Hak Ki Yu

List of Publications by Year in descending order

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

#	Article	IF	CITATIONS
1	Ultrafast low-energy electron diffraction in transmission resolves polymer/graphene superstructure dynamics. Science, 2014, 345, 200-204.	12.6	167
2	RuO ₂ Nanorods on Electrospun Carbon Nanofibers for Supercapacitors. ACS Applied Nano Materials, 2020, 3, 3847-3858.	5.0	104
3	Three-Dimensional Nanobranched Indium–Tin-Oxide Anode for Organic Solar Cells. ACS Nano, 2011, 5, 8026-8032.	14.6	76
4	Chemical Vapor Deposition of Graphene on a "Peeled-Off―Epitaxial Cu(111) Foil: A Simple Approach to Improved Properties. ACS Nano, 2014, 8, 8636-8643.	14.6	65
5	Enhanced Light Outâ€Coupling of Organic Lightâ€Emitting Diodes: Spontaneously Formed Nanofacetâ€6tructured MgO as a Refractive Index Modulation Layer. Advanced Materials, 2010, 22, 4890-4894.	21.0	56
6	Highly efficient organic light-emitting diodes with hole injection layer of transition metal oxides. Journal of Applied Physics, 2005, 98, 093707.	2.5	49
7	Enhancing Light Emission of Nanostructured Vertical Lightâ€Emitting Diodes by Minimizing Total Internal Reflection. Advanced Functional Materials, 2012, 22, 632-639.	14.9	46
8	Real-Time Label-Free Direct Electronic Monitoring of Topoisomerase Enzyme Binding Kinetics on Graphene. ACS Nano, 2015, 9, 11166-11176.	14.6	43
9	Carbon layer supported nickel catalyst for sodium borohydride (NaBH4) dehydrogenation. International Journal of Hydrogen Energy, 2019, 44, 2943-2950.	7.1	43
10	Facile Synthesis of Single Crystalline Metallic RuO ₂ Nanowires and Electromigration-Induced Transport Properties. Journal of Physical Chemistry C, 2011, 115, 4611-4615.	3.1	42
11	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
12	Helium diffraction and acoustic phonons of graphene grown on copper foil. Carbon, 2015, 95, 731-737.	10.3	42
13	Inorganic Molecular Chain Nb ₂ Se ₉ : Synthesis of Bulk Crystal and Oneâ€Atomâ€Thick Level Exfoliation. Physica Status Solidi - Rapid Research Letters, 2018, 12, 1800451.	2.4	40
14	Effect of N2, Ar, and O2 plasma treatments on surface properties of metals. Journal of Applied Physics, 2008, 103, .	2.5	33
15	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
16	Enhancing the Electrochemical and Electronic Performance of CVDâ€Grown Graphene by Minimizing Trace Metal Impurities. ChemElectroChem, 2014, 1, 2070-2074.	3.4	33
17	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
18	Nano-branched transparent conducting oxides: beyond the brittleness limit for flexible electrode applications. Nanoscale, 2012, 4, 6831.	5.6	32

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19	Optical properties and visible light-induced photocatalytic activity of bismuth sillenites (Bi12XO20, X =) Tj ETQq1	1 _{4.8} 78431	,4gBT/O∨
20	Synthesis of a one-dimensional atomic crystal of vanadium selenide ($V < sub > 2 < / sub > Se < sub > 9 < / sub >$). RSC Advances, 2018, 8, 33980-33984.	3.6	31
21	Water-Soluble Epitaxial NaCl Thin Film for Fabrication of Flexible Devices. Scientific Reports, 2017, 7, 8716.	3.3	27
22	Isolation of Nb2Se9 Molecular Chain from Bulk One-Dimensional Crystal by Liquid Exfoliation. Nanomaterials, 2018, 8, 794.	4.1	26
23	Exfoliation and Characterization of V2Se9 Atomic Crystals. Nanomaterials, 2018, 8, 737.	4.1	26
24	Dispersion and damping of the interband π plasmon in graphene grown on Cu(111) foils. Carbon, 2017, 114, 70-76.	10.3	25
25	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
26	Mechanical exfoliation and electrical characterization of a one-dimensional Nb ₂ Se ₉ atomic crystal. RSC Advances, 2018, 8, 37724-37728.	3.6	23
27	ZrO2 Nanoparticle Embedded Low Silver Lead Free Solder Alloy for Modern Electronic Devices. Electronic Materials Letters, 2019, 15, 27-35.	2.2	21
28	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
29	Selective Functionalization of Graphene Peripheries by using Bipolar Electrochemistry. ChemElectroChem, 2016, 3, 372-377.	3.4	20
30	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
31	Ternary Transition Metal Chalcogenide Nb ₂ Pd ₃ Se ₈ : A New Candidate of 1D Van der Waals Materials for Fieldâ€Effect Transistors. Advanced Functional Materials, 2022, 32, 2108104.	14.9	19
32	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
33	Structural and Electrical Properties of Nb ₃ 1 ₈ Layered Crystal. Physica Status Solidi - Rapid Research Letters, 2019, 13, 1800448.	2.4	18
34	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
35	Ultrafast and Chemically Stable Transfer of Au Nanomembrane Using a Water-Soluble NaCl Sacrificial Layer for Flexible Solar Cells. ACS Applied Materials & Samp; Interfaces, 2019, 11, 30477-30483.	8.0	17
36	Surface-Enhanced Raman Spectroscopy (SERS) Study Using Oblique Angle Deposition of Ag Using Different Substrates. Materials, 2019, 12, 1581.	2.9	17

