Dakshanamoorthy Arivuoli Cchem Frsc

List of Publications by Year
in descending order

96 papers	1,587 citations	430874 18 h-index	330143 37 g-index
97 all docs	97 docs citations	97 times ranked	2263 citing authors

#	Article	IF	Citations
1	Synthesis of stoichiometric nano crystalline hydroxyapatite by ethanol-based solâ€“gel technique at low temperature. Journal of Crystal Growth, 2004, 263, 517-523.	1.5	241
2	Growth and microhardness studies of chalcogneides of arsenic, antimony and bismuth. Journal of Materials Science Letters, 1988, 7, 711-713.	0.5	179
3	Photocatalytic Water Splitting under Visible Light by Mixed-Valence Sn₃O₄. ACS Applied Materials & Interfaces, 2014, 6, 3790-3793.	8.0	148
4	Fundamentals of nonlinear optical materials. Pramana - Journal of Physics, 2001, 57, 871-883.	1.8	84
5	Lowâ€Temperature Remediation of NO Catalyzed by Interleaved CuO Nanoplates. Advanced Materials, 2014, 26, 4481-4485.	21.0	79
6	Tribological properties and deformation mechanism of TiAlN coating sliding with various counterbodies. Tribology International, 2013, 66, 143-149.	5.9	60
7	Growth and characterization of hydroxyapatite crystals by hydrothermal method. Journal of Materials Science: Materials in Medicine, 2007, 18, 895-898.	3.6	49
8	Surface modification and characterisation of Tiâ€“Alâ€“V alloys. Materials Chemistry and Physics, 2002, 76, 187-190.	4.0	45
9	Size and Shape Dependence on Melting Temperature of Gallium Nitride Nanoparticles. Journal of Nanomaterials, 2012, 2012, 1-11.	2.7	39
10	Wear mechanism of CrN/NbN superlattice coating sliding against various counterbodies. International Journal of Refractory Metals and Hard Materials, 2013, 41, 547-552.	3.8	27
11	High intense violet luminescence in fluorine doped zinc oxide (FZO) thin films deposited by aerosol assisted CVD. Journal of Alloys and Compounds, 2013, 580, 131-136.	5.5	26
12	Growth of some group V-VI-VII compounds from the vapour. Journal of Crystal Growth, 1993, 128, 1081-1085.	1.5	25
13	Synthesis of Mesoporous Ptâ€“Ru Alloy Particles with Uniform Sizes by Sophisticated Hardâ€Templating Method. Chemistry - an Asian Journal, 2013, 8, 902-907.	3.3	25
14	Mixed-valence NaSb₃O₇ support toward improved electrocatalytic performance in the oxygen-reduction reaction. Journal of Materials Chemistry A, 2017, 5, 1667-1671.	10.3	24
15	Preparation and characterization of bioactive silk fibroin/paramylon blend films for chronic wound healing. International Journal of Biological Macromolecules, 2020, 154, 1324-1331.	7.5	23
16	Microhardness studies of doped and undoped InP crystals. Journal of Materials Science Letters, 1991, 10, 559-561.	0.5	22
17	Influence of an organic and an inorganic additive on the crystallization of dicalcium phosphate dihydrate. Journal of Crystal Growth, 2005, 285, 380-387.	1.5	20
18	Growth of bismuth sulpho-iodide single crystals from vapour. Journal of Materials Science, 1986, 21, 2835-2838.	3.7	18

