Thirumany Sritharan

List of Publications by Year
in descending order

96 papers	3,890 citations	109321 35 h-index	128289 60 g-index
97 all docs	97 docs citations	97 times ranked	5607 citing authors

#	Article	IF	Citations
1	Formation of Si Nanorods and Discrete Nanophases by Axial Diffusion of Si from Substrate into Au and AuPt Nanoalloy Nanorods. Nanomaterials, 2020, 10, 68.	4.1	0
2	The Self-Passivation Mechanism in Degradation of BiVO4 Photoanode. IScience, 2019, 19, 976-985.	4.1	40
3	A Source of Error in Photoanode Evaluation. Joule, 2019, 3, 305-310.	24.0	1
4	Superexchange Effects on Oxygen Reduction Activity of Edgeâ€Sharing [Co_xMn_{1â^'}_xO₆] Octahedra in Spinel Oxide. Advanced Materials, 2018, 30, 1705407.	21.0	142
5	Scientific and Technological Assessment of Iron Pyrite for Use in Solar Devices. Energy Technology, 2018, 6, 8-20.	3.8	21
6	Scaleâ€Up of BiVO₄ Photoanode for Water Splitting in a Photoelectrochemical Cell: Issues and Challenges. Energy Technology, 2018, 6, 100-109.	3.8	49
7	Recent progress in iron oxide based photoanodes for solar water splitting. Journal Physics D: Applied Physics, 2018, 51, 473002.	2.8	44
8	Phosphate tuned copper electrodeposition and promoted formic acid selectivity for carbon dioxide reduction. Journal of Materials Chemistry A, 2017, 5, 11905-11916.	10.3	46
9	New insights into the photocatalytic activity of 3-D coreâ€“shell P25@silica nanocomposites: impact of mesoporous coating. Dalton Transactions, 2017, 46, 4994-5002.	3.3	26
10	A Multisite Strategy for Enhancing the Hydrogen Evolution Reaction on a Nanoâ€Pd Surface in Alkaline Media. Advanced Energy Materials, 2017, 7, 1701129.	19.5	108
11	Improved Charge Separation in WO3/CuWO4 Composite Photoanodes for Photoelectrochemical Water Oxidation. Materials, 2016, 9, 348.	2.9	36
12	On the origin of photocarrier losses in Iron Pyrite nanocubes: Charge carrier dynamics and electrical transport study. , 2016, , .		0
13	Valence Change Ability and Geometrical Occupation of Substitution Cations Determine the Pseudocapacitance of Spinel Ferrite XFe₂O₄ (X = Mn, Co, Ni, Fe). Chemistry of Materials, 2016, 28, 4129-4133.	6.7	98
14	Origin of Photocarrier Losses in Iron Pyrite (FeS₂) Nanocubes. ACS Nano, 2016, 10, 4431-4440.	14.6	56
15	Reaction Kinetics for Leadâ€Free 0.94(K_{0.5}Na_{0.5})NbO₃â€“0.06LiNbO₃ Ceramic Synthesis with Ultrasonic Irradiation. International Journal of Applied Ceramic Technology, 2015, 12, E43.	2.1	6
16	Evolution of nanoplate morphology, structure and chemistry during synthesis of pyrite by a hot injection method. RSC Advances, 2014, 4, 16489.	3.6	19
17	Ultrathin MnO2 nanoflakes as efficient catalysts for oxygen reduction reaction. Chemical Communications, 2014, 50, 7885.	4.1	113
18	Iron Pyrite Thin Film Counter Electrodes for Dye-Sensitized Solar Cells: High Efficiency for Iodine and Cobalt Redox Electrolyte Cells. ACS Nano, 2014, 8, 10597-10605.	14.6	138

