Hak Ki Yu

List of Publications by Year
in descending order

121 papers	2,030 citations	257450 24 h-index	330143 37 g-index
122 all docs	122 docs citations	122 times ranked	2958 citing authors

#	Article	IF	Citations
1	Ultrahighâ€Porosity MgO Microparticles for Heatâ€Energy Storage. Advanced Materials, 2023, 35, .	21.0	6
2	Ternary Transition Metal Chalcogenide Nb₂Pd₃Se₈: A New Candidate of 1D Van der Waals Materials for Fieldâ€Effect Transistors. Advanced Functional Materials, 2022, 32, 2108104.	14.9	19
3	Synthesis of one-dimensional van der Waals material alloys. Applied Physics Letters, 2022, 120, .	3.3	4
4	Direct transformation of ReO₃ nanorods into ReS₂ nanosheets on carbon fibres for modulating solidâ€“gas interactions. CrystEngComm, 2022, 24, 2036-2041.	2.6	2
5	Ru/graphene hybrid film catalyst for NaBH4 hydrolysis reaction. International Journal of Hydrogen Energy, 2022, 47, 15687-15694.	7.1	10
6	Dielectric properties of lead zirconate titanate/Au composite film prepared by aerosol deposition. Materials Chemistry and Physics, 2022, 284, 126078.	4.0	7
7	Polymorphism of low-dimensional material with ternary composition chalcogenide Ta2Ni3Se8. Journal of Alloys and Compounds, 2022, 907, 164463.	5.5	2
8	Organic Dispersion of Mo₃Se₃^{â€“} Single-Chain Atomic Crystals Using Surface Modification Methods. ACS Nano, 2022, 16, 8022-8029.	14.6	4
9	Effects of cobalt oxide catalyst on pyrolysis of polyester fiber. Korean Journal of Chemical Engineering, 2022, 39, 3343-3349.	2.7	15
10	Wafer-Scale Growth of 3D Graphene on SiO₂ by Remote Metal Catalyst-Assisted MOCVD and Its Application as a NO₂ Gas Sensor. Crystal Growth and Design, 2022, 22, 4192-4202.	3.0	8
11	Colloidal Synthesis of Chromium Phosphide Assisted by Partial Oxidation and Its Electrocatalytic Activity in Oxygen Reduction Reaction. Crystal Growth and Design, 2022, 22, 4157-4164.	3.0	1
12	Liquid Precursor-Assisted Chemical Vapor Deposition of One-Dimensional van der Waals Material Nb₂Se₉: Tunable Growth for Room-Temperature Gas Sensors. ACS Sensors, 2022, 7, 1912-1918.	7.8	4
13	Low ligand field strength ion (Iâ˜) mediated 1D inorganic material MoI3: Synthesis and application to photo-detectors. Journal of Alloys and Compounds, 2021, 853, 157375.	5.5	11
14	Fabrication of a room-temperature NO2 gas sensor using morphology controlled CVD-grown tellurium nanostructures. Sensors and Actuators B: Chemical, 2021, 333, 128891.	7.8	21
15	Mechanical properties study of VO 2 microâ€beam according to metalâ€insulator transition. Journal of the American Ceramic Society, 2021, 104, 4183-4189.	3.8	3
16	Family of low dimensional materials with ternary elements Ta2NixSey: Growth strategy for Ta2NiSe5 and Ta2NiSe7. Journal of Alloys and Compounds, 2021, 867, 159054.	5.5	8
17	Ta₂Ni₃Se₈: 1D van der Waals Material with Ambipolar Behavior. Small, 2021, 17, e2102602.	10.0	15
18	Synthesis of one-dimensional atomic chain LiMo3Se3 through ion-exchange reaction from InMo3Se3: Kinetics and thermodynamics. Ceramics International, 2021, 47, 33606-33610.	4.8	2

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19	Micro-networked metal coating using self-cracked WO3 inorganic thin film as sacrificial layer: Application to transparent flexible electrodes. Thin Solid Films, 2021, 736, 138916.	1.8	1
