

R Navamathavan

List of Publications by Year in descending order

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86
papers

1,775
citations

236925

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315739

38
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86
all docs

86
docs citations

86
times ranked

2496
citing authors

#	ARTICLE	IF	CITATIONS
1	Preparation of polyamide-6/chitosan composite nanofibers by a single solvent system via electrospinning for biomedical applications. <i>Colloids and Surfaces B: Biointerfaces</i> , 2011, 83, 173-178.	5.0	100
2	Coaxial In _x Ga _{1-x} N/GaN Multiple Quantum Well Nanowire Arrays on Si(111) Substrate for High-Performance Light-Emitting Diodes. <i>Nano Letters</i> , 2013, 13, 3506-3516.	9.1	95
3	Electrochemical investigation of manganese ferrites prepared via a facile synthesis route for supercapacitor applications. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2018, 538, 668-677.	4.7	76
4	Low-resistivity and transparent indium-oxide-doped ZnO ohmic contact to p-type GaN. <i>Applied Physics Letters</i> , 2004, 85, 6191-6193.	3.3	64
5	Hydroxyapatite Mineralization on the Calcium Chloride Blended Polyurethane Nanofiber via Biomimetic Method. <i>Nanoscale Research Letters</i> , 2011, 6, 2.	5.7	63
6	Effects of Electrical Bias Stress on the Performance of ZnO-Based TFTs Fabricated by RF Magnetron Sputtering. <i>Journal of the Electrochemical Society</i> , 2006, 153, G385.	2.9	60
7	Synthesis and characterization of bovine femur bone hydroxyapatite containing silver nanoparticles for the biomedical applications. <i>Journal of Nanoparticle Research</i> , 2011, 13, 1917-1927.	1.9	58
8	Characteristics of low-k SiOC(H) films deposited at various substrate temperature by PECVD using DMDMS/O ₂ precursor. <i>Thin Solid Films</i> , 2007, 516, 340-344.	1.8	54
9	Structural, thermal, mechanical and bioactivity evaluation of silver-loaded bovine bone hydroxyapatite grafted poly(μ -caprolactone) nanofibers via electrospinning. <i>Surface and Coatings Technology</i> , 2010, 205, 174-181.	4.8	54
10	Lecithin blended polyamide-6 high aspect ratio nanofiber scaffolds via electrospinning for human osteoblast cell culture. <i>Materials Science and Engineering C</i> , 2011, 31, 486-493.	7.3	53
11	Fabrication and characterizations of ZnO thin film transistors prepared by using radio frequency magnetron sputtering. <i>Solid-State Electronics</i> , 2008, 52, 813-816.	1.4	49
12	High-Quality Uniaxial In _x Ga _{1-x} N/GaN Multiple Quantum Well (MQW) Nanowires (NWs) on Si(111) Grown by Metal-Organic Chemical Vapor Deposition (MOCVD) and Light-Emitting Diode (LED) Fabrication. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 2111-2117.	8.0	46
13	Preparation and characterizations of anisotropic chitosan nanofibers via electrospinning. <i>Macromolecular Research</i> , 2011, 19, 345-350.	2.4	42
14	Formation of high aspect ratio polyamide-6 nanofibers via electrically induced double layer during electrospinning. <i>Applied Surface Science</i> , 2010, 256, 6318-6323.	6.1	41
15	Recent Progress on the Fabrication of Ultrafine Polyamide-6 Based Nanofibers Via Electrospinning: A Topical Review. <i>Nano-Micro Letters</i> , 2014, 6, 89-107.	27.0	39
16	$\text{Pop-in}^{\text{TM}}$ phenomenon during nanoindentation in epitaxial GaN thin films on c-plane sapphire substrates. <i>Materials Chemistry and Physics</i> , 2006, 99, 410-413.	4.0	38
17	A nanoindentation study of the mechanical properties of ZnO thin films on (0 0 0 1) sapphire. <i>Applied Surface Science</i> , 2006, 253, 464-467.	6.1	37
18	Electrospun nickel doped titanium dioxide nanofibers as an effective photocatalyst for the hydrolytic dehydrogenation of ammonia borane. <i>International Journal of Hydrogen Energy</i> , 2012, 37, 10036-10045.	7.1	37