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19	Physico-chemical and biological studies on three-dimensional porous silk/spray-dried mesoporous bioactive glass scaffolds. Ceramics International, 2016, 42, 13761-13772.	4.8	18
20	In vitro corrosion behaviour of plasma nitrided Tiâ€“6Alâ€“7Nb orthopaedic alloy in Hanks solution. Science and Technology of Advanced Materials, 2003, 4, 415-418.	6.1	17
21	Extremely high wear resistance and ultra-low friction behaviour of oxygen-plasma-treated nanocrystalline diamond films. Journal Physics D: Applied Physics, 2013, 46, 425304.	2.8	17
22	Fluorine doped tin oxide (FTO) thin film as transparent conductive oxide (TCO) for photovoltaic applications. AIP Conference Proceedings, 2013, , .	0.4	17
23	Enhanced violet photoemission of nanocrystalline fluorine doped zinc oxide (FZO) thin films. Optical Materials, 2015, 47, 88-94.	3.6	17
24	Evaluation of nanoindentation and nanoscratch characteristics of GaN/InGaN epilayers. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 683, 64-69.	5.6	17
25	Growth and characterization of pure and cadmium doped strontium tartrate tetrahydrate single crystals. Materials Research Bulletin, 1994, 29, 309-316.	5.2	15
26	Tailoring the surface-oxygen defects of a tin dioxide support towards an enhanced electrocatalytic performance of platinum nanoparticles. Physical Chemistry Chemical Physics, 2016, 18, 5932-5937.	2.8	15
27	Hard-templating Synthesis of Mesoporous Pt-Based Alloy Particles with Low Ni and Co Contents. Chemistry Letters, 2013, 42, 447-449.	1.3	14
28	Lowâ€cost and biodegradable cellulose/PVP/activated carbon composite membrane for brackish water treatment. Journal of Applied Polymer Science, 2020, 137, 48746.	2.6	14
29	Microhardness studies on ammonium acid urate crystals. Journal of Materials Science Letters, 1993, 12, 405-406.	0.5	12
30	Microhardness studies of doped and undoped strontium tartrate tetrahydrate single crystals. Journal of Materials Science Letters, 1994, 13, 263-265.	0.5	12
31	Nonâ€Invasive, Nonâ€Enzymatic, Biodegradable and Flexible Sweat Glucose Sensor and Its Electrochemical Studies. ChemistrySelect, 2020, 5, 11305-11321.	1.5	12
32	Electrochemical behaviour and characterisation of plasma nitrided Tiâ€“5Alâ€“2Nbâ€“1Ta orthopaedic alloy in Hanks solution. Surface and Coatings Technology, 2004, 182, 287-293.	4.8	11
33	Tribological behaviour of plasma nitrided Ti-5Al-2Nb-1Ta alloy against UHMWPE. Tribology International, 2004, 37, 627-631.	5.9	11
34	Growth of oxide crystals: effect of change in melt depth. Journal of Crystal Growth, 1994, 141, 371-375.	1.5	10
35	Pt Decorated Free-Standing TiO₂ Nanotube Arrays: Highly Active and Durable Electrocatalyst for Oxygen Reduction and Methanol Oxidation Reactions. Journal of Nanoscience and Nanotechnology, 2016, 16, 8269-8278.	0.9	10
36	Nanoindentation studies of MOVPE grown GaAs/InP heterostructures. Materials Chemistry and Physics, 2000, 66, 207-212.	4.0	9

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37	Effect of N⁺ion implantation on the corrosion behaviour of Tiâ€“6Alâ€“7Nb and Tiâ€“5Alâ€“2Nbâ€“1Ta orthopaedic alloys in Hanks solution. Journal of Applied Electrochemistry, 2004, 34, 271-276.	2.9	9
38	Enhanced wear resistance of Ti-5Al-2Nb-1Ta orthopaedic alloy by nitrogen ion implantation. Tribology International, 2006, 39, 548-552.	5.9	9
39	Mechanical properties of some binary, ternary and quaternary IIIâ€“V compound semiconductor alloys. Physica B: Condensed Matter, 2007, 392, 51-57.	2.7	9
40	Preparation and characterization of highly ordered mesoporous SiC nanoparticles with rod shaped morphology and tunable pore diameters. Journal of Materials Chemistry, 2011, 21, 8792.	6.7	9
41	Studies of nanoindentation and residual stress analysis of Ge/GaAs epilayers. Semiconductor Science and Technology, 2015, 30, 055004.	2.0	9
42	Growth of bismuth seleno iodide single crystals from the vapour. Journal of Materials Science, 1987, 22, 981-984.	3.7	8
43	Enhanced photocatalytic activity on Vanadium-doped NiO nanostructures in natural sunlight. Journal of Materials Science: Materials in Electronics, 2021, 32, 1105-1120.	2.2	8
44	Nanoindentation studies of (111) GaAs/InP epilayers. Applied Surface Science, 2001, 180, 119-125.	6.1	7
45	Growth of dendritic BiSeI from vapour. Journal of Materials Science Letters, 1986, 5, 597-598.	0.5	6
46	Growth of struvite crystals from gel. Crystal Research and Technology, 1990, 25, k104-k107.	1.3	6
47	Some aspects of growth and characterisation of BSO and BGO crystals. Ferroelectrics, 1993, 142, 161-165.	0.6	6
48	Growth of hollow SbSI crystals from the vapour. Journal of Crystal Growth, 1986, 79, 432-435.	1.5	5
49	Growth of arsenic tritelluride hollow crystals from vapour. Journal of Materials Science Letters, 1986, 5, 193-194.	0.5	5
50	Growth of SbSI and BiSI from vapour by iodine transport. Materials Chemistry and Physics, 1987, 16, 181-188.	4.0	5
51	Growth and Characterisation of NaNO3 Single Crystals. Crystal Research and Technology, 1991, 26, K141-K146.	1.3	5
52	Growth of bismuth silicon oxide and bismuth germanium oxide crystals by the Czochralski technique and their characterization. Optical Engineering, 1993, 32, 682.	1.0	5
53	Growth and characterization of selenium sulfide (SeS) and selenium tin sulfide (SeSnS2) microcrystals. Journal of Crystal Growth, 2004, 263, 498-503.	1.5	5
54	Microindentation studies of Hg0.7Cd0.3Te/CdTe compound semiconductor alloy. Materials Letters, 2006, 60, 2949-2953.	2.6	5