20	Al2O3 coated glass by aerosol deposition with excellent mechanical properties for mobile electronic displays. Ceramics International, 2021, 47, 30531-30535.	4.8	6
21	A study on the bio-applicability of aqueous-dispersed van der Waals 1-D material Nb2Se9 using poloxamer. Scientific Reports, 2021, 11, 176.	3.3	8
22	One-dimensional van der Waals stacked p-type crystal Ta₂Pt₃Se₈ for nanoscale electronics. Nanoscale, 2021, 13, 17945-17952.	5.6	9
23	High Breakdown Current Density in Quasi-1D van der Waals Layered Material Ta₂NiSe₇. ACS Applied Materials & Interfaces, 2021, 13, 52871-52879.	8.0	6
24	Transparent and Flexible Electromagnetic Interference Shielding Film Using ITO Nanobranches by Internal Scattering. ACS Applied Materials & Interfaces, 2021, 13, 61413-61421.	8.0	15
25	Thermal conductivity-controlled Zn-doped MgO/Mg(OH)₂ micro-structures for high-efficiency thermo-dynamic heat energy storage. Journal of Asian Ceramic Societies, 2020, 8, 50-56.	2.3	10
26	Aqueous Dispersion of One-Dimensional van der Waals Material Mo₆S₃I₆ with the Charge Type of the Hydrophobic Dispersant Tail. ACS Applied Bio Materials, 2020, 3, 3992-3998.	4.6	8
27	Bismuth vanadate photoanode synthesized by electron-beam evaporation of a single precursor source for enhanced solar water-splitting. Applied Surface Science, 2020, 528, 146906.	6.1	11
28	Abnormal dewetting of Ag layer on three-dimensional ITO branches to form spatial plasmonic nanoparticles for organic solar cells. Scientific Reports, 2020, 10, 12819.	3.3	10
29	Plasticized Polystyrene by Addition of -Diene Based Molecules for Defect-Less CVD Graphene Transfer. Polymers, 2020, 12, 1839.	4.5	4
30	RuO₂ Nanorods on Electrospun Carbon Nanofibers for Supercapacitors. ACS Applied Nano Materials, 2020, 3, 3847-3858.	5.0	104
31	Large-area synthesis of van der Waals two-dimensional material Nb3I8 and its infrared detection applications. Journal of Alloys and Compounds, 2020, 831, 154877.	5.5	15
32	Conversion of WO₃ thin films into self-crosslinked nanorods for large-scale ultraviolet detection. RSC Advances, 2020, 10, 14147-14153.	3.6	8
33	Designed growth of porous 2D Nb₂O₅ with Ag nano-particles for differential detection of UV-A and UV-C. Nanotechnology, 2020, 31, 315502.	2.6	1
34	Position-Selective Metal Oxide Nanostructures using Atomic Thin Carbon Layer for Hydrogen Gas Sensors. Journal of Sensor Science and Technology, 2020, 29, 369-373.	0.2	1
35	ZrO2 Nanoparticle Embedded Low Silver Lead Free Solder Alloy for Modern Electronic Devices. Electronic Materials Letters, 2019, 15, 27-35.	2.2	21
36	Thickness-Dependence Electrical Characterization of the One-Dimensional van der Waals TaSe3 Crystal. Materials, 2019, 12, 2462.	2.9	12

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37	Ultrafast and Chemically Stable Transfer of Au Nanomembrane Using a Water-Soluble NaCl Sacrificial Layer for Flexible Solar Cells. ACS Applied Materials & Interfaces, 2019, 11, 30477-30483.	8.0	17
38	Chemical Vapor Deposition: An Ecoâ€Friendly, CMOSâ€Compatible Transfer Process for Largeâ€Scale CVDâ€Graphene (Adv. Mater. Interfaces 13/2019). Advanced Materials Interfaces, 2019, 6, 1970087.	3.7	0