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19	Effect of solvents on high aspect ratio polyamide-6 nanofibers via electrospinning. <i>Macromolecular Research</i> , 2010, 18, 759-765.	2.4	33
20	Photocatalytic activities of electrospun tin oxide doped titanium dioxide nanofibers. <i>Ceramics International</i> , 2012, 38, 4533-4540.	4.8	33
21	The study of efficiency of Al ₂ O ₃ drop coated electrospun meta-aramid nanofibers as separating membrane in lithium-ion secondary batteries. <i>Materials Letters</i> , 2014, 132, 384-388.	2.6	31
22	Different growth behaviors of GaN nanowires grown with Au catalyst and Au + Ga solid solution nano-droplets on Si(111) substrates by using MOCVD. <i>Current Applied Physics</i> , 2011, 11, 77-81.	2.4	30
23	Preparation and electrical characterization of polyamide-6/chitosan composite nanofibers via electrospinning. <i>Materials Letters</i> , 2011, 65, 493-496.	2.6	29
24	Influence of antimicrobial additives on the formation of rosin nanofibers via electrospinning. <i>Colloids and Surfaces B: Biointerfaces</i> , 2013, 104, 262-267.	5.0	29
25	Nanoindentation "pop-in" phenomenon in epitaxial ZnO thin films on sapphire substrates. <i>Materials Characterization</i> , 2008, 59, 359-364.	4.4	27
26	Preparation and characterization of copper oxide particles incorporated polyurethane composite nanofibers by electrospinning. <i>Ceramics International</i> , 2013, 39, 9651-9658.	4.8	25
27	Electrical properties of ZnO-based bottom-gate thin film transistors fabricated by using radio frequency magnetron sputtering. <i>Journal of Alloys and Compounds</i> , 2009, 475, 889-892.	5.5	22
28	Synthesis of GNS-MnS hybrid nanocomposite for enhanced electrochemical energy storage applications. <i>Materials Chemistry and Physics</i> , 2019, 230, 249-257.	4.0	22
29	The influence of the working pressure on the synthesis of GaN nanowires by using MOCVD. <i>Journal of Crystal Growth</i> , 2010, 312, 770-774.	1.5	21
30	Ultraviolet irradiation effect on the properties of leakage current and dielectric breakdown of low-dielectric-constant SiOC (H) films using comb capacitor structure. <i>Thin Solid Films</i> , 2011, 519, 6732-6736.	1.8	20
31	Bactericidal Activity and <i>In Vitro</i> Cytotoxicity Assessment of Hydroxyapatite Containing Gold Nanoparticles. <i>Journal of Biomedical Nanotechnology</i> , 2011, 7, 342-350.	1.1	19
32	Silver-Loaded Biomimetic Hydroxyapatite Grafted Poly(ϵ -caprolactone) Composite Nanofibers: A Cytotoxicity Study. <i>Journal of Biomedical Nanotechnology</i> , 2012, 8, 125-132.	1.1	19
33	Growth characteristics of uniaxial InGaN/GaN MQW/n-GaN nanowires on Si(111) using MOCVD. <i>CrystEngComm</i> , 2012, 14, 8208.	2.6	18
34	Fabrication and characterization of VI semiconductor nanoparticles decorated electrospun polyacrylonitrile nanofibers. <i>Journal of Colloid and Interface Science</i> , 2013, 397, 65-72.	9.4	18
35	GaN Nanowires with Au+Ga Solid Solution Grown on an Si(111) Substrate by Metalorganic Chemical Vapor Deposition. <i>Japanese Journal of Applied Physics</i> , 2009, 48, 091001.	1.5	17
36	Synthesis and Electrical Properties of TiO ₂ Nanoparticles Embedded in Polyamide-6 Nanofibers Via Electrospinning. <i>Nano-Micro Letters</i> , 2011, 3, 56-61.	27.0	17