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55	Morphological Control of Porous SiC Templated by As-Synthesized Form of Mesoporous Silica. Journal of Nanoscience and Nanotechnology, 2011, 11, 6823-6829.	0.9	5
56	Growth, Optical, Mechanical and Dielectric Properties of Glycine Zinc Chloride NLO Single Crystals. Journal of Minerals and Materials Characterization and Engineering, 2011, 10, 1131-1139.	0.4	5
57	Growth of bubble-free bismuth silicon oxide and bismuth germanium oxide crystals under conditions of forced convection in the melt. Journal of Materials Science Letters, 1993, 12, 1218-1220.	0.5	5
58	Crystallization and characterization of AsSeI. Journal of Crystal Growth, 1988, 88, 353-357.	1.5	4
59	Microindentation studies of chalcohalides of antimony and bismuth. Journal Physics D: Applied Physics, 1988, 21, 1019-1021.	2.8	4
60	Microscopy observations of Cz-grown BSO (Bi12SiO20) crystals. Materials Chemistry and Physics, 1994, 37, 90-93.	4.0	4
61	Simulation Studies of InGaN Based Light-Emitting Diodes to Reduce Electron Overflow Problem by Designing Electron Blocking Layer. Journal of Nanoscience and Nanotechnology, 2015, 15, 4414-4420.	0.9	4
62	Evaluation of microindentation properties of epitaxial 3Câ€“SiC/Si thin films. Physica B: Condensed Matter, 2016, 490, 86-89.	2.7	4
63	Growth of hollow antimony seleno-bromide crystals from vapour. Journal of Materials Science Letters, 1987, 6, 249-250.	0.5	3
64	Effect of SeS2 treatment on the surface modification of GaAs and adhesive wafer bonding of GaAs with Silicon. Journal of Crystal Growth, 2004, 263, 454-458.	1.5	3
65	Investigations of structural and optical analysis of SeS and SeSnS2 microcrystals. Journal of Crystal Growth, 2004, 267, 166-172.	1.5	3
66	Characterization of surface deformation around Vickers indentations in InGaAsP epilayers on InP substrate. Applied Surface Science, 2006, 253, 2973-2977.	6.1	3
67	Studies on mechanical properties of titanium aluminium nitride coatings. Indian Journal of Physics, 2013, 87, 1199-1206.	1.8	3
68	Growth of hollow Sb2S3-Sb2Se3 mixed crystals from vapour. Journal of Materials Science Letters, 1986, 5, 959-960.	0.5	2
69	Growth of antimony sulpho iodide single crystals from vapour. Journal of Materials Science, 1987, 22, 85-86.	3.7	2
70	Growth of antimony seleno iodide single crystals from vapour. Materials Chemistry and Physics, 1987, 16, 197-200.	4.0	2
71	Growth and characterization of BiSeI crystals. Journal of Materials Science Letters, 1992, 11, 1608-1610.	0.5	2
72	Dendritic structures of brushite in silica gel. Journal of Crystal Growth, 1993, 130, 217-220.	1.5	2

