Ana S Dobrota

List of Publications by Year
in descending order

29 papers	880 citations	394421 19 h-index	501196 28 g-index
29 all docs	29 docs citations	29 times ranked	1345 citing authors

#	Article	IF	Citations
1	The effect of surface modification by reduced graphene oxide on the electrocatalytic activity of nickel towards the hydrogen evolution reaction. Physical Chemistry Chemical Physics, 2015, 17, 26864-26874.	2.8	86
2	Atomic adsorption on graphene with a single vacancy: systematic DFT study through the periodic table of elements. Physical Chemistry Chemical Physics, 2018, 20, 858-865.	2.8	81
3	Atomic adsorption on pristine graphene along the Periodic Table of Elements â€“ From PBE to non-local functionals. Applied Surface Science, 2018, 436, 433-440.	6.1	61
4	A DFT study of the interplay between dopants and oxygen functional groups over the graphene basal plane â€“ implications in energy-related applications. Physical Chemistry Chemical Physics, 2017, 19, 8530-8540.	2.8	56
5	A general view on the reactivity of the oxygen-functionalized graphene basal plane. Physical Chemistry Chemical Physics, 2016, 18, 6580-6586.	2.8	54
6	Hydrogen Evolution Reaction-From Single Crystal to Single Atom Catalysts. Catalysts, 2020, 10, 290.	3.5	46
7	Improved catalysts for hydrogen evolution reaction in alkaline solutions through the electrochemical formation of nickel-reduced graphene oxide interface. Physical Chemistry Chemical Physics, 2017, 19, 13281-13293.	2.8	45
8	Functionalized graphene for sodium battery applications: the DFT insights. Electrochimica Acta, 2017, 250, 185-195.	5.2	43
9	Structural and electronic properties of V₂O₅ and their tuning by doping with 3d elements â€“ modelling using the DFT+U method and dispersion correction. Physical Chemistry Chemical Physics, 2018, 20, 13934-13943.	2.8	41
10	The Effects of a Low-Level Boron, Phosphorus, and Nitrogen Doping on the Oxygen Reduction Activity of Ordered Mesoporous Carbons. Electrocatalysis, 2015, 6, 498-511.	3.0	35
11	Oxidized graphene as an electrode material for rechargeable metal-ion batteries â€“ a DFT point of view. Electrochimica Acta, 2015, 176, 1092-1099.	5.2	33
12	Investigation of electrocatalytic activity on a N-doped reduced graphene oxide surface for the oxygen reduction reaction in an alkaline medium. International Journal of Hydrogen Energy, 2018, 43, 12129-12139.	7.1	33
13	Altering the reactivity of pristine, N- and P-doped graphene by strain engineering: A DFT view on energy related aspects. Applied Surface Science, 2020, 514, 145937.	6.1	33
14	As a single atom Pd outperforms Pt as the most active co-catalyst for photocatalytic H2 evolution. IScience, 2021, 24, 102938.	4.1	33
15	Surface pourbaix plots of M@N4-graphene single-atom electrocatalysts from density functional theory thermodynamic modeling. Electrochimica Acta, 2022, 412, 140155.	5.2	29
16	Stabilization of alkali metal ions interaction with OH-functionalized graphene via clustering of OH groups â€“ implications in charge storage applications. RSC Advances, 2016, 6, 57910-57919.	3.6	25
17	Atomically Thin Metal Films on Foreign Substrates: From Lattice Mismatch to Electrocatalytic Activity. ACS Catalysis, 2019, 9, 3467-3481.	11.2	25
18	A study of ordered mesoporous carbon doped with Co and Ni as a catalyst of oxygen reduction reaction in both alkaline and acidic media. Surface and Coatings Technology, 2018, 349, 511-521.	4.8	24

#	Article	IF	Citations
19	Simple routes for the improvement of hydrogen evolution activity of Ni-Mo catalysts: From sol-gel derived powder catalysts to graphene supported co-electrodeposits. International Journal of Hydrogen Energy, 2018, 43, 16846-16858.	7.1	22
20	Lattice mismatch as the descriptor of segregation, stability and reactivity of supported thin catalyst films. Physical Chemistry Chemical Physics, 2018, 20, 1524-1530.	2.8	17
21	Sodium storage via single epoxy group on graphene â€“ The role of surface doping. Electrochimica Acta, 2019, 297, 523-528.	5.2	14
22	Theoretical analysis of doped graphene as cathode catalyst in Li-O2 and Na-O2 batteries â€“ the impact of the computational scheme. Electrochimica Acta, 2020, 354, 136735.	5.2	11
23	Enhancement of hydrogen evolution reaction kinetics in alkaline media by fast galvanic displacement of nickel with rhodium â€“ From smooth surfaces to electrodeposited nickel foams. Electrochimica Acta, 2022, 414, 140214.	5.2	10
24	A Pt/MnV2O6 nanocomposite for the borohydride oxidation reaction. Journal of Energy Chemistry, 2021, 55, 428-436.	12.9	8
25	When supporting electrolyte matters â€“ Tuning capacitive response of graphene oxide via electrochemical reduction in alkali and alkaline earth metal chlorides. Electrochimica Acta, 2019, 297, 112-117.	5.2	7
26	What Is the Real State of Single-Atom Catalysts under Electrochemical Conditionsâ€”From Adsorption to Surface Pourbaix Plots?. Catalysts, 2021, 11, 1207.	3.5	6
27	A Review of Theoretical Studies on Functionalized Graphene for Electrochemical Energy Conversion and Storage Applications. Current Physical Chemistry, 2017, 6, 244-265.	0.2	1
28	Effects of alkali metal cations on oxygen reduction on N-containing carbons viewed as the interplay between capacitive and electrocatalytic properties: Experiment and theory. Journal of the Serbian Chemical Society, 2019, 84, 901-914.	0.8	1
29	First-principles analysis of aluminium interaction with nitrogen-doped graphene nanoribbons â€“ from adatom bonding to various potential applications. Materials Today Communications, 2022, 31, 103388.	1.9	0