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37	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
38	Local transport measurements in graphene on SiO2 using Kelvin probe force microscopy. Carbon, 2016, 102, 470-476.	10.3	16
39	Design of dispersant structures for preparing highly concentrated one-dimensional inorganic molecular chains from V ₂ Se ₉ crystals. Chemical Communications, 2018, 54, 12190-12193.	4.1	16
40	Design of softened polystyrene for crack- and contamination-free large-area graphene transfer. Nanoscale, 2018, 10, 21865-21870.	5.6	16
41	MgO nano-facet embedded silver-based dielectric/metal/dielectric transparent electrode. Optics Express, 2012, 20, 845.	3.4	15
42	Growth of two-dimensional rhenium disulfide (ReS ₂) nanosheets with a few layers at low temperature. CrystEngComm, 2017, 19, 5341-5345.	2.6	15
43	An Ecoâ€Friendly, CMOSâ€Compatible Transfer Process for Largeâ€Scale CVDâ€Graphene. Advanced Materials Interfaces, 2019, 6, 1900084.	3.7	15
44	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
45	Large-area synthesis of van der Waals two-dimensional material Nb318 and its infrared detection applications. Journal of Alloys and Compounds, 2020, 831, 154877.	5.5	15
46	Ta ₂ Ni ₃ Se ₈ : 1D van der Waals Material with Ambipolar Behavior. Small, 2021, 17, e2102602.	10.0	15
47	Transparent and Flexible Electromagnetic Interference Shielding Film Using ITO Nanobranches by Internal Scattering. ACS Applied Materials & Samp; Interfaces, 2021, 13, 61413-61421.	8.0	15
48	Effects of cobalt oxide catalyst on pyrolysis of polyester fiber. Korean Journal of Chemical Engineering, 2022, 39, 3343-3349.	2.7	15
49	Effect of ion beam assisted deposition on the growth of indium tin oxide (ITO) nanowires. CrystEngComm, 2014, 16, 4108-4112.	2.6	14
50	Isolation of inorganic molecular chains from rod-like bulk V ₂ Se ₉ crystal by liquid exfoliation. RSC Advances, 2018, 8, 35348-35352.	3.6	14
51	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
52	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
53	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
54	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

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55	Domain Matching Epitaxy of Mg-Containing Ag Contact on <i>p</i> -Type GaN. Crystal Growth and Design, 2011, 11, 2559-2563.	3.0	12
56	Growth of ZnO thin film on graphene transferred Si (100) substrate. Thin Solid Films, 2016, 619, 68-72.	1.8	12
57	Thickness-Dependence Electrical Characterization of the One-Dimensional van der Waals TaSe3 Crystal. Materials, 2019, 12, 2462.	2.9	12
58	Effective Reduction of Copper Surface for Clean Graphene Growth. Journal of the Electrochemical Society, 2015, 162, E277-E281.	2.9	11
59	Understanding of Preferred Orientation Formation in Rock-Salt Materials: The Case of MgO. Crystal Growth and Design, 2016, 16, 1978-1983.	3.0	11
60	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
61	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
62	Low ligand field strength ion (lâ~') mediated 1D inorganic material Mol3: Synthesis and application to photo-detectors. Journal of Alloys and Compounds, 2021, 853, 157375.	5.5	11
63	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
64	Self-Connected and Habitually Tilted Piezoelectric Nanorod Array. ACS Nano, 2011, 5, 8828-8833.	14.6	10
65	Contamination-Free Graphene Transfer from Cu-Foil and Cu-Thin-Film/Sapphire. Coatings, 2017, 7, 218.	2.6	10
66	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
67	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
68	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
69	Ru/graphene hybrid film catalyst for NaBH4 hydrolysis reaction. International Journal of Hydrogen Energy, 2022, 47, 15687-15694.	7.1	10
70	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
71	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
72	Growth of NbC Thin Film Using CH4 as a Carbon Source and Reducing Agent. Coatings, 2018, 8, 379.	2.6	9