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19	tensile-strain-induced monoclinic<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>M</mml:mi><mml:mi>B</mml:mi></mml:msub></mml:math>phase in BiFeO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>epitaxial thin films on a PrScO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline">	3.2	40
20	Improving Photocatalytic H₂ Evolution of TiO₂ via Formation of {001}â€“{010} Quasi-Heterojunctions. Journal of Physical Chemistry C, 2013, 117, 22894-22902.	3.1	38
21	Interfacial enhancement of carbon fiber composites by poly(amido amine) functionalization. Composites Science and Technology, 2013, 74, 37-42.	7.8	169
22	Investigating the Multiple Roles of Polyvinylpyrrolidone for a General Methodology of Oxide Encapsulation. Journal of the American Chemical Society, 2013, 135, 9099-9110.	13.7	181
23	Tuning the interfacial property of hierarchical composites by changing the grafting density of carbon nanotube using 1,3-propodiamine. Composites Science and Technology, 2013, 85, 36-42.	7.8	67
24	Periodic elastic nanodomains in ultrathin tetragonal-like BiFeO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>films. Physical Review B, 2013, 88, .	3.2	22
25	Magneto-optical Kerr effect investigation on magnetoelectric coupling in ferromagnetic/antiferroelectric multilayer thin film structures. Applied Physics Letters, 2012, 101, .	3.3	4
26	Temperature-driven evolution of hierarchical nanodomain structure in tetragonal-like BiFeO3 films. Applied Physics Letters, 2012, 100, .	3.3	9
27	Coexistence of ferroelectric vortex domains and charged domain walls in epitaxial BiFeO3 film on (110)O GdScO3 substrate. Journal of Applied Physics, 2012, 111, .	2.5	33
28	Electric-field control of magnetic properties of CoFe2O4 films on Pb(Mg1/3Nb2/3)O3â€“PbTiO3 substrate. Thin Solid Films, 2012, 522, 420-424.	1.8	11
29	Chemically and uniformly grafting carbon nanotubes onto carbon fibers by poly(amidoamine) for enhancing interfacial strength in carbon fiber composites. Journal of Materials Chemistry, 2012, 22, 5928.	6.7	168
30	Study of strain effect on in-plane polarization in epitaxial BiFeO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>thin films using planar electrodes. Physical Review B, 2012, 86, .	3.2	49
31	Electromechanical properties and fatigue of antiferroelectric (Pb, La) (Zr, Sn, Ti)O3 thin film cantilevers fabricated by micromachining. Sensors and Actuators A: Physical, 2012, 187, 127-131.	4.1	17
32	Ferroelastic Strain Induced Antiferroelectricâ€Ferroelectric Phase Transformation in Multilayer Thin Film Structures. Advanced Functional Materials, 2012, 22, 4159-4164.	14.9	16
33	Abnormal Poisson's ratio and Linear Compressibility in Perovskite Materials. Advanced Materials, 2012, 24, 4170-4174.	21.0	45
34	Nonlinear dielectric thin films for high-power electric storage with energy density comparable with electrochemical supercapacitors. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2011, 58, 1968-1974.	3.0	188
35	Lowâ€Symmetry Monoclinic Phases and Polarization Rotation Path Mediated by Epitaxial Strain in Multiferroic BiFeO₃ Thin Films. Advanced Functional Materials, 2011, 21, 133-138.	14.9	229
36	Nanoscale phase separation in quasi-uniaxial and biaxial strained multiferroic thin films. Applied Physics Letters, 2011, 99, 132905.	3.3	9

