Gyu-Weon Hwang

List of Publications by Year
in descending order

33 papers	1,619 citations	471509 17 h-index	434195 31 g-index
33 all docs	33 docs citations	33 times ranked	2930 citing authors

#	Article	IF	Citations
1	Predicting ligand-dependent nanocrystal shapes of InP quantum dots and their electronic structures. Applied Surface Science, 2022, 578, 151972.	6.1	5
2	Three-Terminal Ovonic Threshold Switch (3T-OTS) with Tunable Threshold Voltage for Versatile Artificial Sensory Neurons. Nano Letters, 2022, 22, 733-739.	9.1	10
3	Emulating the short-term plasticity of a biological synapse with a ruthenium complex-based organic mixed ionicâ€"electronic conductor. Materials Advances, 2022, 3, 2827-2837.	5.4	6
4	A Poisson Process Generator Based on Multiple Thermal Noise Amplifiers for Parallel Stochastic Simulation of Biochemical Reactions. Electronics (Switzerland), 2022, 11, 1039.	3.1	1
5	SWIR imaging using PbS QD photodiode array sensors. Optics Express, 2022, 30, 20659.	3.4	0
6	Precise Control of the Oxidation State of PbS Quantum Dots Using Rapid Thermal Annealing for Infrared Photodetectors. ACS Applied Nano Materials, 2021, 4, 1-6.	5.0	12
7	Novel nano-plasmonic sensing platform based on vertical conductive bridge. Scientific Reports, 2021, 11, 3184.	3.3	1
8	Design of mid-infrared filter array based on plasmonic metal nanodiscs array and its application to on-chip spectrometer. Scientific Reports, 2021, 11, 12218.	3.3	12
9	Realization of an Artificial Visual Nervous System using an Integrated Optoelectronic Device Array. Advanced Materials, 2021, 33, e2105485.	21.0	33
10	Realization of an Artificial Visual Nervous System using an Integrated Optoelectronic Device Array (Adv. Mater. 51/2021). Advanced Materials, 2021, 33, .	21.0	3
11	Controllable modulation of precursor reactivity using chemical additives for systematic synthesis of high-quality quantum dots. Nature Communications, 2020, 11, 5748.	12.8	19
12	Zero-Dimensional PbS Quantum Dotâ€"InGaZnO Film Heterostructure for Short-Wave Infrared Flat-Panel Imager. ACS Photonics, 2020, 7, 1932-1941.	6.6	26
13	Optimization of tunable guided-mode resonance filter based on refractive index modulation of graphene. Scientific Reports, 2019, 9, 19951.	3.3	14
14	Improving Open-circuit Voltage in PbS-based QDPVs Using Different Pb Precursors. Journal of the Korean Physical Society, 2019, 75, 985-989.	0.7	2
15	Enhanced resolution of a surface plasmon resonance sensor detecting C-reactive protein via a bimetallic waveguide-coupled mode approach. Sensors and Actuators B: Chemical, 2018, 266, 311-317.	7.8	28
16	Next-generation in vivo optical imaging with short-wave infrared quantum dots. Nature Biomedical Engineering, 2017, 1, .	22.5	490
17	Enhanced Photocurrent in PbS Quantum Dot Photovoltaics via ZnO Nanowires and Band Alignment Engineering. Advanced Energy Materials, 2016, 6, 1600848.	19.5	66
18	Photovoltaic Performance of PbS Quantum Dots Treated with Metal Salts. ACS Nano, 2016, 10, 3382-3388.	14.6	75

#	Article	IF	Citations
19	A path to practical Solar Pumped Lasers via Radiative Energy Transfer. Scientific Reports, 2015, 5, 14758.	3.3	35
20	Identifying and Eliminating Emissive Subâ€bandgap States in Thin Films of PbS Nanocrystals. Advanced Materials, 2015, 27, 4481-4486.	21.0	77
21	Highâ€Performance Shortwaveâ€Infrared Lightâ€Emitting Devices Using Coreâ€“Shell (PbSâ€“CdS) Colloidal Quantum Dots. Advanced Materials, 2015, 27, 1437-1442.	21.0	167
22	Open-Circuit Voltage Deficit, Radiative Sub-Bandgap States, and Prospects in Quantum Dot Solar Cells. Nano Letters, 2015, 15, 3286-3294.	9.1	223
23	Insights into the reactive ion etching mechanism of nanocrystalline diamond films as a function of film microstructure and the presence of fluorine gas. Journal of Applied Physics, 2010, 107, 044313.	2.5	3
24	Control of abnormal grain inclusions in the nanocrystalline diamond film deposited by hot filament CVD. Diamond and Related Materials, 2009, 18, 1369-1374.	3.9	18
25	Atomic Layer Deposition of Ru Thin Films Using 2,4-(Dimethylpentadienyl)(ethylcyclopentadienyl)Ru by a Liquid Injection System. Journal of the Electrochemical Society, 2007, 154, D95.	2.9	88
26	Atomic Layer Deposition of Bi[sub 1â^'xâ^'y]Ti[sub x]Si[sub y]O[sub z] Thin Films Using H[sub 2]O Oxidant and Their Characteristics Depending on Si Content. Journal of the Electrochemical Society, 2007, 154, H915.	2.9	3
27	Atomic Layer Deposition and Electrical Properties of PbTiO[sub 3] Thin Films Using Metallorganic Precursors and H[sub 2]O. Journal of the Electrochemical Society, 2007, 154, G69.	2.9	28
28	Transformation of the Crystalline Structure of an ALD TiO[sub 2] Film on a Ru Electrode by O[sub 3] Pretreatment. Electrochemical and Solid-State Letters, 2006, 9, F5.	2.2	66
29	Characterization of Pb[sub x]Pt[sub y] Alloy Formation on a Pt Substrate during Liquid-Delivery MOCVD of Pb(Zr,Ti)O[sub 3] Thin Films. Journal of the Electrochemical Society, 2006, 153, F81.	2.9	7
30	Characteristics of Polycrystalline SrRuO[sub 3] Thin-Film Bottom Electrodes for Metallorganic Chemical-Vapor-Deposited Pb(Zr[sub 0.2]Ti[sub 0.8])O[sub 3] Thin Films. Journal of the Electrochemical Society, 2006, 153, C777.	2.9	8
31	Characteristics of Amorphous Bi[sub 2]Ti[sub 2]O[sub 7] Thin Films Grown by Atomic Layer Deposition for Memory Capacitor Applications. Journal of the Electrochemical Society, 2006, 153, F20.	2.9	29
32	Growth Characteristics of Atomic Layer Deposited TiO[sub 2] Thin Films on Ru and Si Electrodes for Memory Capacitor Applications. Journal of the Electrochemical Society, 2005, 152, C552.	2.9	64
33	Electrochemical modulation of trap states in PbS QDs and their electrical characterization. Journal of the Korean Physical Society, 0, , .	0.7	0