Ki Chang Kwon

List of Publications by Year in descending order

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64 papers

3,187 citations

147566 31 h-index 55 g-index

67 all docs

67 docs citations

times ranked

67

5025 citing authors

#	Article	IF	Citations
1	Increased Work Function in Fewâ€Layer Graphene Sheets via Metal Chloride Doping. Advanced Functional Materials, 2012, 22, 4724-4731.	7.8	242
2	Wafer-scale transferable molybdenum disulfide thin-film catalysts for photoelectrochemical hydrogen production. Energy and Environmental Science, 2016, 9, 2240-2248.	15.6	174
3	Enhanced Endurance Organolead Halide Perovskite Resistive Switching Memories Operable under an Extremely Low Bending Radius. ACS Applied Materials & Interfaces, 2017, 9, 30764-30771.	4.0	135
4	Highly selective and sensitive chemoresistive humidity sensors based on rGO/MoS ₂ van der Waals composites. Journal of Materials Chemistry A, 2018, 6, 5016-5024.	5.2	132
5	Ferroelectricity and Rashba Effect in a Two-Dimensional Dion-Jacobson Hybrid Organic–Inorganic Perovskite. Journal of the American Chemical Society, 2019, 141, 15972-15976.	6.6	113
6	Inhibition of Ion Migration for Reliable Operation of Organolead Halide Perovskiteâ€Based Metal/Semiconductor/Metal Broadband Photodetectors. Advanced Functional Materials, 2016, 26, 4213-4222.	7.8	112
7	In-Plane Ferroelectric Tin Monosulfide and Its Application in a Ferroelectric Analog Synaptic Device. ACS Nano, 2020, 14, 7628-7638.	7.3	106
8	p–p Heterojunction of Nickel Oxide-Decorated Cobalt Oxide Nanorods for Enhanced Sensitivity and Selectivity toward Volatile Organic Compounds. ACS Applied Materials & Samp; Interfaces, 2018, 10, 1050-1058.	4.0	103
9	Transition Metal Disulfide Nanosheets Synthesized by Facile Sonication Method for the Hydrogen Evolution Reaction. Journal of Physical Chemistry C, 2016, 120, 3929-3935.	1.5	101
10	Two-Dimensional NbS ₂ Gas Sensors for Selective and Reversible NO ₂ Detection at Room Temperature. ACS Sensors, 2019, 4, 2395-2402.	4.0	101
11	Atomically thin two-dimensional materials as hole extraction layers in organolead halide perovskite photovoltaic cells. Journal of Power Sources, 2016, 319, 1-8.	4.0	98
12	Work-Function Decrease of Graphene Sheet Using Alkali Metal Carbonates. Journal of Physical Chemistry C, 2012, 116, 26586-26591.	1.5	97
13	Synthesis of Atomically Thin Transition Metal Disulfides for Charge Transport Layers in Optoelectronic Devices. ACS Nano, 2015, 9, 4146-4155.	7.3	94
14	Energy Harvesting from Atmospheric Humidity by a Hydrogel-Integrated Ferroelectric-Semiconductor System. Joule, 2020, 4, 176-188.	11.7	94
15	Self-Powered Photodetector Using Two-Dimensional Ferroelectric Dion–Jacobson Hybrid Perovskites. Journal of the American Chemical Society, 2020, 142, 18592-18598.	6.6	90
16	Synthesis of Numerous Edge Sites in MoS ₂ via SiO ₂ Nanorods Platform for Highly Sensitive Gas Sensor. ACS Applied Materials & D. (1988) 10, 31594-31602.	4.0	79
17	Drastically enhanced hydrogen evolution activity by 2D to 3D structural transition in anion-engineered molybdenum disulfide thin films for efficient Si-based water splitting photocathodes. Journal of Materials Chemistry A, 2017, 5, 15534-15542.	5.2	69
18	Polarized Lightâ€Emitting Diodes Based on Patterned MoS ₂ Nanosheet Hole Transport Layer. Advanced Materials, 2017, 29, 1702598.	11.1	68

