Kwang-Soon Ahn

List of Publications by Year
in descending order

63 papers	2,367 citations	218677 26 h-index	206112 48 g-index
66 all docs	66 docs citations	66 times ranked	3089 citing authors

#	Article	IF	Citations
1	Drawing the distinguished graphite carbon nitride (g-C3N4) on SnO2 nanoflake film for solar water oxidation. International Journal of Hydrogen Energy, 2020, 45, 22567-22575.	7.1	12
2	Visible-light photoelectrochemical responses of dye-sensitized, compact TiO₂ thin films deposited by electron beam evaporation. Molecular Crystals and Liquid Crystals, 2019, 679, 119-126.	0.9	0
3	Multilayered Fluorine Doped SnO2 Inverse Opal/WO3/BiVO4 Film for Solar Water Oxidation: Systematic Development and Defined Role of Each Layer. Journal of the Electrochemical Society, 2019, 166, H750-H763.	2.9	4
4	Effects of Hydrogen Treatment and Nb₂O₅ Nanoparticle Decoration in TiO₂Nanorods for Solar Water Oxidation. ACS Sustainable Chemistry and Engineering, 2019, 7, 4495-4507.	6.7	9
5	Electrolyte effects on undoped and Mo-doped BiVO4 film for photoelectrochemical water splitting. Journal of Electroanalytical Chemistry, 2019, 842, 41-49.	3.8	15
6	Effects of Al2O3 Coating on BiVO4 and Mo-doped BiVO4 Film for Solar Water Oxidation. Journal of Electrochemical Science and Technology, 2019, 10, 424-432.	2.2	5
7	Dual roles of a flouride-doped SnO2/TiO2 bilayer based on inverse opal/nanoparticle structure for water oxidation. Journal of the Korean Physical Society, 2018, 72, 260-269.	0.7	3
8	Unique photoelectrochemical behavior of TiO2 nanorods wrapped with novel titanium Oxy-Nitride (TiOxNy) nanoparticles. International Journal of Hydrogen Energy, 2018, 43, 16458-16467.	7.1	15
9	Nanolayered CuWO4 Decoration on Fluorine-Doped SnO2 Inverse Opals for Solar Water Oxidation. Journal of Electrochemical Science and Technology, 2018, 9, 282-291.	2.2	5
10	Annealing effect of fluorine-doped SnO2/WO3 core-shell inverse opal nanoarchitecture for photoelectrochemical water splitting. Journal of the Korean Physical Society, 2017, 70, 162-168.	0.7	6
11	Hydrogen Treated Niobium Oxide Nanotube Arrays for Photoelectrochemical Water Oxidation. Journal of the Electrochemical Society, 2016, 163, H1165-H1170.	2.9	12
12	Beneficial surface passivation of hydrothermally grown TiO2 nanowires for solar water oxidation. Applied Surface Science, 2016, 366, 561-566.	6.1	18
13	Role of WO₃ Layers Electrodeposited on SnO₂ Inverse Opal Skeletons in Photoelectrochemical Water Splitting. Journal of Physical Chemistry C, 2016, 120, 5906-5915.	3.1	51
14	Visible Light Absorbing TiO₂ Nanotube Arrays by Sulfur Treatment for Photoelectrochemical Water Splitting. Journal of Physical Chemistry C, 2015, 119, 13375-13383.	3.1	79
15	Joint Effects of Photoactive TiO₂ and Fluoride-Doping on SnO₂ Inverse Opal Nanoarchitecture for Solar Water Splitting. ACS Applied Materials & Interfaces, 2015, 7, 20292-20303.	8.0	72
16	Effect of copper phthalocyanine (CuPc) interlayer on the electrical characteristics of Au/n-GaN Schottky rectifier. Materials Science in Semiconductor Processing, 2015, 30, 420-428.	4.0	10
17	Bifunctional Effects of CdSe Quantum Dots and Nb2O5 Interlayer for ZnO Nanorods-based Photoelectrochemical Water-Splitting Cells. Electrochimica Acta, 2014, 133, 262-267.	5.2	18
18	Double layered nanoarchitecture based on anodic TiO2 nanotubes for dye-sensitized solar cells. Journal of Photochemistry and Photobiology A: Chemistry, 2014, 274, 20-26.	3.9	7

