Shansheng Yu

List of Publications by Year
in descending order

72 papers	2,662 citations	236612 25 h-index	189595 50 g-index
73 all docs	73 docs citations	73 times ranked	4134 citing authors

#	Article	IF	Citations
1	Theoretical insight into surface structures of pentlandite toward hydrogen evolution. Journal of Colloid and Interface Science, 2022, 607, 645-654.	5.0	13
2	Molybdenum disulfide loading on a Z-scheme graphitic carbon nitride and lanthanum nickelate heterojunction for enhanced photocatalysis: Interfacial charge transfer and mechanistic insights. Journal of Colloid and Interface Science, 2022, 611, 684-694.	5.0	55
3	Structural Evolution of a PtRh Nanodendrite Electrocatalyst and Its Ultrahigh Durability toward Oxygen Reduction Reaction. ACS Catalysis, 2022, 12, 3302-3308.	5.5	21
4	Investigation on the demetallation of Fe-N-C for oxygen reduction reaction: The influence of structure and structural evolution of active site. Applied Catalysis B: Environmental, 2022, 309, 121290.	10.8	26
5	Solid phase microwave-assisted fabrication of Fe-doped ZIF-8 for single-atom Fe-N-C electrocatalysts on oxygen reduction. Journal of Energy Chemistry, 2021, 54, 579-586.	7.1	52
6	Effect of an external electric field, aqueous solution and specific adsorption on segregation of Pt_{ML}/M_{ML}/Pt(111) (M = Cu, Pd, Au): a DFT study. Physical Chemistry Chemical Physics, 2021, 23, 1584-1589.	1.3	5
7	Feâ€“Nâ€“C with Intensified Exposure of Active Sites for Highly Efficient and Stable Direct Methanol Fuel Cells. ACS Applied Materials & Interfaces, 2021, 13, 16279-16288.	4.0	14
8	Synergistic effect of S-bridged Fe-Ni group on hydrogen evolution for pentlandite. Journal of Colloid and Interface Science, 2021, 593, 116-124.	5.0	13
9	Highly Conductive Amorphous Pentlandite Anchored with Ultrafine Platinum Nanoparticles for Efficient pHâ€Universal Hydrogen Evolution Reaction. Advanced Functional Materials, 2021, 31, 2105372.	7.8	33
10	Facile Preparation of VO₂ Films with Enhanced Luminous Transmittance and Infrared Modulation Ability. ACS Applied Electronic Materials, 2021, 3, 4793-4802.	2.0	6
11	Unlock the potential of Li4Ti5O12 for high-voltage/long-cycling-life and high-safety batteries: Dual-ion architecture superior to lithium-ion storage. Journal of Energy Chemistry, 2020, 44, 13-18.	7.1	46
12	Two-dimensional Ï€-conjugated metal bis(dithiolene) nanosheet: A promising anchoring material for lithium-sulfur batteries. Computational Materials Science, 2020, 171, 109228.	1.4	15
13	Theoretical study of the strain effect on the oxygen reduction reaction activity and stability of FeNC catalyst. New Journal of Chemistry, 2020, 44, 6818-6824.	1.4	12
14	Iron, Copper and Nitrogen Coâ€doped Carbon with Enhanced Electrocatalytic Activity towards Oxygen Reduction. ChemElectroChem, 2020, 7, 3116-3122.	1.7	3
15	Metal distribution in iron-nickel sulfide mineral pentlandite: First-principles study. Chemical Physics Letters, 2019, 736, 136786.	1.2	14
16	Interstitial Hydrogen Atom Modulation to Boost Hydrogen Evolution in Pd-Based Alloy Nanoparticles. ACS Nano, 2019, 13, 12987-12995.	7.3	67
17	Heterostructured Ag/gâ€C₃N₄/TiO₂ with enhanced visible light photocatalytic performances. Journal of Chemical Technology and Biotechnology, 2019, 94, 3806-3814.	1.6	38
18	Insight into the role of Niâ€“Fe dual sites in the oxygen evolution reaction based on atomically metal-doped polymeric carbon nitride. Journal of Materials Chemistry A, 2019, 7, 14001-14010.	5.2	97