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19	Water Splitting Exceeding 17% Solar-to-Hydrogen Conversion Efficiency Using Solution-Processed Ni-Based Electrocatalysts and Perovskite/Si Tandem Solar Cell. ACS Applied Materials & Diterfaces, 2019, 11, 33835-33843.	4.0	67
20	SnS ₂ Nanograins on Porous SiO ₂ Nanorods Template for Highly Sensitive NO ₂ Sensor at Room Temperature with Excellent Recovery. ACS Sensors, 2019, 4, 678-686.	4.0	64
21	Electrocatalytic Water Splitting and CO ₂ Reduction: Sustainable Solutions via Singleâ€Atom Catalysts Supported on 2D Materials. Small Methods, 2019, 3, 1800492.	4.6	63
22	Memristive Devices Based on Two-Dimensional Transition Metal Chalcogenides for Neuromorphic Computing. Nano-Micro Letters, 2022, 14, 58.	14.4	62
23	Effect of anions in Au complexes on doping and degradation of graphene. Journal of Materials Chemistry C, 2013, 1, 2463.	2.7	58
24	Pd- and Au-Decorated MoS2 Gas Sensors for Enhanced Selectivity. Electronic Materials Letters, 2019, 15, 368-376.	1.0	50
25	Extension of stability in organic photovoltaic cells using UV/ozone-treated graphene sheets. Solar Energy Materials and Solar Cells, 2013, 109, 148-154.	3.0	43
26	Synergetically Selective Toluene Sensing in Hematiteâ€Decorated Nickel Oxide Nanocorals. Advanced Materials Technologies, 2017, 2, 1600259.	3.0	41
27	Gas sensing characteristics of the FET-type gas sensor having inkjet-printed WS2 sensing layer. Solid-State Electronics, 2019, 153, 27-32.	0.8	39
28	One-pot synthesis of sulfur and nitrogen codoped titanium dioxide nanorod arrays for superior photoelectrochemical water oxidation. Applied Catalysis B: Environmental, 2018, 234, 213-222.	10.8	37
29	Directly Assembled 3D Molybdenum Disulfide on Silicon Wafer for Efficient Photoelectrochemical Water Reduction. Advanced Sustainable Systems, 2018, 2, 1700142.	2.7	36
30	Au decoration of vertical hematite nanotube arrays for further selective detection of acetone in exhaled breath. Sensors and Actuators B: Chemical, 2018, 274, 587-594.	4.0	35
31	Microscopic Evidence for Strong Interaction between Pd and Graphene Oxide that Results in Metalâ€Decorationâ€Induced Reduction of Graphene Oxide. Advanced Materials, 2017, 29, 1605929.	11.1	32
32	Role of Metal Cations in Alkali Metal Chloride Doped Graphene. Journal of Physical Chemistry C, 2014, 118, 8187-8193.	1.5	31
33	Efficient Water Splitting Cascade Photoanodes with Ligandâ€Engineered MnO Cocatalysts. Advanced Science, 2018, 5, 1800727.	5.6	30
34	Edge-exposed WS2 on 1D nanostructures for highly selective NO2 sensor at room temperature. Sensors and Actuators B: Chemical, 2021, 333, 129566.	4.0	30
35	Anion exchange membrane water electrolysis for sustainable largeâ€scale hydrogen production. , 2022, 1, 26-48.		30
36	Tungsten disulfide thin film/p-type Si heterojunction photocathode for efficient photochemical hydrogen production. MRS Communications, 2017, 7, 272-279.	0.8	29

