Do Hwan Kim

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/3820863/publications.pdf

Version: 2024-02-01

48 papers	1,608 citations	394286 19 h-index	302012 39 g-index
49 all docs	49 docs citations	49 times ranked	1109 citing authors

#	Article	IF	Citations
1	Rational design of multifunctional electrocatalyst: An approach towards efficient overall water splitting and rechargeable flexible solid-state zincâ€“air battery. Applied Catalysis B: Environmental, 2022, 300, 120752.	10.8	150
2	Structural, electronic, and electrocatalytic evaluation of spinel transition metal sulfide supported reduced graphene oxide. Journal of Materials Chemistry A, 2022, 10, 1999-2011.	5.2	51
3	Reduction of Transition-Metal Columbite-Tantalite as a Highly Efficient Electrocatalyst for Water Splitting. ACS Applied Materials & Interfaces, 2022, 14, 15090-15102.	4.0	3
4	Atomic Heterointerface Engineering of Ni₂Pâ€NiSe₂ Nanosheets Coupled ZnPâ€Based Arrays for Highâ€Efficiency Solarâ€Assisted Water Splitting. Advanced Functional Materials, 2022, 32, .	7.8	49
5	Chromium-rich Cr_xIr_{1â^'x}O₂ wire-in-tube alloys for boosted water oxidation with long standing electrocatalytic activity. Journal of Materials Chemistry A, 2022, 10, 13803-13813.	5.2	10
6	A single atom Ir doped heterophase of a NiMoP-NiMoP_xO_y ultrathin layer assembled on CNTs-graphene for high-performance water splitting. Journal of Materials Chemistry A, 2022, 10, 14604-14612.	5.2	12
7	Rational Engineering Co_xO_y Nanosheets via Phosphorous and Sulfur Dualâ€Coupling for Enhancing Water Splitting and Znâ€“Air Battery. Advanced Functional Materials, 2021, 31, 2007822.	7.8	44
8	Hierarchical Co and Nb dual-doped MoS2 nanosheets shelled micro-TiO2 hollow spheres as effective multifunctional electrocatalysts for HER, OER, and ORR. Nano Energy, 2021, 82, 105750.	8.2	220
9	Singleâ€Atom Coâ€Decorated MoS₂ Nanosheets Assembled on Metal Nitride Nanorod Arrays as an Efficient Bifunctional Electrocatalyst for pHâ€Universal Water Splitting. Advanced Functional Materials, 2021, 31, 2100233.	7.8	108
10	3D nickel molybdenum oxyselenide (Ni1-xMoxOSe) nanoarchitectures as advanced multifunctional catalyst for Zn-air batteries and water splitting. Applied Catalysis B: Environmental, 2021, 286, 119909.	10.8	72
11	Novel core-shell CuMo-oxynitride@N-doped graphene nanohybrid as multifunctional catalysts for rechargeable zinc-air batteries and water splitting. Nano Energy, 2021, 85, 105987.	8.2	89
12	Bifunctional Catalyst Derived from Sulfur-Doped VMoO_x Nanolayer Shelled Co Nanosheets for Efficient Water Splitting. ACS Applied Materials & Interfaces, 2021, 13, 42944-42956.	4.0	26
13	Ruthenium single atoms implanted continuous MoS2-Mo2C heterostructure for high-performance and stable water splitting. Nano Energy, 2021, 88, 106277.	8.2	68
14	Activated CuNi@Ni Core@shell structures via oxygen and nitrogen dual coordination assembled on 3D CNTs-graphene hybrid for high-performance water splitting. Applied Catalysis B: Environmental, 2021, 294, 120263.	10.8	44
15	Rational construction of Au@Co2N0.67 nanodots-interspersed 3D interconnected N-graphene hollow sphere network for efficient water splitting and Zn-air battery. Nano Energy, 2021, 89, 106420.	8.2	26
16	Theoretical study of ethyl alcohol adsorbed on a germanium (100) surface. Bulletin of the Korean Chemical Society, 2021, 42, 1585.	1.0	0
17	Highly Effective Freshwater and Seawater Electrolysis Enabled by Atomic Rhâ€Modulated Coâ€CoO Lateral Heterostructures. Small, 2021, 17, e2103826.	5.2	47
18	Density Functional Theory Calculations of the Adsorption of Cytosine on Si(100). Bulletin of the Korean Chemical Society, 2020, 41, 1060-1067.	1.0	1