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37	Effect of NH ₃ plasma treatment on the device performance of ZnO based thin film transistors. <i>Vacuum</i> , 2011, 85, 904-907.	3.5	17
38	Mechanical behavior of electrospun Nylon66 fibers reinforced with pristine and treated multi-walled carbon nanotube fillers. <i>Ceramics International</i> , 2013, 39, 8199-8206.	4.8	17
39	Radial growth behavior and characteristics of m-plane In _{0.16} Ga _{0.84} N/GaN MQW nanowires by MOCVD. <i>CrystEngComm</i> , 2013, 15, 1874.	2.6	17
40	One-step facile hydrothermal synthesis of rGO-CoS ₂ nanocomposites for high performance HER electrocatalysts. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 40359-40367.	7.1	16
41	Spherical-Like Ball-by-Ball Architecture of Ni-Co-Zn-S Electrodes for Electrochemical Energy Storage Application in Supercapacitors. <i>Journal of the Electrochemical Society</i> , 2017, 164, E434-E439.	2.9	15
42	Electrical properties of ultrafine nylon-6 nanofibers prepared via electrospinning. <i>Fibers and Polymers</i> , 2011, 12, 1021-1024.	2.1	12
43	Recent advancements in liquefied petroleum gas sensors: A topical review. <i>Sensors International</i> , 2021, 2, 100091.	8.4	12
44	Plasma Diagnostics during Plasma-Enhanced Chemical-Vapor Deposition of Low-Dielectric-Constant SiOC(H) Films from TES/O ₂ Precursors. <i>Journal of the Korean Physical Society</i> , 2008, 53, 1468-1474.	0.7	12
45	Growth behavior of GaN epilayers on Si(111) grown by GaN nanowires assisted epitaxial lateral overgrowth. <i>CrystEngComm</i> , 2012, 14, 5558.	2.6	11
46	Effect of Interlayers on the Indium Oxide-Doped ZnO Ohmic Contact to p-Type GaN. <i>Journal of the Electrochemical Society</i> , 2005, 152, G491.	2.9	10
47	The growth behavior of GaN NWs on Si(1 1 1) by the dispersion of Au colloid catalyst using pulsed MOCVD. <i>Journal of Crystal Growth</i> , 2011, 319, 31-38.	1.5	10
48	Graphitic carbon nitride encapsulated sonochemically synthesized Ni ²⁺ -nickel hydroxide nanocomposites for electrocatalytic hydrogen generation. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 40349-40358.	7.1	10
49	Mechanical properties of some binary, ternary and quaternary III-V compound semiconductor alloys. <i>Physica B: Condensed Matter</i> , 2007, 392, 51-57.	2.7	9
50	Electrical characterization of low-k films with nano-pore structure prepared with DMDMOS/O ₂ precursors. <i>Surface and Coatings Technology</i> , 2008, 202, 5688-5692.	4.8	9
51	Study of Cu diffusion behavior in low dielectric constant SiOC(H) films deposited by plasma-enhanced chemical vapor deposition. <i>Thin Solid Films</i> , 2010, 518, 6474-6477.	1.8	9
52	UV irradiation effects on the bonding structure and electrical properties of ultra low-k SiOC(H) thin films for 45 nm technology node. <i>Current Applied Physics</i> , 2011, 11, S109-S113.	2.4	9
53	Two-dimensional metal carbides and nitrides from head to toe with energy applications: A topical review. <i>Ceramics International</i> , 2021, 47, 32477-32489.	4.8	9
54	Plasma enhanced chemical vapor deposition of low dielectric constant SiOC(H) films using MTES/O ₂ precursor. <i>Thin Solid Films</i> , 2007, 515, 5040-5044.	1.8	8

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55	A nanoindentation analysis of the influence of lattice mismatch on some wide band gap semiconductor films. <i>Physica B: Condensed Matter</i> , 2008, 403, 675-678.	2.7	8
56	Bicrystalline GaN nanowires grown by the formation of Pt+Ga solid solution nano-droplets on Si(1 1) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	1.5	8
57	Direct comparison on the structural and optical properties of metal-catalytic and self-catalytic assisted gallium nitride (GaN) nanowires by chemical vapor deposition. <i>RSC Advances</i> , 2014, 4, 45100-45108.	3.6	8
58	Nanoindentation studies of (111) GaAs/InP epilayers. <i>Applied Surface Science</i> , 2001, 180, 119-125.	6.1	7
59	Deformation behavior during nanoindentation of epitaxial ZnO thin films on sapphire substrate. <i>Materials Letters</i> , 2007, 61, 2443-2445.	2.6	7
60	Enhanced electrical properties of electrospun nylon66 nanofibers containing carbon nanotube fillers and Ag nanoparticles. <i>Fibers and Polymers</i> , 2014, 15, 918-923.	2.1	7
61	Investigation of Electrical Conduction in Low-dielectric-constant SiOC(-H) Thin Films Deposited by Using PECVD. <i>Journal of the Korean Physical Society</i> , 2009, 55, 227-231.	0.7	7
62	Selective area growth of GaN nanowires using metalorganic chemical vapor deposition on nano-patterned Si(111) formed by the etching of nano-sized Au droplets. <i>Thin Solid Films</i> , 2011, 520, 126-130.	1.8	6
63	Non-polar InGaN quantum dots grown on the m-plane of n-GaN nanowires by a self-catalyst method using metal organic chemical vapor deposition. <i>CrystEngComm</i> , 2014, 16, 7580.	2.6	6
64	Microindentation studies of Hg _{0.7} Cd _{0.3} Te/CdTe compound semiconductor alloy. <i>Materials Letters</i> , 2006, 60, 2949-2953.	2.6	5
65	Method of sealing pores in porous low-k SiOC(-H) films fabricated using plasma-assisted atomic layer deposition. <i>Journal of the Korean Physical Society</i> , 2013, 62, 1143-1149.	0.7	5
66	Reviewâ€”State of the Art of the Multifunctional Bismuth Ferrite: Synthesis Method and Applications. <i>ECS Journal of Solid State Science and Technology</i> , 2022, 11, 043010.	1.8	5
67	Electrical characterization of nylon-6 composite nanofibers. <i>Journal of Physics and Chemistry of Solids</i> , 2012, 73, 1326-1330.	4.0	4
68	Improved Structural and Electrical Properties of ZnO-Based Thin Film Transistors by Using Pulsed KrF Excimer Laser Irradiation. <i>Journal of Electronic Materials</i> , 2019, 48, 3137-3144.	2.2	4
69	Green Synthesis of Silver Nanoparticles Using Aqueous Rhizome Extract of <i>Corallocarpus Epigaeus</i> for Biomedical Applications. <i>Applied Science and Convergence Technology</i> , 2021, 30, 54-61.	0.9	4
70	Characterization of surface deformation around Vickers indentations in InGaAsP epilayers on InP substrate. <i>Applied Surface Science</i> , 2006, 253, 2973-2977.	6.1	3
71	Photocatalytic Properties of Silver Nanoparticles Decorated Nanobranched TiO ₂ Nanofibers. <i>Journal of Nanoscience and Nanotechnology</i> , 2011, 11, 6886-6892.	0.9	3
72	Characterisation of bioresourced hydroxyapatite containing silver nanoparticles. <i>Materials Research Innovations</i> , 2012, 16, 249-256.	2.3	3