39	Large-scale synthesis of van der Waals 1-dimensional material Mo6S3I6 by using a MoI2 precursor. Journal of Alloys and Compounds, 2019, 803, 499-504.	5.5	11
40	Design of dispersant for highly concentrated one-dimensional Nb2Se9 inorganic molecular chains from bulk crystal. Scientific Reports, 2019, 9, 14579.	3.3	5
41	Mg(OH)2 nano-sheet decorated MgO micro-beams by electron beam irradiation for thermochemical heat storage. Ceramics International, 2019, 45, 18908-18913.	4.8	10
42	Surface-Enhanced Raman Spectroscopy (SERS) Study Using Oblique Angle Deposition of Ag Using Different Substrates. Materials, 2019, 12, 1581.	2.9	17
43	Strategy for Controlling the Electrical Conductivity of Indium Tin Oxide (ITO) Nanobranches. Advanced Electronic Materials, 2019, 5, 1900246.	5.1	4
44	Electro-Chemical Oxidation and Reduction of Ag as Preparation for a High-Efficiency Surface Enhanced Raman Scattering (SERS) Substrate. Journal of the Electrochemical Society, 2019, 166, B594-B597.	2.9	1
45	An Ecoâ€Friendly, CMOSâ€Compatible Transfer Process for Largeâ€Scale CVDâ€Graphene. Advanced Materials Interfaces, 2019, 6, 1900084.	3.7	15
46	The migration of alkali metal (Na+, Li+, and K+) ions in single crystalline vanadate nanowires: Rasch-Hinrichsen resistivity. Current Applied Physics, 2019, 19, 516-520.	2.4	3
47	Water-induced hydrogenation of graphene/metal interfaces at room temperature: Insights on water intercalation and identification of sites for water splitting. Nano Research, 2019, 12, 3101-3108.	10.4	13
48	Carbon layer supported nickel catalyst for sodium borohydride (NaBH4) dehydrogenation. International Journal of Hydrogen Energy, 2019, 44, 2943-2950.	7.1	43
49	Structural and Electrical Properties of Nb₃I₈ Layered Crystal. Physica Status Solidi - Rapid Research Letters, 2019, 13, 1800448.	2.4	18
50	Improving p-to-n transition and detection range of bimodal hydrogen-sensitive nanohybrids of hole-doped rGO and chemochromic Pd-decorated-MoO3 nanoflakes. Journal of Alloys and Compounds, 2019, 774, 111-121.	5.5	15
51	Secondary electron emission properties of Zn-doped MgO thin films grown via electron-beam evaporation. Thin Solid Films, 2018, 653, 57-61.	1.8	19
52	Hierarchical Ag nanostructures on Sn-doped indium oxide nano-branches: super-hydrophobic surface for surface-enhanced Raman scattering. RSC Advances, 2018, 8, 12927-12932.	3.6	9
53	Spontaneous nano-gap formation in Ag film using NaCl sacrificial layer for Raman enhancement. Nanotechnology, 2018, 29, 105502.	2.6	6
54	Photophysical properties and photoelectrochemical performances of sol-gel derived copper stannate (CuSnO3) amorphous semiconductor for solar water splitting application. Ceramics International, 2018, 44, 1843-1849.	4.8	13

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55	Design of dispersant structures for preparing highly concentrated one-dimensional inorganic molecular chains from V₂Se₉ crystals. Chemical Communications, 2018, 54, 12190-12193.	4.1	16
56	Design of softened polystyrene for crack- and contamination-free large-area graphene transfer. Nanoscale, 2018, 10, 21865-21870.	5.6	16
57	Synthesis of a one-dimensional atomic crystal of vanadium selenide (V₂Se₉). RSC Advances, 2018, 8, 33980-33984.	3.6	31
