (HSA) Durable Ultra Active Platinum-Ruthenium Electro-Catalysts for Direct Methanol Fuel Cells. Journal of the Electrochemical Society, 2014, 161, F1053-F1060.	2.9	2
24	Heterostructures for Improved Stability of Lithium Sulfur Batteries. Journal of the Electrochemical Society, 2014, 161, A1173-A1180.	2.9	8
25	Rechargeable magnesium battery: Current status and key challenges for the future. Progress in Materials Science, 2014, 66, 1-86.	32.8	538
26	High performance fluorine doped (Sn,Ru)O <sub>2</sub> oxygen evolution reaction“electro-catalysts for proton exchange membrane based water electrolysis. Journal of Power Sources, 2014, 245, 362-370.	7.8	42
27	High energy mechano-chemical milling: Convenient approach to synthesis of LiMn <sub>1.5</sub> Ni <sub>0.5</sub> O <sub>4</sub> high voltage cathode for lithium ion batteries. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2014, 190, 119-125.	3.5	7
28	A Convenient Approach to Mo <sub>6</sub> S <sub>8</sub> Chevrel Phase Cathode for Rechargeable Magnesium Battery. Journal of the Electrochemical Society, 2014, 161, A593-A598.	2.9	76
29	Nanostructured F doped IrO <sub>2</sub> electro-catalyst powders for PEM based water electrolysis. Journal of Power Sources, 2014, 269, 855-865.	7.8	43
30	Fluorine doped (Ir,Sn,Nb)O <sub>2</sub> anode electro-catalyst for oxygen evolution via PEM based water electrolysis. International Journal of Hydrogen Energy, 2014, 39, 664-674.	7.1	47
31	Electrochemical properties of a new nanocrystalline NaMn <sub>2</sub> O <sub>4</sub> cathode for rechargeable sodium ion batteries. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2014, 188, 1-7.	3.5	20
32	High performance robust F-doped tin oxide based oxygen evolution electro-catalysts for PEM based water electrolysis. Journal of Materials Chemistry A, 2013, 1, 4026.	10.3	66
33	Novel F-doped IrO <sub>2</sub> oxygen evolution electrocatalyst for PEM based water electrolysis. Journal of Power Sources, 2013, 222, 313-317.	7.8	50
34	Tin and graphite based nanocomposites: Potential anode for sodium ion batteries. Journal of Power Sources, 2013, 225, 316-322.	7.8	242
35	A Simple Low Temperature Synthesis of Nanostructured Vanadium Nitride for Supercapacitor Applications. Journal of the Electrochemical Society, 2013, 160, A2195-A2206.	2.9	55
36	A Scientific Study of Current Collectors for Mg Batteries in Mg(AlCl <sub>2</sub> EtBu) <sub>2</sub> /THF Electrolyte. Journal of the Electrochemical Society, 2013, 160, A351-A355.	2.9	80

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37	Biocompatible Sol-gel Based Nanostructured Hydroxyapatite Coatings on Nano-porous SiC. , 2012, , 333-349.		0
38	Novel (Ir,Sn,Nb)O <sub>2</sub> anode electrocatalysts with reduced noble metal content for PEM based water electrolysis. International Journal of Hydrogen Energy, 2012, 37, 3001-3013.	7.1	64
39	Novel sol-gel derived calcium phosphate coatings on Mg <sub>4</sub> Y alloy. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2011, 176, 1679-1689.	3.5	47
40	Structure and thermal stability of biodegradable Mg-Zn-Ca based amorphous alloys synthesized by mechanical alloying. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2011, 176, 1637-1643.	3.5	57
41	Amorphous silicon-carbon based nano-scale thin film anode materials for lithium ion batteries. Electrochimica Acta, 2011, 56, 4717-4723.	5.2	122
42	Sol-gel synthesis of Pt-Ru-Os-Ir based anode electro-catalysts for direct methanol fuel cells. Journal of Alloys and Compounds, 2010, 506, 698-702.	5.5	20
43	Complexed sol-gel synthesis of improved Pt-Ru-Os-based anode electro-catalysts for direct methanol fuel cells. Journal of Physics and Chemistry of Solids, 2009, 70, 1019-1023.	4.0	12
44	In situ electrochemical synthesis of lithiated silicon-carbon based composites anode materials for lithium ion batteries. Journal of Power Sources, 2009, 194, 1043-1052.	7.8	114
45	In situ Raman microscopy during discharge of a high capacity silicon-carbon composite Li-ion battery negative electrode. Electrochemistry Communications, 2009, 11, 235-237.	4.7	71
46	Alloy Design for Long Term Cyclability of Si Based Anode Materials for Lithium Ion Batteries. SAE International Journal of Materials and Manufacturing, 2008, 1, 285-290.	0.3	0
47	Silicon-based composite anodes for Li-ion rechargeable batteries. Journal of Materials Chemistry, 2007, 17, 3229.	6.7	76
48	Silicon, graphite and resin based hard carbon nanocomposite anodes for lithium ion batteries. Journal of Power Sources, 2007, 165, 368-378.	7.8	73
49	Silicon and carbon based composite anodes for lithium ion batteries. Journal of Power Sources, 2006, 158, 557-563.	7.8	89