#	Article	IF	Citations
19	Hierarchical 3D Oxygenated Cobalt Vanadium Selenide Nanosheets as Advanced Electrode for Flexible Zincâ€“Cobalt and Zincâ€“Air Batteries. Small, 2020, 16, e2004661.	5.2	54
20	Molybdenum and Phosphorous Dual Doping in Cobalt Monolayer Interfacial Assembled Cobalt Nanowires for Efficient Overall Water Splitting. Advanced Functional Materials, 2020, 30, 2002533.	7.8	107
21	Rational Design of Core@shell Structured CoS_x@Cu₂MoS₄ Hybridized MoS₂/N,Sâ€Codoped Graphene as Advanced Electrocatalyst for Water Splitting and Znâ€Air Battery. Advanced Energy Materials, 2020, 10, 1903289.	10.2	179
22	Temperature Dependence of the Reaction HClâ€‰+â€‰OHâ€‰â†'â€‰Clâ€‰+â€‰H2O between 140 and 1100â€‰K. Bulletin of the Chemical Society, 2019, 40, 93-101.	1.0	1
23	Nitrogen Atom Abstraction of Nitrogen Chemisorbed on W(100) Surface. Bulletin of the Korean Chemical Society, 2018, 39, 231-238.	1.0	0
24	Chemisorption of Ethanol on Ge(100) Surface. Journal of Physical Chemistry C, 2018, 122, 15352-15358.	1.5	4
25	Functionalization of Ge(1â€¯0â€¯0) surface by adsorption of phenylthiol. Applied Surface Science, 2018, 456, 908-914.	3.1	2
26	Competing Reactions of Vinyl and Hydroxyl Groups of Vinyl Alcohol on Ge(100): Effects of Vinyl Substituent on Dissociative Adsorption. Journal of Physical Chemistry C, 2018, 122, 17319-17327.	1.5	1
27	Dissociative adsorption of a multifunctional compound on a semiconductor surface: a theoretical study of the adsorption of hydroxylamine on Ge(100). Physical Chemistry Chemical Physics, 2018, 20, 15335-15343.	1.3	3
28	A first-principles study on the adsorption of ethylenediamine on Ge(100). Physical Chemistry Chemical Physics, 2017, 19, 16881-16887.	1.3	4
29	Adsorption Structures of Acetic Acid on Ge(100) at High Coverage. Journal of Physical Chemistry C, 2017, 121, 18584-18592.	1.5	3
30	Molecular tuning of amino acids to form two-dimensional molecular networks driven by conformational preorganization. Chemical Communications, 2016, 52, 14055-14058.	2.2	5
31	Chemical Reaction of Benzoic Acid with Ge(100): Effect of a Phenyl Substituent. Journal of Physical Chemistry C, 2016, 120, 14742-14748.	1.5	5
32	Dissociative adsorption of guanine on Ge(100). Chemical Communications, 2015, 51, 12815-12818.	2.2	10
33	Functional Group-Selective Adsorption Using Scanning Tunneling Microscopy. ACS Nano, 2012, 6, 3597-3603.	7.3	6
34	Adsorption Structure and Reaction Mechanism of Purine on Ge(100) Studied by Scanning Tunneling Microscopy and Theoretical Calculations. Journal of Physical Chemistry C, 2012, 116, 6953-6959.	1.5	12
35	Chemisorption of cis-2-butene-1,4-diol on Si(100): A theoretical investigation. Surface Science, 2012, 606, 1268-1273.	0.8	3
36	Hydrogen-Bonded Amino Acid Network of Histidine on Ge(100). Journal of Physical Chemistry C, 2011, 115, 4636-4641.	1.5	15

#	Article	IF	Citations
37	Subsurface Incorporation of Co Atoms into Si(100). Journal of Physical Chemistry C, 2011, 115, 15467-15470.	1.5	7
38	Atomic and electronic structure of styrene on Ge(100). Surface Science, 2011, 605, 1438-1444.	0.8	3
39	Atomic and electronic structure of methanol on Ge(100). Surface Science, 2010, 604, 129-135.	0.8	22
40	Creation and annihilation of single atom vacancy during subsurface diffusion. Physical Review B, 2010, 82, .	1.1	8
41	Discrimination of Chiral Adsorption Configurations: Styrene on Germanium(100). Journal of Physical Chemistry C, 2009, 113, 1426-1432.	1.5	10
42	Structural Properties of Norbornene Monolayers on Ge(100). Journal of Physical Chemistry C, 2009, 113, 14311-14315.	1.5	2
43	Atomic and Electronic Structure of Pyrrole on Ge(100). Journal of Physical Chemistry C, 2008, 112, 7412-7419.	1.5	17
44	Dissociative Chemisorption of Methanol on Ge(100). Journal of Physical Chemistry C, 2007, 111, 15013-15019.	1.5	37
45	Bidentate Structures of Acetic Acid on Ge(100):â€‰ The Role of Carboxyl Oxygen. Journal of Physical Chemistry C, 2007, 111, 5941-5945.	1.5	23
46	Chemical Reactions and Adsorption Geometries of Pyrrole on Ge(100). Journal of Physical Chemistry B, 2006, 110, 7938-7943.	1.2	13
47	Atomic and electronic structure of acetic acid on Ge(100). Surface Science, 2006, 600, 3629-3632.	0.8	19
48	Structure of Pyrrole on Ge(100). Japanese Journal of Applied Physics, 2006, 45, 2148-2150.	0.8	2