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73	One-dimensional van der Waals stacked p-type crystal Ta ₂ Pt ₃ Se ₈ for nanoscale electronics. Nanoscale, 2021, 13, 17945-17952.	5.6	9
74	Synthesis of metallic ReO ₃ nanowires. Physica Status Solidi - Rapid Research Letters, 2010, 4, 365-367.	2.4	8
75	Position-selective metal oxide nano-structures using graphene catalyst for gas sensors. Carbon, 2017, 125, 221-226.	10.3	8
76	Aqueous Dispersion of One-Dimensional van der Waals Material Mo ₆ S ₃ I ₆ with the Charge Type of the Hydrophobic Dispersant Tail. ACS Applied Bio Materials, 2020, 3, 3992-3998.	4.6	8
77	Conversion of WO ₃ thin films into self-crosslinked nanorods for large-scale ultraviolet detection. RSC Advances, 2020, 10, 14147-14153.	3.6	8
78	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
79	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
80	Wafer-Scale Growth of 3D Graphene on SiO ₂ by Remote Metal Catalyst-Assisted MOCVD and Its Application as a NO ₂ Gas Sensor. Crystal Growth and Design, 2022, 22, 4192-4202.	3.0	8
81	Recrystallized NaCl from Thin Film to Nano-/Microsized Sacrificial Crystal for Metal Nanostructures. Crystal Growth and Design, 2018, 18, 5295-5300.	3.0	7
82	Dielectric properties of lead zirconate titanate/Au composite film prepared by aerosol deposition. Materials Chemistry and Physics, 2022, 284, 126078.	4.0	7
83	Degradation Mechanism of Secondary Electron Emission in Plasma-Exposed MgO Films. Japanese Journal of Applied Physics, 2009, 48, 076003.	1.5	6
84	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
85	Spontaneous nano-gap formation in Ag film using NaCl sacrificial layer for Raman enhancement. Nanotechnology, 2018, 29, 105502.	2.6	6
86	Al2O3 coated glass by aerosol deposition with excellent mechanical properties for mobile electronic displays. Ceramics International, 2021, 47, 30531-30535.	4.8	6
87	High Breakdown Current Density in Quasi-1D van der Waals Layered Material Ta ₂ NiSe ₇ . ACS Applied Materials & Interfaces, 2021, 13, 52871-52879.	8.0	6
88	Ultrahighâ€Porosity MgO Microparticles for Heatâ€Energy Storage. Advanced Materials, 2023, 35, .	21.0	6
89	Ohmic contacts for high power LEDs. Physica Status Solidi A, 2004, 201, 2831-2836.	1.7	5
90	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

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91	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
92	Polyâ€Trimethoxyphenylsilane as Carrier Film for Residualâ€Free CVD Graphene Transfer. Physica Status Solidi - Rapid Research Letters, 2017, 11, 1700240.	2.4	5
93	Design of dispersant for highly concentrated one-dimensional Nb2Se9 inorganic molecular chains from bulk crystal. Scientific Reports, 2019, 9, 14579.	3.3	5
94	Modulating ZnO Nanostructure Arrays on Any Substrates by Nanolevel Structure Control. Journal of Physical Chemistry C, 2011, 115, 7987-7992.	3.1	4
95	Probing the Growth Habit of Highly Single Crystalline Twinned V-Shape RuO ₂ Nanowires by Polarized Raman Scattering. Journal of Physical Chemistry C, 2014, 118, 20716-20720.	3.1	4
96	A facile growth process of highly single crystalline Ir _{1â^'x} V _x O ₂ mixed metal oxide nanorods and their electrochemical properties. CrystEngComm, 2017, 19, 3455-3464.	2.6	4
97	Strategy for Controlling the Electrical Conductivity of Indium Tin Oxide (ITO) Nanobranches. Advanced Electronic Materials, 2019, 5, 1900246.	5.1	4
98	Plasticized Polystyrene by Addition of -Diene Based Molecules for Defect-Less CVD Graphene Transfer. Polymers, 2020, 12, 1839.	4.5	4
99	Synthesis of one-dimensional van der Waals material alloys. Applied Physics Letters, 2022, 120, .	3.3	4
100	Organic Dispersion of Mo ₃ Se ₃ ^{$\hat{a}\in$"} Single-Chain Atomic Crystals Using Surface Modification Methods. ACS Nano, 2022, 16, 8022-8029.	14.6	4
101	Liquid Precursor-Assisted Chemical Vapor Deposition of One-Dimensional van der Waals Material Nb ₂ Se ₉ : Tunable Growth for Room-Temperature Gas Sensors. ACS Sensors, 2022, 7, 1912-1918.	7.8	4
102	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
103	Triangular radial Nb2O5 nanorod growth on c-plane sapphire for ultraviolet-radiation detection. RSC Advances, 2018, 8, 31066-31070.	3.6	3
104	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
105	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
106	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
107	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
108	Direct transformation of ReO ₃ nanorods into ReS ₂ nanosheets on carbon fibres for modulating solid–gas interactions. CrystEngComm, 2022, 24, 2036-2041.	2.6	2

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109	Polymorphism of low-dimensional material with ternary composition chalcogenide Ta2Ni3Se8. Journal of Alloys and Compounds, 2022, 907, 164463.	5.5	2
110	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
111	Suppressing Grain Growth on Cu Foil Using Graphene. Coatings, 2018, 8, 334.	2.6	1
112	Mimicking of five human senses using nanostructured ZnO single material. Nanotechnology, 2018, 29, 475501.	2.6	1
113	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
114	Designed growth of porous 2D Nb ₂ O ₅ with Ag nano-particles for differential detection of UV-A and UV-C. Nanotechnology, 2020, 31, 315502.	2.6	1
115	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
116	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
117	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
118	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
119	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
120	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
121	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	O