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19	Bifunctional doping effect on the TiO2 nanowires for photoelectrochemical water splitting. Electrochimica Acta, 2013, 114, 159-164.	5.2	12
20	Effects of TiCl4Surface Treatment on Photoelectrochemical Response of TiO2Nanotube Arrays. Molecular Crystals and Liquid Crystals, 2012, 568, 192-197.	0.9	0
21	Carrier transport mechanism of Se/n-type Si Schottky diodes. Journal of Alloys and Compounds, 2012, 534, 37-41.	5.5	22
22	Effects of TiCl₄ Treatment of Nanoporous TiO₂ Films on Morphology, Light Harvesting, and Charge-Carrier Dynamics in Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2012, 116, 21285-21290.	3.1	131
23	Enhanced light-harvesting efficiency by FÃ¶rster resonance energy transfer in quasi-solid state DSSC using organic blue dye. Electrochimica Acta, 2012, 68, 240-245.	5.2	25
24	Temperature-dependent current-voltage characteristics and reverse leakage conduction mechanism of Pt/n-type Si0.85Ge0.15 schottky rectifiers. Journal of the Korean Physical Society, 2012, 60, 1498-1503.	0.7	2
25	Enhanced Photoelectrochemical Response of Graphene-Coated Al₂O₃-TiO₂Nanocomposite Photoanodes. Molecular Crystals and Liquid Crystals, 2011, 538, 272-277.	0.9	3
26	Phase separation in Ga and N co-incorporated ZnO films and its effects on photo-response in photoelectrochemical water splitting. Thin Solid Films, 2011, 519, 5983-5987.	1.8	26
27	Tungsten oxide bilayer electrodes for photoelectrochemical cells. Journal of Power Sources, 2010, 195, 5422-5425.	7.8	11
28	Effects of substrate temperature and RF power on the formation of aligned nanorods in ZnO thin films. Jom, 2010, 62, 25-30.	1.9	6
29	Effect of substrate temperature on the photoelectrochemical responses of Ga and N co-doped ZnO films. Journal of Materials Science, 2010, 45, 5218-5222.	3.7	17
30	Influence of gas ambient on the synthesis of co-doped ZnO:(Al,N) films for photoelectrochemical water splitting. Journal of Power Sources, 2010, 195, 5801-5805.	7.8	47
31	Amorphous copper tungsten oxide with tunable band gaps. Journal of Applied Physics, 2010, 108, 043502.	2.5	14
32	Synthesis and characterization of band gap-reduced ZnO:N and ZnO:(Al,N) films for photoelectrochemical water splitting. Journal of Materials Research, 2010, 25, 69-75.	2.6	56
33	Tri-Branched Tri-Anchoring Organic Dye for Visible Light-Responsive Dye-Sensitized Photoelectrochemical Water-Splitting Cells. Japanese Journal of Applied Physics, 2010, 49, 060219.	1.5	6
34	Temperature dependency and carrier transport mechanisms of Ti/p-type InP Schottky rectifiers. Journal of Alloys and Compounds, 2010, 504, 146-150.	5.5	85
35	Enhanced Carrier Transport of N-Doped TiO₂for Photoelectrochemical Cells. Japanese Journal of Applied Physics, 2009, 48, 120204.	1.5	9
36	CoAl2O4â€“Fe2O3 p-n nanocomposite electrodes for photoelectrochemical cells. Applied Physics Letters, 2009, 95, 022116.	3.3	32