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19	Suppressing the Pd-C interaction through B-doping for highly efficient oxygen reduction. Carbon, 2019, 149, 370-379.	5.4	32
20	Substituent Effect of Imidazolium Ionic Liquid: A Potential Strategy for High Coulombic Efficiency Al Battery. Journal of Physical Chemistry C, 2019, 123, 11522-11528.	1.5	16
21	Doping MoS2 monolayer with nonmetal atoms to tune its electronic and magnetic properties, and chemical activity: a computational study. New Journal of Chemistry, 2019, 43, 5766-5772.	1.4	9
22	Theoretical insight into the hydrogen adsorption on MoS2 (MoSe2) monolayer as a function of biaxial strain/external electric field. Applied Surface Science, 2019, 478, 857-865.	3.1	38
23	The mechanism and activity of oxygen reduction reaction on single atom doped graphene: a DFT method. RSC Advances, 2019, 9, 7086-7093.	1.7	31
24	Single-atom cobalt array bound to distorted 1T MoS2 with ensemble effect for hydrogen evolution catalysis. Nature Communications, 2019, 10, 5231.	5.8	371
25	Revealing the Intrinsic Peroxidase-Like Catalytic Mechanism of Heterogeneous Single-Atom Coâ€“MoS2. Nano-Micro Letters, 2019, 11, 102.	14.4	114
26	Enhanced Stability of Pt_{ML}/M_{ML}/WC(0001) Multilayer Alloys under Electrochemical Conditions: A First Principle Study. ACS Applied Materials & Interfaces, 2018, 10, 15704-15711.	4.0	7
27	Synthesis of ultrathin wrinkle-free PdCu alloy nanosheets for modulating d-band electrons for efficient methanol oxidation. Journal of Materials Chemistry A, 2018, 6, 8531-8536.	5.2	70
28	Anti-Site Defects-Assisted Enhancement of Electrogenerated Chemiluminescence from in Situ Mn²⁺-Doped Supertetrahedral Chalcogenide Nanoclusters. ACS Applied Materials & Interfaces, 2018, 10, 38223-38229.	4.0	16
29	The catalytic activity and mechanism of oxygen reduction reaction on P-doped MoS₂. Physical Chemistry Chemical Physics, 2018, 20, 18184-18191.	1.3	22
30	Doping Cu Atoms Excel as the Functional Material to Tune the Wettability for TMeNs Hard Coating. Advanced Materials Interfaces, 2018, 5, 1800391.	1.9	4
31	Precise mono-Cu⁺ ion doping enhanced electrogenerated chemiluminescence from Cdâ€“Inâ€“S supertetrahedral chalcogenide nanoclusters for dopamine detection. Nanoscale, 2018, 10, 15932-15937.	2.8	22
32	Free-Standing Single-Molecule Thick Crystals Consisting of Linear Long-Chain Polymers. Nano Letters, 2017, 17, 1655-1659.	4.5	10
33	Engineering Pt/Pd Interfacial Electronic Structures for Highly Efficient Hydrogen Evolution and Alcohol Oxidation. ACS Applied Materials & Interfaces, 2017, 9, 18008-18014.	4.0	111
34	Pd-loaded SnO2 ultrathin nanorod-assembled hollow microspheres with the significant improvement for toluene detection. Sensors and Actuators B: Chemical, 2017, 243, 465-474.	4.0	42
35	Improving Photocatalytic Performance from Bi2WO6@MoS2/graphene Hybrids via Gradual Charge Transferred Pathway. Scientific Reports, 2017, 7, 3637.	1.6	53
36	Unlocking the Electrocatalytic Activity of Chemically Inert Amorphous Carbon-Nitrogen for Oxygen Reduction: Discerning and Refactoring the Chaotic Bonds. ChemElectroChem, 2017, 4, 1268-1268.	1.7	2

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37	Two-dimensional polyaniline nanosheets via liquid-phase exfoliation. Chinese Physics B, 2017, 26, 048102.	0.7	0
38	Unlocking the Electrocatalytic Activity of Chemically Inert Amorphous Carbonâ€Nitrogen for Oxygen Reduction: Discerning and Refactoring Chaotic Bonds. ChemElectroChem, 2017, 4, 1269-1273.	1.7	24
39	A coupling effects of vacancy and Al (Ga, In) dopant on electronic structures of hexagonal boron nitride monolayer. Materials Research Express, 2017, 4, 116302.	0.8	9
40	Enhanced toluene sensing performances of Pd- loaded SnO2 cubic nanocages with porous nanoparticle-assembled shells. Sensors and Actuators B: Chemical, 2017, 241, 1121-1129.	4.0	42
41	Interaction of Rhodamine 6G molecules with graphene: a combined computationalâ€“experimental study. Physical Chemistry Chemical Physics, 2016, 18, 28418-28427.	1.3	13
42	R6G molecule induced modulation of the optical properties of reduced graphene oxide nanosheets for use in ultrasensitive SPR sensing. Scientific Reports, 2016, 6, 21254.	1.6	17
43	Fundamental insights into the electronic structure of zigzag MoS₂ nanoribbons. Physical Chemistry Chemical Physics, 2016, 18, 4675-4683.	1.3	16
44	Decoration of the inert basal plane of defect-rich MoS₂ with Pd atoms for achieving Pt-similar HER activity. Journal of Materials Chemistry A, 2016, 4, 4025-4031.	5.2	122
45	Multistep synthesis of non-spherical SnO 2 @SnO 2 yolk-shell cuboctahedra with nanoparticle-assembled porous structure for toluene detection. Sensors and Actuators B: Chemical, 2016, 231, 365-375.	4.0	32
46	Confinement of massless Dirac fermions in the graphene matrix induced by the B/N heteroatoms. Physical Chemistry Chemical Physics, 2015, 17, 5586-5593.	1.3	4
47	TM atoms on B/N doped defective graphene as a catalyst for oxygen reduction reaction: a theoretical study. RSC Advances, 2015, 5, 82804-82812.	1.7	18
48	Stabilization of Pt monolayer catalysts under harsh conditions of fuel cells. Journal of Chemical Physics, 2015, 142, 194710.	1.2	11
49	First-principles investigations on the adsorption and diffusion of carbon atoms on the surface and in the subsurface of Co (111) related to the growth of graphene. RSC Advances, 2014, 4, 34237.	1.7	7
50	Electronic and magnetic properties of nitrogen-doped graphene nanoribbons with grain boundary. RSC Advances, 2014, 4, 1503-1511.	1.7	7
51	Stability of Pt near surface alloys under electrochemical conditions: a model study. Physical Chemistry Chemical Physics, 2014, 16, 16615-16622.	1.3	20
52	Electronic properties of a patchwork of armchair graphene nanoribbon and triangular boron nitride nanoflake. Molecular Simulation, 2013, 39, 487-494.	0.9	3
53	Exploration of Defect Structures on Graphene. Journal of Nanoscience and Nanotechnology, 2013, 13, 1030-1034.	0.9	2
54	Physical Insight Into Substitutional N-Doped Graphene Nanoribbons With Armchair Edges. IEEE Nanotechnology Magazine, 2011, 10, 926-930.	1.1	2

