Chun-Wei Huang

List of Publications by Citations

66 papers	2,101 citations	24 h-index	44 g-index
67 ext. papers	2,399 ext. citations	9.3 avg, IF	4.72 L-index

#	Paper	IF	Citations
66	High Mobility MoS Transistor with Low Schottky Barrier Contact by Using Atomic Thick h-BN as a Tunneling Layer. *Advanced Materials*, **2016**, 28, 8302-8308	24	282
65	Dynamic evolution of conducting nanofilament in resistive switching memories. *Nano Letters*, **2013**, 13, 3671-7	11.5	266
64	Flexible ferroelectric element based on van der Waals heteroepitaxy. *Science Advances*, **2017**, 3, e1700121	14.3	130
63	Switching Kinetic of VCM-Based Memristor: Evolution and Positioning of Nanofilament. *Advanced Materials*, **2015**, 27, 5028-33	24	129
62	Well-aligned ZnO nanowires with excellent field emission and photocatalytic properties. *Nanoscale*, **2012**, 4, 1471-5	7.7	96
61	Oxide Heteroepitaxy for Flexible Optoelectronics. *ACS Applied Materials & Interfaces*, **2016**, 8, 32401-32407	9.5	82
60	Rational Design of ZnO:H/ZnO Bilayer Structure for High-Performance Thin-Film Transistors. *ACS Applied Materials & Interfaces*, **2016**, 8, 7862-8	9.5	61
59	Direct Observation of Dual-Filament Switching Behaviors in Ta O -Based Memristors. *Small*, **2017**, 13, 1603116	11	56
58	Phase transformation and thermoelectric properties of bismuth-telluride nanowires. *Nanoscale*, **2013**, 5, 4669-72	7.7	54
57	Dielectric Engineering of a Boron Nitride/Hafnium Oxide Heterostructure for High-Performance 2D Field Effect Transistors. *Advanced Materials*, **2016**, 28, 2062-9	24	48
56	Growth of CuInSe2 and In2Se3/CuInSe2 nano-heterostructures through solid state reactions. *Nano Letters*, **2011**, 11, 4348-51	11.5	43
55	Excellent piezoelectric and electrical properties of lithium-doped ZnO nanowires for nanogenerator applications. *Nano Energy*, **2014**, 8, 291-296	17.1	41
54	Observation of Resistive Switching Behavior in Crossbar Core-Shell Ni/NiO Nanowires Memristor. *Small*, **2018**, 14, 1703153	11	40
53	Revealing controllable nanowire transformation through cationic exchange for RRAM application. *Nano Letters*, **2014**, 14, 2759-63	11.5	39
52	In situ TEM and energy dispersion spectrometer analysis of chemical composition change in ZnO nanowire resistive memories. *Analytical Chemistry*, **2013**, 85, 3955-60	7.8	38
51	Kinetic competition model and size-dependent phase selection in 1-D nanostructures. *Nano Letters*, **2012**, 12, 3115-20	11.5	37
50	Dynamic observation of phase transformation behaviors in indium(III) selenide nanowire based phase change memory. *ACS Nano*, **2014**, 8, 9457-62	16.7	35