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37	Quasi-solid-state dye-sensitized solar cells employing ternary component polymer-gel electrolytes. Journal of Power Sources, 2008, 180, 896-901.	7.8	99
38	Enhancement of photoelectrochemical response by aligned nanorods in ZnO thin films. Journal of Power Sources, 2008, 176, 387-392.	7.8	115
39	Carrier concentration tuning of bandgap-reduced p-type ZnO films by codoping of Cu and Ga for improving photoelectrochemical response. Journal of Applied Physics, 2008, 103, 073504.	2.5	65
40	ZnO nanocoral structures for photoelectrochemical cells. Applied Physics Letters, 2008, 93, 163117.	3.3	92
41	Band gap narrowing of ZnO:N films by varying rf sputtering power in O[sub 2]âˆ•N[sub 2] mixtures. Journal of Vacuum Science & Technology B, 2007, 25, L23.	1.3	30
42	Enhanced photoelectrochemical responses of ZnO films through Ga and N codoping. Applied Physics Letters, 2007, 91, .	3.3	144
43	The effect of thermal annealing on photoelectrochemical responses of WO3 thin films. Journal of Applied Physics, 2007, 101, 093524.	2.5	80
44	Photoelectrochemical Properties of N-Incorporated ZnO Films Deposited by Reactive RF Magnetron Sputtering. Journal of the Electrochemical Society, 2007, 154, B956.	2.9	81
45	Tandem dye-sensitized solar cell-powered electrochromic devices for the photovoltaic-powered smart window. Journal of Power Sources, 2007, 168, 533-536.	7.8	92
46	Enhanced electron diffusion length of mesoporous TiO2 film by using Nb2O5 energy barrier for dye-sensitized solar cells. Applied Physics Letters, 2006, 89, 013103.	3.3	102
47	Polymer-Laminated Electrochromic Devices Composed of WO[sub 3] and Ni(OH)[sub 2] on Glass and PET Substrates. Journal of the Electrochemical Society, 2005, 152, H201.	2.9	11
48	Electrochemical and Electrochromic Properties of Ni Oxide Thin Films Prepared by a Solâ€"Gel Method. Journal of Sol-Gel Science and Technology, 2004, 31, 323-328.	2.4	35
49	PtRu Alloy and PtRuâ^'WO3 Nanocomposite Electrodes for Methanol Electrooxidation Fabricated by a Sputtering Deposition Method. Journal of Physical Chemistry B, 2004, 108, 5989-5994.	2.6	105
50	Effect of interfacial property on electrochromic response speed of Ta2O5/NiO and Ta2O5/Ni(OH)2. Solid State Ionics, 2003, 165, 155-160.	2.7	12
51	The role of defects on the electrochromic response time of sputter-deposited Ni oxide films. Solid State Ionics, 2003, 156, 433-437.	2.7	8
52	Electrocatalytic Enhancement of Methanol Oxidation at Ptâ^'WOxNanophase Electrodes and In-Situ Observation of Hydrogen Spillover Using Electrochromism. Journal of Physical Chemistry B, 2003, 107, 4352-4355.	2.6	96
53	PtRuâ€"WO3 nanostructured alloy electrode for use in thin-film fuel cells. Applied Physics Letters, 2003, 82, 1090-1092.	3.3	33
54	Bleached state transmittance in charge-unbalanced all-solid-state electrochromic devices. Applied Physics Letters, 2003, 82, 3379-3381.	3.3	38

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55	All-solid-state electrochromic device composed of WO3 and Ni(OH)2 with a Ta2O5 protective layer. Applied Physics Letters, 2002, 81, 3930-3932.	3.3	64
56	Thickness-dependent microstructural and electrochromic properties of sputter-deposited Ni oxide films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2002, 20, 1468-1474.	2.1	24
57	The Effect of Ar/O2 Ratio on Electrochromic Response Time of Ni Oxides Grown Using an RF Sputtering System. Japanese Journal of Applied Physics, 2002, 41, L212-L215.	1.5	22
58	Microstructural and electrochromic properties of sputter-deposited Ni oxide films grown at different working pressures. Journal of Applied Physics, 2002, 92, 1268-1273.	2.5	20
59	Ptâ€"WOx electrode structure for thin-film fuel cells. Applied Physics Letters, 2002, 81, 907-909.	3.3	52
60	Electrochromic properties of SnO2-incorporated Ni oxide films grown using a cosputtering system. Journal of Applied Physics, 2002, 92, 7128-7132.	2.5	14
61	The Effect of RF Power on the Electrochromic Response Time of Sputter-Deposited Ni Oxide Films. Japanese Journal of Applied Physics, 2002, 41, L533-L535.	1.5	18
62	Surface morphological, microstructural, and electrochromic properties of short-range ordered and crystalline nickel oxide thin films. Applied Surface Science, 2002, 199, 259-269.	6.1	58
63	Initial growth step and annealing effect of Ta[sub 2]O[sub 5] formed by anodization of Ta foil in an ammonium tartrate electrolyte. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2001, 19, 2840.	2.1	12