

Byungjin Cho

List of Publications by Year in descending order

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46
papers

2,297
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448610

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48
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docs citations

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times ranked

4383
citing authors

#	ARTICLE	IF	CITATIONS
1	In-depth analysis on electrical parameters of floating gate IGZO synaptic transistor affecting pattern recognition accuracy. Nanotechnology, 2022, , .	1.3	0
2	In-depth analysis on electrical parameters of floating gate IGZO synaptic transistor affecting pattern recognition accuracy. Nanotechnology, 2022, 33, 215201.	1.3	8
3	Physical Vapor Transport Process for Highly Purified Hg ₂ Br ₂ Crystal: from Powder Purification to Crystal Growth. Journal of Korean Institute of Metals and Materials, 2022, 60, 551-556.	0.4	3
4	Dual-Terminal Stimulated Heterosynaptic Plasticity of IGZO Memtransistor with Al ₂ O ₃ /TiO ₂ Double-Oxide Structure. ACS Applied Electronic Materials, 2022, 4, 2923-2932.	2.0	10
5	Ultra-flexible and rollable 2D-MoS ₂ /Si heterojunction-based near-infrared photodetector <i>via</i> direct synthesis. Nanoscale, 2021, 13, 672-680.	2.8	54
6	Brain-inspired ferroelectric Si nanowire synaptic device. APL Materials, 2021, 9, .	2.2	17
7	Low Power MoS ₂ /Nb ₂ O ₅ Memtransistor Device with Highly Reliable Heterosynaptic Plasticity. Advanced Functional Materials, 2021, 31, 2104174.	7.8	33
8	Accelerated Learning in Wide-Band-Gap AlN Artificial Photonic Synaptic Devices: Impact on Suppressed Shallow Trap Level. Nano Letters, 2021, 21, 7879-7886.	4.5	17
9	Unveiling the Role of Al ₂ O ₃ Interlayer in Indium-Gallium-Zinc Oxide Transistors. Physica Status Solidi (A) Applications and Materials Science, 2021, 218, 2000621.	0.8	4
10	Artificial 2D van der Waals Synapse Devices via Interfacial Engineering for Neuromorphic Systems. Nanomaterials, 2020, 10, 88.	1.9	11
11	Room-temperature sputtered electrocatalyst WSe ₂ nanomaterials for hydrogen evolution reaction. Journal of Energy Chemistry, 2020, 47, 107-111.	7.1	41
12	Comparative Analysis of Hg ₂ Br ₂ and Hg ₂ Br _x Cl _{2-x} Crystals Grown via PVT. Crystals, 2020, 10, 1096.	1.0	7
13	Al ₂ O ₃ -Induced Sub-Gap Doping on the IGZO Channel for the Detection of Infrared Light. ACS Applied Electronic Materials, 2020, 2, 1478-1483.	2.0	19
14	Novel Exfoliation of High-Quality 2H-MoS ₂ Nanoflakes for Solution-Processed Photodetector. Nanomaterials, 2020, 10, 1045.	1.9	26
15	Enhanced Photoresponse of WS ₂ Photodetectors through Interfacial Defect Engineering Using a TiO ₂ Interlayer. ACS Applied Electronic Materials, 2020, 2, 838-845.	2.0	17
16	One-step H ₂ S reactive sputtering for 2D MoS ₂ /Si heterojunction photodetector. Nanotechnology, 2020, 31, 225205.	1.3	9
17	Modulation of Synaptic Plasticity Mimicked in Al Nanoparticle-Embedded IGZO Synaptic Transistor. Advanced Electronic Materials, 2020, 6, 1901072.	2.6	47
18	Preparation and Properties of 2D Materials. Nanomaterials, 2020, 10, 764.	1.9	0