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37	Domain structure and in-plane switching in a highly strained Bi_{0.9}Sm_{0.1}FeO₃ film. Applied Physics Letters, 2011, 99, 222904.	3.3	22
38	Characterization of Feâ€“Crâ€“Mnâ€“N amorphous powders with a wide supercooled liquid region developed by mechanical alloying. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 1135-1142.	5.6	26
39	Strain-driven phase transitions and associated dielectric/piezoelectric anomalies in BiFeO3 thin films. Applied Physics Letters, 2010, 97, .	3.3	35
40	Large strain and high energy storage density in orthorhombic perovskite (Pb0.97La0.02)(Zr1â^'xâ^'ySnxTiy)O3 antiferroelectric thin films. Applied Physics Letters, 2010, 97, 142902.	3.3	164
41	Nanoscale domains in strained epitaxial BiFeO3 thin Films on LaSrAlO4 substrate. Applied Physics Letters, 2010, 96, 252903.	3.3	75
42	Low symmetry monoclinic MC phase in epitaxial BiFeO3 thin films on LaSrAlO4 substrates. Applied Physics Letters, 2010, 97, 242903.	3.3	46
43	The effect of nitrogen on the glass-forming ability and micro-hardness of Feâ€“Crâ€“Mnâ€“N amorphous alloys prepared by mechanical alloying. Materials Chemistry and Physics, 2009, 118, 71-75.	4.0	28
44	Reduction of crystallization temperature of the Aurivillius phase in Nd-doped SrBi2Ta2O9 thin films via substrate bias. Thin Solid Films, 2009, 517, 2633-2637.	1.8	4
45	Microstructural, thermal and magnetic properties of amorphous/nanocrystalline FeCrMnN alloys prepared by mechanical alloying and subsequent heat treatment. Journal of Alloys and Compounds, 2009, 480, 617-624.	5.5	50
46	Magnetron Sputtered nc-Al/<I>Î±</I>-Al₂O₃ Nanocomposite Thin Films for Nonvolatile Memory Application. Journal of Nanoscience and Nanotechnology, 2009, 9, 4116-4120.	0.9	8
47	Influence of oxygen partial pressure on magnetron sputtered Sr0.8Nd0.3Bi2.5Ta2O9+x ferroelectric thin films. Journal of Alloys and Compounds, 2008, 457, 549-554.	5.5	18
48	Magnetization switching in multiferroic ceramics by oxygen vacancies. Proceedings of SPIE, 2008, , .	0.8	1
49	Multiferroic properties of sputtered BiFeO3 thin films. Applied Physics Letters, 2008, 92, .	3.3	67
50	Oxidation of Alâ€“Au intermetallics and its consequences studied by x-ray photoelectron spectroscopy. Journal of Materials Research, 2008, 23, 1371-1382.	2.6	23
51	Effect of Ta nanobarrier in magnetron sputtering of Nd-doped SrBi2Ta2O9 thin films. Journal of Nanoscience and Nanotechnology, 2008, 8, 2618-22.	0.9	0
52	Microstructural Evolution of Annealed Rutheniumâ€“Nitrogen Films. Electrochemical and Solid-State Letters, 2007, 10, P15.	2.2	18
53	Study of Ru barrier failure in the Cu/Ru/Si system. Journal of Materials Research, 2007, 22, 2505-2511.	2.6	23
54	Thin film aluminumâ€“gold interface interactions. Scripta Materialia, 2007, 56, 549-552.	5.2	27

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55	An XPS study of Al2Au and AlAu4 intermetallic oxidation. Applied Surface Science, 2007, 253, 6217-6221.	6.1	24
56	Interface transformations in thin film aluminumâ€“gold diffusion couples. Thin Solid Films, 2007, 515, 5454-5461.	1.8	15
57	Nd-substituted SrBi2Ta2O9 ferroelectric thin films prepared by radio frequency magnetron sputtering. Thin Solid Films, 2007, 515, 8371-8375.	1.8	9
58	Cyclic loading as an extended nanoindentation technique. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 423, 14-18.	5.6	42
59	Twin-microstructure enhanced magnetoresistance in La0.67Ba0.33MnO3 oxides. Solid State Communications, 2006, 139, 506-510.	1.9	3
60	Effect of porosity and adhesion promoter layer on adhesion energy of nanoporous inorganic low-Îº. Thin Solid Films, 2006, 504, 213-217.	1.8	5
61	Synthesis of a new electroceramic by replacement of Bi in strontium bismuth niobate. Journal of Electroceramics, 2006, 16, 321-325.	2.0	4
62	Isolated and Grouped Co Spins in Polycrystalline Zn_{1-x}Co_xO Oxides. Advances in Science and Technology, 2006, 52, 27-30.	0.2	0
63	Ruthenium Barrier/Seed Layer for Cu/Low-Îº Metallization. Journal of the Electrochemical Society, 2006, 153, J41.	2.9	58
64	Room-temperature Ferromagnetic Zn0.95Co0.05O Diluted Magnetic Semiconducting Thin Films by Pulsed Laser Deposition. Materials Research Society Symposia Proceedings, 2006, 928, 1.	0.1	0
65	Adhesion study of low-k/Si system using 4-point bending and nanoscratch test. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2005, 121, 193-198.	3.5	40
66	Ordering and grain growth in nanocrystalline Fe75Si25 alloy. Acta Materialia, 2005, 53, 1233-1239.	7.9	54
67	Mechanochemical activation of strontium bismuth tantalate synthesis. Scripta Materialia, 2005, 53, 1197-1199.	5.2	11
68	Adhesion study of tetra methyl cyclo tetra siloxanes (TMCTS) and tri methyl silane (3MS)-based low-k films. Microelectronic Engineering, 2005, 81, 35-43.	2.4	2
69	Samarium modified strontium bismuth niobate: Synthesis and ferroelectro-magnetic property evaluation. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2005, 123, 222-226.	3.5	20
70	Effects of ternary alloying on mechano-synthesis and nano-crystal stability of an iron-silicon alloy. Journal of Alloys and Compounds, 2005, 390, 82-87.	5.5	7
71	Tensile fracture of tinâ€“lead solder joints in copper. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 379, 277-285.	5.6	50
72	Production and annealing of nanocrystalline Feâ€“Si and Feâ€“Siâ€“Al alloy powders. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 371, 210-216.	5.6	53

