

Ahalapitiya H Jayatissa

List of Publications by Year in descending order

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55
papers

2,188
citations

201674

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46
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all docs

57
docs citations

57
times ranked

3290
citing authors

#	ARTICLE	IF	CITATIONS
1	Hydrothermal Synthesis of Nanomaterials. Journal of Nanomaterials, 2020, 2020, 1-3.	2.7	249
2	Perovskites-Based Solar Cells: A Review of Recent Progress, Materials and Processing Methods. Materials, 2018, 11, 729.	2.9	205
3	Ammonia gas sensing behavior of graphene surface decorated with gold nanoparticles. Solid-State Electronics, 2012, 78, 159-165.	1.4	180
4	Gas sensing properties of graphene synthesized by chemical vapor deposition. Materials Science and Engineering C, 2011, 31, 1405-1411.	7.3	117
5	Surface and gas sensing properties of nanocrystalline nickel oxide thin films. Applied Surface Science, 2013, 276, 291-297.	6.1	92
6	Graphene based field effect transistor for the detection of ammonia. Journal of Applied Physics, 2012, 112, .	2.5	72
7	Adsorption kinetics of ammonia sensing by graphene films decorated with platinum nanoparticles. Journal of Applied Physics, 2012, 111, .	2.5	67
8	Enhancement of Hydrogen Gas Sensing of Nanocrystalline Nickel Oxide by Pulsed-Laser Irradiation. ACS Applied Materials & Interfaces, 2012, 4, 4651-4657.	8.0	62
9	Nano and micro mechanical properties of uncross-linked and cross-linked chitosan films. Journal of the Mechanical Behavior of Biomedical Materials, 2012, 5, 82-89.	3.1	59
10	Evolution of hydrogen gas sensing properties of sol-gel derived nickel oxide thin film. Sensors and Actuators B: Chemical, 2013, 182, 125-133.	7.8	58
11	Mechanical and biological properties of chitosan/carbon nanotube nanocomposite films. Journal of Biomedical Materials Research - Part A, 2014, 102, 2704-2712.	4.0	57
12	The effect of graphene substrate on osteoblast cell adhesion and proliferation. Journal of Biomedical Materials Research - Part A, 2014, 102, 3282-3290.	4.0	57
13	Annealing effect on the formation of nanocrystals in thermally evaporated tungsten oxide thin films. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2004, 109, 269-275.	3.5	54
14	Methane gas sensor application of cuprous oxide synthesized by thermal oxidation. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 332-337.	1.8	54
15	ZnO nanoparticles induced effects on nanomechanical behavior and cell viability of chitosan films. Materials Science and Engineering C, 2013, 33, 3688-3696.	7.3	48
16	Detection of organic vapors by graphene films functionalized with metallic nanoparticles. Journal of Applied Physics, 2012, 112, .	2.5	47
17	Graphene films as transparent electrodes for photovoltaic devices based on cadmium sulfide thin films. Solar Energy Materials and Solar Cells, 2017, 163, 1-8.	6.2	45
18	Low resistive aluminum doped nanocrystalline zinc oxide for reducing gas sensor application via sol-gel process. Sensors and Actuators B: Chemical, 2013, 177, 761-769.	7.8	43

#	ARTICLE	IF	CITATIONS
19	Tribological Properties of 2D Materials and Composites – A Review of Recent Advances. <i>Materials</i> , 2021, 14, 1630.	2.9	40
20	The Impact of Graphene on the Fabrication of Thin Film Solar Cells: Current Status and Future Prospects. <i>Materials</i> , 2018, 11, 36.	2.9	36
21	Low resistive gallium doped nanocrystalline zinc oxide for gas sensor application via sol-gel process. <i>Sensors and Actuators B: Chemical</i> , 2014, 204, 310-318.	7.8	35
22	The effect of UV irradiation on nanocrystalline zinc oxide thin films related to gas sensing characteristics. <i>Applied Surface Science</i> , 2011, 257, 5398-5402.	6.1	33
23	Preparation of nanocrystalline nickel oxide thin films by sol-gel process for hydrogen sensor applications. <i>Materials Science and Engineering C</i> , 2012, 32, 2230-2234.	7.3	31
24	Zinc nitride films prepared by reactive RF magnetron sputtering of zinc in nitrogen containing atmosphere. <i>Journal Physics D: Applied Physics</i> , 2012, 45, 135101.	2.8	30
25	Effect of laser irradiation on gas sensing properties of sol-gel derived nanocrystalline Al-doped ZnO thin films. <i>Thin Solid Films</i> , 2014, 562, 585-591.	1.8	29
26	An ab initio computational study of pure Zn ₃ N ₂ and its native point defects and dopants Cu, Ag and Au. <i>Thin Solid Films</i> , 2014, 564, 331-338.	1.8	29
27	Hydrogen sensing properties of multi-walled carbon nanotubes. <i>Materials Science and Engineering C</i> , 2008, 28, 1556-1559.	7.3	28
28	Preparation of gallium-doped ZnO films by oxidized ZnS films. <i>Semiconductor Science and Technology</i> , 2003, 18, L27-L30.	2.0	27
29	Acceleration of biomimetic mineralization to apply in bone regeneration. <i>Biomedical Materials (Bristol)</i> , 2008, 3, 015003.	3.3	27
30	Cross-linked chitosan improves the mechanical properties of calcium phosphate-chitosan cement. <i>Materials Science and Engineering C</i> , 2015, 54, 14-19.	7.3	26
31	Kesterite-based next generation high performance thin film solar cell: current progress and future prospects. <i>Journal of Materials Science: Materials in Electronics</i> , 2017, 28, 2290-2306.	2.2	25
32	Computational and experimental study of electrical conductivity of graphene/poly(methyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 227 Td 2015, 204, 141-147.	3.9	24
33	Two step technology for porous ZnO nanosystem formation for potential use in hydrogen gas sensors. <i>Thin Solid Films</i> , 2016, 604, 48-54.	1.8	23
34	Comparison study of graphene based conductive nanocomposites using poly(methyl methacrylate) and polypyrrole as matrix materials. <i>Journal of Materials Science: Materials in Electronics</i> , 2015, 26, 7780-7783.	2.2	21
35	Enhancement of gas sensor response of nanocrystalline zinc oxide for ammonia by plasma treatment. <i>Applied Surface Science</i> , 2014, 309, 46-53.	6.1	20
36	Reactive radio frequency sputtering deposition and characterization of zinc nitride and oxynitride thin films. <i>Thin Solid Films</i> , 2012, 520, 1698-1704.	1.8	17