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73	In vitro solubility, growth and characterization of cholesteryl acetate. Journal of Crystal Growth, 2004, 267, 301-305.	1.5	2
74	AFM studies of microindented GaN and InGaN. Materials Letters, 2009, 63, 515-518.	2.6	2
75	A Thermo Dynamical Model for the Shape and Size Effect on Melting of Boron Carbide Nanoparticles. Journal of Nanoscience and Nanotechnology, 2012, 12, 993-1000.	0.9	2
76	Nanoindentation Studies of Metal Organic Vapor Phase Epitaxy Grown Ge/Si Heterostructures. Energy and Environment Focus, 2013, 2, 85-89.	0.3	2
77	Synthesis and Electro-Catalytic Properties of Platinum Supported on Graphene for Methanol Oxidation. Journal of Nanoscience and Nanotechnology, 2015, 15, 9746-9753.	0.9	2
78	Dealloyed Nanoporous Pt-Based Alloys as High Performance Anode Catalysts for Direct Alcohol Fuel Cells. Journal of Nanoscience and Nanotechnology, 2017, 17, 2991-2998.	0.9	2
79	Simulation Studies on GaN/InGaN Based Multi Quantum Well Light Emitting Diode for Reducing Efficiency Droop by Imposing Improved Si-Doped Barrier Model. Energy and Environment Focus, 2012, 1, 57-63.	0.3	2
80	Synthesis, Optical and Dielectric Properties of Tris-Glycine Zinc Chloride (TGZC) Single Crystals. Journal of Minerals and Materials Characterization and Engineering, 2011, 10, 517-526.	0.4	2
81	Growth of SbI3 single crystals from vapour by the temperature oscillation method. Materials Chemistry and Physics, 1987, 16, 189-195.	4.0	1
82	Observations made during the growth of trihalides of group Vb elements. Journal of Crystal Growth, 1992, 119, 303-308.	1.5	1
83	Nanoindentation studies of gallium arsenide heteroepitaxial layers. Crystal Research and Technology, 2014, 49, 575-580.	1.3	1
84	Interleaved Mesoporous Copper for the Anode Catalysis in Direct Ammonium Borane Fuel Cells. Journal of Nanoscience and Nanotechnology, 2014, 14, 4443-4448.	0.9	1
85	Fluorine-doped zinc oxide thin films: influence of precursor flow rate on violet luminescence. Applied Physics A: Materials Science and Processing, 2015, 119, 941-948.	2.3	1
86	Hierarchical SnO2 Nanostructure with High Energy {113} Facet as Pt-Support for Improved Oxygen Reduction Reaction. Journal of Nanoscience and Nanotechnology, 2017, 17, 2929-2936.	0.9	1
87	Reduction of Electron Overflow Problem by Improved InGaN/GaN Based Multiple Quantum Well LEDs Structure with p- AlInGaN/AlGaN EBL Layer. Environmental Science and Engineering, 2014, , 189-192.	0.2	1
88	Equilibrium diagrams for some AB3 (A=Sb, Bi, As and B=Cl, Br, I) compounds. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1986, 7, 22-30.	0.4	0
89	Growth of arsenic tritelluride whiskers from vapour. Journal of Materials Science Letters, 1986, 5, 717-718.	0.5	0
90	Growth of hollow Bi2Se2S crystals from vapour. Crystal Research and Technology, 1988, 23, 793-795.	1.3	0

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91	Vapour-Liquid-Solid Mechanism of Growth of Whiskers of Some Semiconducting Compounds. Crystal Research and Technology, 1991, 26, K60-K63.	1.3	0
92	Growth and characterization of urinary crystals. Crystal Research and Technology, 1994, 29, K71-K75.	1.3	0
93	PREPARATION AND CHARACTERISATION OF Ti/BaTiO3/InP MIS STRUCTURES. International Journal of Modern Physics B, 2002, 16, 281-286.	2.0	0
94	Tribological behaviour of plasma nitrided Ti-5Al-2Nb-1Ta alloy against UHMWPE. , 0, , .		0
95	Mechanical properties of InAs/InP semiconductor alloys. Applied Surface Science, 2006, 253, 2657-2661.	6.1	0
96	Nanomechanical studies of doped InGaP/GaAs epilayers. , 2013, , .		0