#	ARTICLE	IF	CITATIONS
19	Improved electrical performance of a sol-gel IGZO transistor with high-k Al ₂ O ₃ gate dielectric achieved by post annealing. Nano Convergence, 2019, 6, 24.	6.3	37
20	Improvement of the Bias Stress Stability in 2D MoS ₂ and WS ₂ Transistors with a TiO ₂ Interfacial Layer. Nanomaterials, 2019, 9, 1155.	1.9	11
21	Facile fabrication of ZnO nanowire memory device based on chemically-treated surface defects. Nanotechnology, 2019, 30, 155201.	1.3	2
22	In-depth Investigation of Hg ₂ Br ₂ Crystal Growth and Evolution. Materials, 2019, 12, 4224.	1.3	10
23	Self-Formed Channel Devices Based on Vertically Grown 2D Materials with Large Surface Area and Their Potential for Chemical Sensor Applications. Small, 2018, 14, e1704116.	5.2	57
24	Photonics: Enhanced Performance of MoS ₂ Photodetectors by Inserting an ALD-Processed TiO ₂ Interlayer (Small 5/2018). Small, 2018, 14, 1870022.	5.2	2
25	Room-Temperature Solid-State Grown WO ₃ Film on Plastic Substrate for Extremely Sensitive Flexible NO ₂ Gas Sensors. Advanced Materials Interfaces, 2018, 5, 1700811.	1.9	20
26	Enhanced Performance of MoS ₂ Photodetectors by Inserting an ALD-Processed TiO ₂ Interlayer. Small, 2018, 14, 1703176.	5.2	51
27	Facile Fabrication of a Two-Dimensional TMD/Si Heterojunction Photodiode by Atmospheric-Pressure Plasma-Enhanced Chemical Vapor Deposition. ACS Applied Materials & Interfaces, 2018, 10, 36136-36143.	4.0	17
28	Low Power Switching Characteristics of CNT Field Effect Transistor Device with Al-Doped ZrHfO ₂ Gate Dielectric. Journal of Nanomaterials, 2018, 2018, 1-7.	1.5	6
29	Scalable integration of periodically aligned 2D-MoS ₂ nanoribbon array. APL Materials, 2018, 6, 076102.	2.2	10
30	Three-Dimensional Atomistic Tomography of W-Based Alloyed Two-Dimensional Transition Metal Dichalcogenides. ACS Applied Materials & Interfaces, 2018, 10, 30640-30648.	4.0	3
31	High Purification of Hg ₂ Br ₂ Powder for Acousto-Optic Tunable Filters Utilizing a PVT Process. Korean Journal of Materials Research, 2018, 28, 732-737.	0.1	3
32	Effect of Nb Doping on Chemical Sensing Performance of Two-Dimensional Layered MoSe ₂ . ACS Applied Materials & Interfaces, 2017, 9, 3817-3823.	4.0	143
33	Broad-Band Photocurrent Enhancement in MoS ₂ Layers Directly Grown on Light-Trapping Si Nanocone Arrays. ACS Applied Materials & Interfaces, 2017, 9, 6314-6319.	4.0	16
34	Wafer-Scale Integration of Highly Uniform and Scalable MoS ₂ Transistors. ACS Applied Materials & Interfaces, 2017, 9, 37146-37153.	4.0	32
35	Ultraviolet Wavelength-Dependent Optoelectronic Properties in Two-Dimensional NbSe ₂ -WSe ₂ van der Waals Heterojunction-Based Field-Effect Transistors. ACS Applied Materials & Interfaces, 2017, 9, 41537-41545.	4.0	23
36	High-performing MoS ₂ -embedded Si photodetector. Materials Science in Semiconductor Processing, 2017, 71, 35-41.	1.9	13

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37	Two-Dimensional Atomic-Layered Alloy Junctions for High-Performance Wearable Chemical Sensor. ACS Applied Materials & Interfaces, 2016, 8, 19635-19642.	4.0	83
38	Influence of Gas Adsorption and Gold Nanoparticles on the Electrical Properties of CVD-Grown MoS ₂ Thin Films. ACS Applied Materials & Interfaces, 2016, 8, 21612-21617.	4.0	16
39	Alloyed 2D Metal-Semiconductor Heterojunctions: Origin of Interface States Reduction and Schottky Barrier Lowering. Nano Letters, 2016, 16, 5928-5933.	4.5	57
40	The influence of interfacial tensile strain on the charge transport characteristics of MoS ₂ -based vertical heterojunction devices. Nanoscale, 2016, 8, 17598-17607.	2.8	15
41	Alloyed 2D Metal-Semiconductor Atomic Layer Junctions. Nano Letters, 2016, 16, 1890-1895.	4.5	77
42	Metal Decoration Effects on the Gas-Sensing Properties of 2D Hybrid-Structures on Flexible Substrates. Sensors, 2015, 15, 24903-24913.	2.1	41
43	Bifunctional Sensing Characteristics of Chemical Vapor Deposition Synthesized Atomic-Layered MoS ₂ . ACS Applied Materials & Interfaces, 2015, 7, 2952-2959.	4.0	162
44	Charge-transfer-based Gas Sensing Using Atomic-layer MoS ₂ . Scientific Reports, 2015, 5, 8052.	1.6	489
45	Chemical Sensing of 2D Graphene/MoS ₂ Heterostructure device. ACS Applied Materials & Interfaces, 2015, 7, 16775-16780.	4.0	375
46	Graphene-based gas sensor: metal decoration effect and application to a flexible device. Journal of Materials Chemistry C, 2014, 2, 5280-5285.	2.7	198