49	Copper silicide/silicon nanowire heterostructures: in situ TEM observation of growth behaviors and electron transport properties. *Nanoscale*, **2013**, 5, 5086-92	7.7	31
48	In-situ TEM observation of Multilevel Storage Behavior in low power FeRAM device. *Nano Energy*, **2017**, 34, 103-110	17.1	29
47	High-yield synthesis of ZnO nanowire arrays and their opto-electrical properties. *Nanoscale*, **2012**, 4, 1476-80	7.7	27
46	Observing Growth of Nanostructured ZnO in Liquid. *Chemistry of Materials*, **2016**, 28, 4507-4511	9.6	25
45	Probing the electrochemical properties of an electrophoretically deposited Co3O4/rGO/CNTs nanocomposite for supercapacitor applications. *RSC Advances*, **2016**, 6, 60578-60586	3.7	25
44	Direct observation of melting behaviors at the nanoscale under electron beam and heat to form hollow nanostructures. *Nanoscale*, **2012**, 4, 4702-6	7.7	25
43	Optoelectronic Properties of Single-Crystalline Zn2GeO4 Nanowires. *Journal of Physical Chemistry C* , **2014**, 118, 8194-8199	3.8	24
42	Opto-electrical properties of Sb-doped p-type ZnO nanowires. *Applied Physics Letters*, **2014**, 104, 111909	3.4	24
41	Phosphorus-Doped p□ Homojunction ZnO Nanowires: Growth Kinetics in Liquid and Their Optoelectronic Properties. *Chemistry of Materials*, **2015**, 27, 4216-4221	9.6	23
40	The influence of surface oxide on the growth of metal/semiconductor nanowires. *Nano Letters*, **2011**, 11, 2753-8	11.5	23
39	Single-crystalline □Ni2Si nanowires with excellent physical properties. *Nanoscale Research Letters*, **2013**, 8, 290	5	20
38	Observing topotactic phase transformation and resistive switching behaviors in low power SrCoOx memristor. *Nano Energy*, **2020**, 72, 104683	17.1	19
37	Transparent Antiradiative Ferroelectric Heterostructure Based on Flexible Oxide Heteroepitaxy. *ACS Applied Materials & Interfaces*, **2018**, 10, 30574-30580	9.5	19
36	The different roles of contact materials between oxidation interlayer and doping effect for high performance ZnO thin film transistors. *Applied Physics Letters*, **2015**, 106, 051607	3.4	19
35	Atomic-Scale Fabrication of In-Plane Heterojunctions of Few-Layer MoS via In Situ Scanning Transmission Electron Microscopy. *Small*, **2020**, 16, e1905516	11	18
34	Atomic Visualization of the Phase Transition in Highly Strained BiFeO3 Thin Films with Excellent Pyroelectric Response. *Nano Energy*, **2015**, 17, 72-81	17.1	17
33	Observing the evolution of graphene layers at high current density. *Nano Research*, **2016**, 9, 3663-3670	10	16
32	Growth of single-crystalline cobalt silicide nanowires with excellent physical properties. *Journal of Applied Physics*, **2011**, 110, 074302	2.5	16