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55	Field-Emission Mechanism of Island-Shaped Grapheneâ€“BN Nanocomposite. Journal of Physical Chemistry C, 2011, 115, 9471-9476.	1.5	15
56	Mechanical and electronâ€transport properties of graphene nanoribbons under tensile strain: A firstâ€principles study. Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 2328-2331.	0.8	14
57	Photovoltaic properties of graphene oxide sheets beaded with ZnO nanoparticles. Journal of Solid State Chemistry, 2011, 184, 881-887.	1.4	39
58	Electronic Properties of Nitrogen-Atom-Adsorbed Graphene Nanoribbons With Armchair Edges. IEEE Nanotechnology Magazine, 2010, 9, 243-247.	1.1	16
59	Nitrogen/Boron Doping Position Dependence of the Electronic Properties of a Triangular Graphene. ACS Nano, 2010, 4, 7619-7629.	7.3	86
60	Effect of N/B doping on the electronic and field emission properties for carbon nanotubes, carbon nanocones, and graphene nanoribbons. Nanoscale, 2010, 2, 1069.	2.8	149
61	Electronic Properties of Nitrogen-/Boron-Doped Graphene Nanoribbons With Armchair Edges. IEEE Nanotechnology Magazine, 2010, 9, 78-81.	1.1	46
62	Mechanical and electron transport properties of graphene nanoribbons under tensile strain: A first-principle study. , 2010, , .		0
63	First-principles calculations on the structure and electronic properties of boron doping zigzag single-walled carbon nanotubes. Science in China Series D: Earth Sciences, 2009, 52, 1219-1224.	0.9	6
64	Electronic and Field Emission Properties of Carbon Nanocones: A Density Functional Theory Investigation. IEEE Nanotechnology Magazine, 2009, 8, 153-158.	1.1	14
65	Formation Mechanism of Î²-Phase in PVDF/CNT Composite Prepared by the Sonication Method. Macromolecules, 2009, 42, 8870-8874.	2.2	300
66	Coulomb Repulsion at the Nanometer-Sized Contact: A Force Driving Superhydrophobicity, Superfluidity, Superlubricity, and Supersolidity. Journal of Physical Chemistry C, 2009, 113, 20009-20019.	1.5	67
67	Theoretical investigation on different effects of nitrogen and boron substitutional impurities on the structures and field emission properties for carbon nanotubes. Physica E: Low-Dimensional Systems and Nanostructures, 2008, 40, 890-893.	1.3	12
68	Oxidation of Graphene Nanoribbon by Molecular Oxygen. IEEE Nanotechnology Magazine, 2008, 7, 628-635.	1.1	15
69	Nature of Substitutional Impurity Atom B/N in Zigzag Single-Wall Carbon Nanotubes Revealed by First-Principle Calculations. IEEE Nanotechnology Magazine, 2006, 5, 595-598.	1.1	16
70	Electron spin resonance analysis of magnetic structures in La2/3Ca1/3MnO3. Journal of Magnetism and Magnetic Materials, 2005, 293, 782-786.	1.0	10
71	Crystal structures and magnetic properties of Feâ€“N thin films deposited by dc magnetron sputtering. Powder Diffraction, 2004, 19, 352-355.	0.4	7
72	Nature of substitutional impurity atom B/N in zigzag single-wall carbon nanotubes revealed by first principle calculations. , 0, , .		1