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73	Study of piezoelectric, magnetic and magnetoelectric measurements on SrBi3Nb2FeO12 ceramic. Ceramics International, 2004, 30, 1431-1433.	4.8	24
74	Processing and study of dielectric and ferroelectric nature of BiFeO3 modified SrBi2Nb2O9. Ceramics International, 2004, 30, 1427-1430.	4.8	18
75	Effects of solid-state annealing on the interfacial intermetallics between tin-lead solders and copper. Journal of Electronic Materials, 2003, 32, 939-947.	2.2	30
76	Properties of hemispherical cups drawn using a flexible tool. Journal of Materials Processing Technology, 2003, 134, 310-317.	6.3	10
77	Self-propagating high temperature synthesis of AlFeSi intermetallic compound. Intermetallics, 2003, 11, 279-281.	3.9	11
78	Reaction Sintering of an Aluminium-Based Ternary Intermetallic and its Properties. Materials Science Forum, 2003, 426-432, 1855-1860.	0.3	0
79	Textured growth of Cu/Sn intermetallic compounds. Journal of Electronic Materials, 2002, 31, 1250-1255.	2.2	11
80	Exothermic reactions in powder mixtures of Al, Fe and Si. Materials Letters, 2001, 51, 455-460.	2.6	6
81	Interface reaction between copper and molten tinâ€“lead solders. Acta Materialia, 2001, 49, 2481-2489.	7.9	154
82	Synthesis of ternary intermetallics by exothermic reaction. Journal of Materials Processing Technology, 2001, 113, 469-473.	6.3	9
83	A feature of the reaction between Al and SiC particles in an MMC. Materials Characterization, 2001, 47, 75-77.	4.4	30
84	Synthesis of aluminiumâ€“ironâ€“silicon intermetallics by reaction of elemental powders. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2000, 286, 209-217.	5.6	15
85	Morphology of Î²-AlFeSi intermetallic in Al-7Si alloy castings. Materials Science and Technology, 1998, 14, 738-742.	1.6	38
86	Phenomena in interrupted tensile tests of heat treated aluminium alloy 6061. Acta Materialia, 1997, 45, 3155-3161.	7.9	26
87	Effects of processing parameters on the performance of Al grain refinement master alloys Alî—¸Ti and Alî—¸B in small ingots. Journal of Materials Processing Technology, 1997, 66, 253-257.	6.3	41
88	Influence of titanium to boron ratio on the ability to grain refine aluminium-silicon alloys. Journal of Materials Processing Technology, 1997, 63, 585-589.	6.3	78
89	Effect of Al-Ti and Al-B master alloy addition on the grain refinement of stationary arc-melted Al weld. Journal of Materials Science Letters, 1996, 15, 1886.	0.5	1
90	Further comments on the interpretation of creep data obtained at low stresses and intermediate temperatures. Materials Science and Engineering, 1985, 69, L1-L3.	0.1	1

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91	On the applicability of a phenomenological relationship to creep at low stresses and intermediate temperatures. Materials Science and Engineering, 1983, 61, 1-5.	0.1	7
92	Creep of type 316 stainless steel at low stresses. Metal Science, 1981, 15, 365-368.	0.7	10
93	The creep of type 304 stainless steel at low stresses. Acta Metallurgica, 1980, 28, 1633-1639.	2.1	31
94	On the transition between dislocation and diffusion creep. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1980, 41, 871-882.	0.6	17
95	The creep of Beta-Cobalt at low stresses. Acta Metallurgica, 1979, 27, 1293-1300.	2.1	52
96	The Self-Passivation Mechanism in Degradation of BiVO ₄ Photoanode. SSRN Electronic Journal, 0, , .	0.4	0