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37	Nanocrystalline WO ₃ films prepared by two-step annealing. Applied Surface Science, 2005, 244, 453-457.	6.1	16
38	One-pot hydrothermal synthesis and fabrication of kesterite Cu ₂ ZnSn(S,Se) thin films. Progress in Natural Science: Materials International, 2017, 27, 550-555.	4.4	16
39	Thermal annealing effect on zinc nitride thin films deposited by reactive rf-magnetron sputtering process. Materials Science in Semiconductor Processing, 2013, 16, 318-325.	4.0	13
40	Dissolution behavior of biomimetic minerals on 3D PLGA scaffold. Surface and Coatings Technology, 2006, 200, 6336-6339.	4.8	12
41	Optical properties of zinc nitride films deposited by the rf magnetron sputtering method. Journal Physics D: Applied Physics, 2012, 45, 045402.	2.8	12
42	Preparation and characterization of cobalt-doped iron pyrite (FeS ₂) thin films. Progress in Natural Science: Materials International, 2020, 30, 352-359.	4.4	11
43	Design and Fabrication of a Graphene/Polyvinylidene Fluoride Nanocomposite-Based Airflow Sensor. ACS Omega, 2022, 7, 7981-7988.	3.5	10
44	Fabrication of semiconducting pyrite thin films from hydrothermally synthesized pyrite (FeS ₂) powder. Journal of Materials Science: Materials in Electronics, 2016, 27, 535-542.	2.2	8
45	Spin coating of transparent zinc oxide films using novel precursor. Journal of Materials Science: Materials in Electronics, 2009, 20, 577-581.	2.2	6
46	The effects of the pressure and the oxygen content of the sputtering gas on the structure and the properties of zinc oxy-nitride thin films deposited by reactive sputtering of zinc. Semiconductor Science and Technology, 2013, 28, 025009.	2.0	4
47	Carbon helices produced by hot filament assisted chemical vapor deposition. Journal of Materials Science: Materials in Electronics, 2010, 21, 509-513.	2.2	3
48	Manufacturing of Multifunctional Nanocrystalline ZnO Thin Films. Advanced Materials Research, 0, 383-390, 4073-4078.	0.3	3
49	Characterization of porous nickel oxide base hydrogen gas sensor. , 2011, , .		2
50	Zinc Nitride Films by Reactive Sputtering of Zn in N ₂ -Containing Atmosphere. Materials Research Society Symposia Proceedings, 2011, 1324, 157.	0.1	2
51	Sensitivity of tungsten oxide thin films for nitric oxide and methane gases. , 2009, , .		1
52	Structural, surface, optical, and mechanical properties of Zn ₃ N ₂ thin films prepared by sputtering deposition. , 2010, , .		1
53	Antibacterial silver (Ag) containing titanium oxynitride (TiO _x N _y) coatings for inhibiting surgical site infections (SSI). Medical Devices & Sensors, 2019, 2, e10052.	2.7	1
54	Preparation of ZnO films in sol-gel method using novel monomers. , 2005, 6002, 276.		0

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55	The effect of graphene substrate on osteoblast cell adhesion and proliferation. Journal of Biomedical Materials Research - Part A, 2013, , n/a-n/a.	4.0	0