31	Single-crystalline CuO nanowires for resistive random access memory applications. *Applied Physics Letters*, **2015**, 106, 173103	3.4	15
30	Flexible Heteroepitaxy Photoelectrode for Photo-electrochemical Water Splitting. *ACS Applied Energy Materials*, **2018**, 1, 3900-3907	6.1	15
29	Dynamic observation of reversible lithium storage phenomena in hybrid supercapacitor devices. *Nano Energy*, **2017**, 41, 494-500	17.1	14
28	Self-formed conductive nanofilaments in (Bi, Mn)O for ultralow-power memory devices. *Nano Energy*, **2015**, 13, 283-290	17.1	14
27	Nickel/Platinum Dual Silicide Axial Nanowire Heterostructures with Excellent Photosensor Applications. *Nano Letters*, **2016**, 16, 1086-91	11.5	14
26	Low Interface Trap Densities and Enhanced Performance of AlGaN/GaN MOS High- Electron Mobility Transistors Using Thermal Oxidized Y2O3 Interlayer. *IEEE Electron Device Letters*, **2015**, 36, 1284-1286	4.4	13
25	Atomic-scale investigation of Lithiation/Delithiation mechanism in High-entropy spinel oxide with superior electrochemical performance. *Chemical Engineering Journal*, **2021**, 420, 129838	14.7	13
24	In Situ Investigation of Defect-Free Copper Nanowire Growth. *Nano Letters*, **2018**, 18, 778-784	11.5	11
23	Mass transport phenomena in copper nanowires at high current density. *Nano Research*, **2016**, 9, 1071-1078	10	10
22	Single-crystalline Ge nanowires and Cu3Ge/Ge nano-heterostructures. *CrystEngComm*, **2012**, 14, 4570	3.3	10
21	Direct Observation of Sublimation Behaviors in One-Dimensional In2Se3/In2O3 Nanoheterostructures. *Analytical Chemistry*, **2015**, 87, 5584-8	7.8	9
20	Optimization of the nanotwin-induced zigzag surface of copper by electromigration. *Nanoscale*, **2016**, 8, 2584-8	7.7	9
19	Observing phase transformation in CVD-grown MoSvia atomic resolution TEM. *Chemical Communications*, **2018**, 54, 9941-9944	5.8	9
18	Carbon Nanotube/Nitrogen-Doped Reduced Graphene Oxide Nanocomposites and Their Application in Supercapacitors. *Journal of Nanoscience and Nanotechnology*, **2017**, 17, 5366-5373	1.3	9
17	Dynamic observation on the growth behaviors in manganese silicide/silicon nanowire heterostructures. *Nanoscale*, **2015**, 7, 1776-81	7.7	8
16	Atomic-Scale Localized Thinning and Reconstruction of Two-Dimensional WS2 Layers through In Situ Transmission Electron Microscopy/Scanning Transmission Electron Microscopy. *Journal of Physical Chemistry C*, **2020**, 124, 14935-14940	3.8	8
15	Growth and properties of single-crystalline Ge nanowires and germanide/Ge nano-heterostructures. *CrystEngComm*, **2012**, 14, 53-58	3.3	8
14	Observing Solid-State Formation of Oriented Porous Functional Oxide Nanowire Heterostructures by in Situ TEM. *Nano Letters*, **2018**, 18, 6064-6070	11.5	7

13	Electron Beam Irradiation-Induced Deoxidation and Atomic Flattening on the Copper Surface. *ACS Applied Materials & Interfaces*, **2019**, 11, 40909-40915	9.5	6
12	Real time observation of the formation of hollow nanostructures through solid state reactions. *Analytical Chemistry*, **2014**, 86, 4348-53	7.8	6
11	In Situ TEM Investigation of the Electrochemical Behavior in CNTs/MnO-Based Energy Storage Devices. *Analytical Chemistry*, **2017**, 89, 9671-9675	7.8	6
10	In situ TEM investigation of electron beam-induced ultrafast chemical lithiation for charging. *Journal of Materials Chemistry A*, **2020**, 8, 648-655	13	6
9	Dynamic observation on the functional metal oxide conversion behaviors in Fe3O4/ZnO heterostructures. *Scripta Materialia*, **2020**, 177, 192-197	5.6	5
8	Solid-State Diffusional Behaviors of Functional Metal Oxides at Atomic Scale. *Small*, **2018**, 14, 1702877	11	4
7	Shape control of nickel silicide nanocrystals on stress-modified surface. *CrystEngComm*, **2014**, 16, 1611	3.3	4
6	Synthesis and thermoelectric properties of indium telluride nanowires. *Materials Research Bulletin*, **2019**, 112, 61-65	5.1	4
5	Electron-beam-induced phase transition in the transmission electron microscope: the case of VO2(B). *CrystEngComm*, **2018**, 20, 6857-6860	3.3	4
4	Unique amorphization-mediated growth to form heterostructured silicide nanowires by solid-state reactions. *Materials and Design*, **2019**, 169, 107674	8.1	2
3	Synthesis of single-crystalline Ge1Sb2Te4 nanoplates in solution phase. *CrystEngComm*, **2016**, 18, 2244-2246	3.3	1
2	The Linearly Temperature-Dependent Thermal Conductivity Across the Transition Temperature of Polycrystalline YBa2Cu3O6.9. *Journal of Superconductivity and Novel Magnetism*, **2019**, 32, 2289-2293	1.5	0
1	Observing Resistive Switching Behaviors in Single Ta2O5 Nanotube-Based Memristive Devices. *Materials Today Nano*, **2022**, 100212	9.7	