58	Mechanical exfoliation and electrical characterization of a one-dimensional Nb₂Se₉ atomic crystal. RSC Advances, 2018, 8, 37724-37728.	3.6	23
59	Isolation of inorganic molecular chains from rod-like bulk V₂Se₉ crystal by liquid exfoliation. RSC Advances, 2018, 8, 35348-35352.	3.6	14
60	Isolation of Nb2Se9 Molecular Chain from Bulk One-Dimensional Crystal by Liquid Exfoliation. Nanomaterials, 2018, 8, 794.	4.1	26
61	Exfoliation and Characterization of V2Se9 Atomic Crystals. Nanomaterials, 2018, 8, 737.	4.1	26
62	Suppressing Grain Growth on Cu Foil Using Graphene. Coatings, 2018, 8, 334.	2.6	1
63	Growth of NbC Thin Film Using CH4 as a Carbon Source and Reducing Agent. Coatings, 2018, 8, 379.	2.6	9
64	Inorganic Molecular Chain Nb₂Se₉: Synthesis of Bulk Crystal and Oneâ€Atomâ€Thick Level Exfoliation. Physica Status Solidi - Rapid Research Letters, 2018, 12, 1800451.	2.4	40
65	Mimicking of five human senses using nanostructured ZnO single material. Nanotechnology, 2018, 29, 475501.	2.6	1
66	Triangular radial Nb2O5 nanorod growth on c-plane sapphire for ultraviolet-radiation detection. RSC Advances, 2018, 8, 31066-31070.	3.6	3
67	Flexible top-emitting organic light emitting diodes with a functional dielectric reflector on a metal foil substrate. RSC Advances, 2018, 8, 26156-26160.	3.6	13
68	A simple means of producing highly transparent graphene on sapphire using chemical vapor deposition on a copper catalyst. Carbon, 2018, 139, 593-598.	10.3	2
69	Recrystallized NaCl from Thin Film to Nano-/Microsized Sacrificial Crystal for Metal Nanostructures. Crystal Growth and Design, 2018, 18, 5295-5300.	3.0	7
70	Photochemical tuning of ultrathin TiO2/p-Si p-n junction properties via UV-induced H doping. Electronic Materials Letters, 2017, 13, 107-113.	2.2	5
71	Dispersion and damping of the interband Ïє plasmon in graphene grown on Cu(111) foils. Carbon, 2017, 114, 70-76.	10.3	25
72	Optical properties and visible light-induced photocatalytic activity of bismuth sillenites (Bi12XO20, X =) Tj ETQq0 0 0 rgBT /Overlock 10	4.8	31

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73	A facile growth process of highly single crystalline Ir_{1â”x}V_xO₂ mixed metal oxide nanorods and their electrochemical properties. CrystEngComm, 2017, 19, 3455-3464.	2.6	4
74	Position-selective metal oxide nano-structures using graphene catalyst for gas sensors. Carbon, 2017, 125, 221-226.	10.3	8
75	Polyâ€Trimethoxyphenylsilane as Carrier Film for Residualâ€Free CVD Graphene Transfer. Physica Status Solidi - Rapid Research Letters, 2017, 11, 1700240.	2.4	5
76	Plasmon-enhanced ZnO nanorod/Au NPs/Cu2O structure solar cells: Effects and limitations. Korean Journal of Chemical Engineering, 2017, 34, 3200-3207.	2.7	9
77	Water-Soluble Epitaxial NaCl Thin Film for Fabrication of Flexible Devices. Scientific Reports, 2017, 7, 8716.	3.3	27
78	Growth of two-dimensional rhenium disulfide (ReS₂) nanosheets with a few layers at low temperature. CrystEngComm, 2017, 19, 5341-5345.	2.6	15
79	Graphene growth controlled by the position and number of layers (n = 0, 1, and more than 2) using Ni and MgO patterned ultra-flat Cu foil. RSC Advances, 2017, 7, 52187-52191.	3.6	1