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73	Synthesis and characterizations of Pt nanorods on electrospun polyamide-6 nanofibers templates. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2012, 177, 826-831.	3.5	3
74	Effects of ultraviolet irradiation treatment on low-k SiOC($\hat{\sim}$ H) ultra-thin films deposited by using TMS/O ₂ PEALD. <i>Journal of the Korean Physical Society</i> , 2012, 60, 800-806.	0.7	3
75	The effects of UV radiation on SiC(O)N/SiOC($\hat{\sim}$ H) thin films grown on Si substrates using plasma-enhanced atomic layer deposition. <i>Thin Solid Films</i> , 2013, 547, 151-155.	1.8	3
76	Investigation of Oxygen-Adsorbed Iron Pnictide Crystals. <i>Journal of Superconductivity and Novel Magnetism</i> , 2017, 30, 287-292.	1.8	3
77	Physical properties and electronic structure of YbFe ₂ As ₂ . <i>Journal of Magnetism and Magnetic Materials</i> , 2020, 493, 165736.	2.3	3
78	Effects of the formation temperature of Au + Ga solid solution droplets on the growth behaviors of GaN nanowires on Si(111) by using MOCVD. <i>Journal of the Korean Physical Society</i> , 2009, 55, 1496-1500.	0.7	3
79	Size effects of nano-pattern in Si(111) substrate on the selective growth behavior of GaN nanowires by MOCVD. <i>Materials Research Bulletin</i> , 2012, 47, 836-842.	5.2	2
80	X-ray photoelectron spectroscopy study on YbFe ₂ As ₂ crystals prepared by different growth temperatures. <i>Physica B: Condensed Matter</i> , 2021, 604, 412688.	2.7	2
81	Synthesis and physical properties of oxygen adsorbed YbFe ₂ As ₂ . <i>Materials Research Express</i> , 2017, 4, 086101.	1.6	2
82	Preparation and Properties of Low Dielectric Constant SiOC(H) Thin Films Deposited by Using PECVD. <i>Journal of the Korean Physical Society</i> , 2010, 56, 818-822.	0.7	2
83	Effect of evaporated copper and aluminum on post-annealed SiOC($\hat{\sim}$ H) films deposited using plasma-enhanced chemical vapor deposition. <i>Thin Solid Films</i> , 2010, 518, 6469-6473.	1.8	1
84	A study on electrospun nylon-6/TiO ₂ composite nanofibers. <i>Journal of the Korean Physical Society</i> , 2012, 60, 1741-1744.	0.7	0
85	Hierarchical growth of GaN nanowires for light emitting diode applications. , 2016, , .		0
86	Evidence of strong correlation and magnetotransport scaling in YbFe ₂ As ₂ . <i>Physica B: Condensed Matter</i> , 2022, 630, 413696.	2.7	0