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37	Role of ionic chlorine in the thermal degradation of metal chloride-doped graphene sheets. Journal of Materials Chemistry C, 2013, 1, 253-259.	2.7	27
38	Transfer of ultrathin molybdenum disulfide and transparent nanomesh electrode onto silicon for efficient heterojunction solar cells. Nano Energy, 2018, 50, 649-658.	8.2	26
39	Vertically aligned MoS2 thin film catalysts with Fe-Ni sulfide nanoparticles by one-step sulfurization for efficient solar water reduction. Chemical Engineering Journal, 2021, 418, 129369.	6.6	26
40	Tailoring catalytic activities of transition metal disulfides for water splitting. FlatChem, 2017, 4, 68-80.	2.8	24
41	Tailoring the coercive field in ferroelectric metal-free perovskites by hydrogen bonding. Nature Communications, 2022, 13, 794.	5.8	24
42	Toward High-Performance Hematite Nanotube Photoanodes: Charge-Transfer Engineering at Heterointerfaces. ACS Applied Materials & Samp; Interfaces, 2016, 8, 23793-23800.	4.0	22
43	Data-driven discovery of high performance layered van der Waals piezoelectric NbOI2. Nature Communications, 2022, 13, 1884.	5.8	22
44	Highly photoresponsive and wavelength-selective circularly-polarized-light detector based on metal-oxides hetero-chiral thin film. Scientific Reports, 2016, 6, 19580.	1.6	21
45	Fluoropolymer-assisted graphene electrode for organic light-emitting diodes. Organic Electronics, 2014, 15, 3154-3161.	1.4	20
46	Microscopic evidence of strong interactions between chemical vapor deposited 2D MoS2 film and SiO2 growth template. Nano Convergence, 2021, 8, 11.	6.3	20
47	Ion beam irradiation of few-layer graphene and its application to liquid crystal cells. Carbon, 2014, 67, 352-359.	5. 4	19
48	Boosting the photocatalytic hydrogen evolution performance via an atomically thin 2D heterojunction visualized by scanning photoelectrochemical microscopy. Nano Energy, 2019, 65, 104053.	8.2	18
49	Effect of transition-metal chlorides on graphene properties. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 1794-1800.	0.8	17
50	Challenge beyond Graphene: Metal Oxide/Graphene/Metal Oxide Electrodes for Optoelectronic Devices. ACS Applied Materials & Samp; Interfaces, 2016, 8, 12932-12939.	4.0	16
51	Eco-friendly graphene synthesis on Cu foil electroplated by reusing Cu etchants. Scientific Reports, 2015, 4, 4830.	1.6	15
52	Enhanced nucleation of germanium on graphene <i>via</i> dipole engineering. Nanoscale, 2018, 10, 5689-5694.	2.8	14
53	Strong Fermi-level pinning at metal contacts to halide perovskites. Journal of Materials Chemistry C, 2021, 9, 15212-15220.	2.7	12
54	Extended thermal stability in metal-chloride doped graphene using graphene overlayers. Chemical Engineering Journal, 2014, 244, 355-363.	6.6	10

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55	Synthesis of atomically thin alloyed molybdenum-tungsten disulfides thin films as hole transport layers in organic light-emitting diodes. Applied Surface Science, 2021, 541, 148529.	3.1	10
56	Effect of Amine-Based Organic Compounds on the Work-Function Decrease of Graphene. Journal of Physical Chemistry C, 2016, 120, 1309-1316.	1.5	8
57	Multifunctional Properties of a Zn(II) Coordination Complex. Crystal Growth and Design, 2021, 21, 3401-3408.	1.4	8
58	Extremely Sensitive and Selective NO2 Detection at Relative Humidity 90% in 2-Dimensional Tin Sulfides/SnO2 Nanorod Heterostructure. Sensors and Actuators B: Chemical, 2022, 369, 132319.	4.0	7
59	Comparison of metal chloride-doped graphene electrode fabrication processes for GaN-based light emitting diodes. RSC Advances, 2014, 4, 51215-51219.	1.7	5
60	2â€Dimensional Materials: Electrocatalytic Water Splitting and CO ₂ Reduction: Sustainable Solutions via Singleâ€Atom Catalysts Supported on 2D Materials (Small Methods 9/2019). Small Methods, 2019, 3, 1970028.	4.6	4
61	Graphene Oxide: Microscopic Evidence for Strong Interaction between Pd and Graphene Oxide that Results in Metalâ€Decorationâ€Induced Reduction of Graphene Oxide (Adv. Mater. 15/2017). Advanced Materials, 2017, 29, .	11.1	1
62	Ion-beam-irradiated CYTOP-transferred graphene for liquid crystal cells. Electronic Materials Letters, 2017, 13, 277-285.	1.0	1
63	Effect of Fluoropolymer Assisted Transfer on Graphene Doping. Science of Advanced Materials, 2017, 9, 758-764.	0.1	1
64	Solar Water Splitting: Efficient Water Splitting Cascade Photoanodes with Ligand-Engineered MnO Cocatalysts (Adv. Sci. 10/2018). Advanced Science, 2018, 5, 1870061.	5.6	0