80	Contamination-Free Graphene Transfer from Cu-Foil and Cu-Thin-Film/Sapphire. Coatings, 2017, 7, 218.	2.6	10
81	Copper Micro-Labyrinth with Graphene Skin: New Transparent Flexible Electrodes with Ultimate Low Sheet Resistivity and Superior Stability. Nanomaterials, 2016, 6, 161.	4.1	5
82	Selective Functionalization of Graphene Peripheries by using Bipolar Electrochemistry. ChemElectroChem, 2016, 3, 372-377.	3.4	20
83	Graphene protected Ag nanowires: blocking of surface migration for thermally stable and wide-range-wavelength transparent flexible electrodes. RSC Advances, 2016, 6, 84985-84989.	3.6	18
84	Growth of ZnO thin film on graphene transferred Si (100) substrate. Thin Solid Films, 2016, 619, 68-72.	1.8	12
85	Quality of graphene on sapphire: long-range order from helium diffraction versus lattice defects from Raman spectroscopy. RSC Advances, 2016, 6, 21235-21245.	3.6	24
86	Local transport measurements in graphene on SiO2 using Kelvin probe force microscopy. Carbon, 2016, 102, 470-476.	10.3	16
87	Understanding of Preferred Orientation Formation in Rock-Salt Materials: The Case of MgO. Crystal Growth and Design, 2016, 16, 1978-1983.	3.0	11
88	Real-Time Label-Free Direct Electronic Monitoring of Topoisomerase Enzyme Binding Kinetics on Graphene. ACS Nano, 2015, 9, 11166-11176.	14.6	43
89	Helium diffraction and acoustic phonons of graphene grown on copper foil. Carbon, 2015, 95, 731-737.	10.3	42
90	Effective Reduction of Copper Surface for Clean Graphene Growth. Journal of the Electrochemical Society, 2015, 162, E277-E281.	2.9	11

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91	Enhancing the Electrochemical and Electronic Performance of CVDâ€Grown Graphene by Minimizing Trace Metal Impurities. ChemElectroChem, 2014, 1, 2070-2074.	3.4	33
92	Effect of ion beam assisted deposition on the growth of indium tin oxide (ITO) nanowires. CrystEngComm, 2014, 16, 4108-4112.	2.6	14
93	Probing the Growth Habit of Highly Single Crystalline Twinned V-Shape RuO₂ Nanowires by Polarized Raman Scattering. Journal of Physical Chemistry C, 2014, 118, 20716-20720.	3.1	4
94	Chemical Vapor Deposition of Graphene on a â€œPeeled-Offâ€•Epitaxial Cu(111) Foil: A Simple Approach to Improved Properties. ACS Nano, 2014, 8, 8636-8643.	14.6	65
95	Ultrafast low-energy electron diffraction in transmission resolves polymer/graphene superstructure dynamics. Science, 2014, 345, 200-204.	12.6	167
96	Growth mechanism of metal-oxide nanowires synthesized by electron beam evaporation: A self-catalytic vapor-liquid-solid process. Scientific Reports, 2014, 4, 6589.	3.3	42
97	MgO nano-facet embedded silver-based dielectric/metal/dielectric transparent electrode. Optics Express, 2012, 20, 845.	3.4	15
98	Nano-branched transparent conducting oxides: beyond the brittleness limit for flexible electrode applications. Nanoscale, 2012, 4, 6831.	5.6	32
99	Enhancing Light Emission of Nanostructured Vertical Lightâ€Emitting Diodes by Minimizing Total Internal Reflection. Advanced Functional Materials, 2012, 22, 632-639.	14.9	46
100	Enhanced Secondary Electron Emission in Nanoscale Thin Metal Containing MgO Film: Laser Irradiation on Creation of F Centers. Journal of Physical Chemistry C, 2011, 115, 17910-17914.	3.1	12
