Oleg I Velikokhatnyi

List of Publications by Year
in descending order

35	1,746	331670 21	377865 34
papers	citations	h-index	g-index

36	36	36	2726
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	New approaches to high-energy-density cathode and anode architectures for lithium-sulfur batteries. , 2022, , 353-439.		0
2	Computational and experimental investigation of Co and S-doped Ni₂P as an efficient electrocatalyst for acid mediated proton exchange membrane hydrogen evolution reaction. Catalysis Science and Technology, 2021, 11, 861-873.	4.1	16
3	Highly Efficient Fluorine Doped Ni₂P Electrocatalysts for Alkaline Mediated Oxygen Evolution Reaction. Journal of the Electrochemical Society, 2021, 168, 064512.	2.9	10
4	Molybdenum doped bilayer photoanode nanotubes for enhanced photoelectrochemical water splitting. International Journal of Hydrogen Energy, 2021, , .	7.1	3
5	Computational and Experimental Study of Fluorine Doped (Mn_{1â€“x}Nb_x)O₂ Nanorod Electrocatalysts for Acid-Mediated Oxygen Evolution Reaction. ACS Applied Energy Materials, 2020, 3, 541-557.	5.1	30
6	Influence of Defects on Activity-Stability of Cu_{1.5}Mn_{1.5}O₄for Acid-Mediated Oxygen Evolution Reaction. Journal of the Electrochemical Society, 2020, 167, 144511.	2.9	7
7	Experimental and Theoretical Validation of High Efficiency and Robust Electrocatalytic Response of One-Dimensional (1D) (Mn,Ir)O₂:10F Nanorods for the Oxygen Evolution Reaction in PEM-Based Water Electrolysis. ACS Catalysis, 2019, 9, 2134-2157.	11.2	89
8	First principles study of the elastic properties of magnesium and iron based bio-resorbable alloys. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2018, 230, 20-23.	3.5	9
9	Electrochemically active and robust cobalt doped copper phosphosulfide electro-catalysts for hydrogen evolution reaction in electrolytic and photoelectrochemical water splitting. International Journal of Hydrogen Energy, 2018, 43, 7855-7871.	7.1	37
10	First report of vertically aligned (Sn,Ir)O2:F solid solution nanotubes: Highly efficient and robust oxygen evolution electrocatalysts for proton exchange membrane based water electrolysis. Journal of Power Sources, 2018, 392, 139-149.	7.8	33
11	Cobalt based nanostructured alloys: Versatile high performance robust hydrogen evolution reaction electro-catalysts for electrolytic and photo-electrochemical water splitting. International Journal of Hydrogen Energy, 2017, 42, 17049-17062.	7.1	35
12	Highly active robust oxide solid solution electro-catalysts for oxygen reduction reaction for proton exchange membrane fuel cell and direct methanol fuel cell cathodes. International Journal of Hydrogen Energy, 2017, 42, 24079-24089.	7.1	14
13	Fluorine substituted (Mn,Ir)O₂:F high performance solid solution oxygen evolution reaction electro-catalysts for PEM water electrolysis. RSC Advances, 2017, 7, 17311-17324.	3.6	53
14	Study of fluorine doped (Nb,Ir)O2 solid solution electro-catalyst powders for proton exchange membrane based oxygen evolution reaction. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2016, 212, 101-108.	3.5	18
15	Binder-jetting 3D printing and alloy development of new biodegradable Fe-Mn-Ca/Mg alloys. Acta Biomaterialia, 2016, 45, 375-386.	8.3	166
16	Noble metal-free bifunctional oxygen evolution and oxygen reduction acidic media electro-catalysts. Scientific Reports, 2016, 6, 28367.	3.3	94
17	Vertically aligned nitrogen doped (Sn,Nb)O2 nanotubes â€“ Robust photoanodes for hydrogen generation by photoelectrochemical water splitting. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2016, 208, 1-14.	3.5	25
18	Nanostructured robust cobalt metal alloy based anode electro-catalysts exhibiting remarkably high performance and durability for proton exchange membrane fuel cells. Journal of Materials Chemistry A, 2015, 3, 14015-14032.	10.3	27

#	Article	IF	Citations
19	WO₃ based solid solution oxide â€“ 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 â€“ Viable photoanodes for hydrogen generation via photoelectrochemical water splitting. Journal of Power Sources, 2015, 299, 11-24.	7.8	72
21	Nanostructured (Ir,Sn)O₂:F â€“ Oxygen Evolution Reaction Anode Electro-Catalyst Powders for PEM Based Water Electrolysis. Journal of the Electrochemical Society, 2014, 161, F868-F875.	2.9	20
22	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
23	Rechargeable magnesium battery: Current status and key challenges for the future. Progress in Materials Science, 2014, 66, 1-86.	32.8	538
24	High performance fluorine doped (Sn,Ru)O2 oxygen evolution reactionÂelectro-catalysts for proton exchange membrane based water electrolysis. Journal of Power Sources, 2014, 245, 362-370.	7.8	42
25	Nanostructured F doped IrO2 electro-catalyst powders for PEM based water electrolysis. Journal of Power Sources, 2014, 269, 855-865.	7.8	43
26	Fluorine doped (Ir,Sn,Nb)O2 anode electro-catalyst for oxygen evolution via PEM based water electrolysis. International Journal of Hydrogen Energy, 2014, 39, 664-674.	7.1	47
27	Fluorine-Doped IrO₂: A Potential Electrocatalyst for Water Electrolysis. Journal of Physical Chemistry C, 2013, 117, 20542-20547.	3.1	35
28	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
29	Theoretical Study of Magnesium and Zinc Tantalates and Niobates as Prospective Catalyst Supports for Water Electrolysis. Journal of the Electrochemical Society, 2012, 159, F607-F616.	2.9	5
30	Novel (Ir,Sn,Nb)O2 anode electrocatalysts with reduced noble metal content for PEM based water electrolysis. International Journal of Hydrogen Energy, 2012, 37, 3001-3013.	7.1	64
31	Exploring calcium tantalates and niobates as prospective catalyst supports for water electrolysis. Journal of Power Sources, 2012, 202, 190-199.	7.8	8
32	A CALPHAD study on the thermodynamic stability of calcium-, zinc-, and yttrium-doped magnesium in aqueous environments. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2011, 176, 1727-1732.	3.5	3
33	Ab-initio study of fluorine-doped tin dioxide: A prospective catalyst support for water electrolysis. Physica B: Condensed Matter, 2011, 406, 471-477.	2.7	24
34	First-principles studies on alloying and simplified thermodynamic aqueous chemical stability of calcium-, zinc-, aluminum-, yttrium- and iron-doped magnesium alloysâ˜†. Acta Biomaterialia, 2010, 6, 1698-1704.	8.3	69
35	Exploring tin tantalates and niobates as prospective catalyst supports for water electrolysis. Physica B: Condensed Matter, 2009, 404, 1737-1745.	2.7	14