101	Modulating ZnO Nanostructure Arrays on Any Substrates by Nanolevel Structure Control. Journal of Physical Chemistry C, 2011, 115, 7987-7992.	3.1	4
102	Design of Epitaxially Strained Ag Film for Durable Ag-Based Contact to p-Type GaN. Crystal Growth and Design, 2011, 11, 4943-4949.	3.0	10
103	Self-Connected and Habitually Tilted Piezoelectric Nanorod Array. ACS Nano, 2011, 5, 8828-8833.	14.6	10
104	Facile Synthesis of Single Crystalline Metallic RuO₂ Nanowires and Electromigration-Induced Transport Properties. Journal of Physical Chemistry C, 2011, 115, 4611-4615.	3.1	42
105	Domain Matching Epitaxy of Mg-Containing Ag Contact on p-Type GaN. Crystal Growth and Design, 2011, 11, 2559-2563.	3.0	12
106	Effects of W diffusion barrier on inhibition of AlN formation in Ti/W/Al ohmic contacts on N-face n-GaN. Applied Physics Letters, 2011, 99, 233502.	3.3	6
107	Three-Dimensional Nanobranched Indiumâ€“Tin-Oxide Anode for Organic Solar Cells. ACS Nano, 2011, 5, 8026-8032.	14.6	76
108	Design of an Interfacial Layer to Block Chemical Reaction for Epitaxial ZnO Growth on a Si Substrate. Crystal Growth and Design, 2011, 11, 2438-2443.	3.0	17

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109	Synthesis of metallic ReO₃ nanowires. Physica Status Solidi - Rapid Research Letters, 2010, 4, 365-367.	2.4	8
110	Enhanced Light Outâ€Coupling of Organic Lightâ€Emitting Diodes: Spontaneously Formed Nanofacetâ€Structured MgO as a Refractive Index Modulation Layer. Advanced Materials, 2010, 22, 4890-4894.	21.0	56
111	Growth Mechanism of MgO Film on Si (100): Domain Matching Epitaxy, Strain Relaxation, Preferred Orientation Formation. Crystal Growth and Design, 2010, 10, 5200-5204.	3.0	32
112	Degradation Mechanism of Secondary Electron Emission in Plasma-Exposed MgO Films. Japanese Journal of Applied Physics, 2009, 48, 076003.	1.5	6
113	Effects of Ni cladding layers on suppression of Ag agglomeration in Ag-based Ohmic contacts on p-GaN. Applied Physics Letters, 2009, 95, 062108.	3.3	33
114	26.2: Preferred Orientation Formation of MgO Layer during Ion Beam Assisted Deposition Process. Digest of Technical Papers SID International Symposium, 2009, 40, 356-358.	0.3	0
115	Effect of N2, Ar, and O2 plasma treatments on surface properties of metals. Journal of Applied Physics, 2008, 103, .	2.5	33
116	P-147: Change of Secondary Electron Emission Properties with Micro-Structural Evolution of MgO Film During Growth. Digest of Technical Papers SID International Symposium, 2008, 39, 1759.	0.3	0
117	P-90: The Effect of Doping to MgO Protection Layer on Secondary Electron Emission Property. Digest of Technical Papers SID International Symposium, 2006, 37, 544.	0.3	3
118	Rhodium-oxide-coated indium tin oxide for enhancement of hole injection in organic light emitting diodes. Applied Physics Letters, 2005, 87, 072105.	3.3	16
119	Highly efficient organic light-emitting diodes with hole injection layer of transition metal oxides. Journal of Applied Physics, 2005, 98, 093707.	2.5	49
120	Ohmic contacts for high power LEDs. Physica Status Solidi A, 2004, 201, 2831-2836.	1.7	5
121	1D van der Waals Nb ₂ Pd ₃ Se ₈ â€Based nâ€Type Fieldâ€Effect Transistors Prepared by Liquid Phase Exfoliation. Advanced Materials Interfaces, 0, , 2200620.	3.7	1