

# Satish Vitta

## List of Publications by Year in descending order

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100  
papers

1,141  
citations

516215

16  
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103  
all docs

103  
docs citations

103  
times ranked

1481  
citing authors

#	ARTICLE	IF	CITATIONS
1	Influence of zinc content and grain size on enhanced thermoelectric performance of optimally doped ZnSb. Materials Research Bulletin, 2022, 149, 111702.	2.7	3
2	Vacancy induced anomalies in the electrical transport properties of Ag-doped Zn <sub>1-x</sub> Cd <sub>x</sub> Sb (x=0.375) solid solutions. Applied Physics Letters, 2022, 120, 032102.	1.5	2
3	A mixed dielectric response in langasite Ba <sub>3</sub> NbFe <sub>3</sub> Si <sub>2</sub> O <sub>14</sub> . Physical Chemistry Chemical Physics, 2021, 23, 554-562.	1.3	3
4	Electric cars – Assessment of green nature vis-à-vis conventional fuel driven cars. Sustainable Materials and Technologies, 2021, 30, e00339.	1.7	1
5	Bacterial Cellulose Based Nanocomposites for Electronic and Energy Applications. , 2020, , 16-25.		4
6	Enhancing the High-Temperature Thermoelectric Performance of Li(CoNi)O <sub>2</sub> by Replacement of Ni with Earth-Abundant Mg. Journal of Electronic Materials, 2020, 49, 4324-4332.	1.0	0
7	p-type High Temperature Thermoelectric Behavior of Dy Filled CoSb <sub>3</sub> and Fe <sub>1.5</sub> Co <sub>2.5</sub> Sb <sub>12</sub> and Their Magnetic Properties. ACS Applied Energy Materials, 2020, 3, 6644-6656.	2.5	4
8	Remarkable Improvement of Thermoelectric Figure-of-Merit in SnTe through In Situ-Created Te Nanoinclusions. ACS Applied Energy Materials, 2020, 3, 7113-7120.	2.5	14
9	Tuning the nature of charge carriers by controlling dual substitution in single-filled thermoelectric skutterudite, Yb-CoSb <sub>3</sub> . Emergent Materials, 2020, 3, 195-201.	3.2	3
10	Effect of double doping, Li and Se, on the high-temperature thermoelectric properties of Cu <sub>2</sub> Te. Journal of Materials Science: Materials in Electronics, 2020, 31, 4129-4134.	1.1	4
11	Ultralow thermal conductivity and low charge carrier scattering potential in Zn <sub>1-x</sub> Cd <sub>x</sub> Sb solid solutions for thermoelectric application. Materials Today Energy, 2019, 12, 107-113.	2.5	12
12	Enhancement of thermoelectric power factor by inducing octahedral ordering in $\text{LaO}_6$ double perovskites. Physical Review B, 2019, 99, .	1.1	30
13	Effect of Trivalent Rare Earth, Dy <sup>3+</sup> Substitution for Ba <sup>2+</sup> on Low Temperature Magnetic and High Temperature Thermoelectric Properties of Type-I Clathrate, Ba <sub>8</sub> Al <sub>16</sub> Si <sub>30</sub> . ACS Applied Energy Materials, 2019, 2, 4255-4263.	2.5	2
14	Increasing figure-of-merit of ZrNiSn half-Heusler alloy by minimal substitution and thermal conductivity reduction. Journal of Materials Science: Materials in Electronics, 2019, 30, 6139-6147.	1.1	13
15	High Thermoelectric Performance in Mg <sub>2</sub> (Si <sub>0.3</sub> Sn <sub>0.7</sub> ) by Enhanced Phonon Scattering. ACS Applied Energy Materials, 2019, 2, 2129-2137.	2.5	44
16	Optimization of Thermoelectric Properties of Mechanically Alloyed p-Type SiGe by Mathematical Modelling. Journal of Electronic Materials, 2019, 48, 649-655.	1.0	6
17	Enhancing Thermoelectric Figure-of-Merit of Polycrystalline Na <sub>y</sub> CoO <sub>2</sub> by a Combination of Non-stoichiometry and Co-substitution. Journal of Electronic Materials, 2018, 47, 3230-3237.	1.0	7
18	Enhanced magnetic moment and curie temperature due to co-substitution in Heusler alloys Fe <sub>2-x</sub> CoxMnSi. Journal of Materials Science: Materials in Electronics, 2018, 29, 1420-1425.	1.1	4

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19	Thermo-transport properties of Zn-substituted layered Li-nickel oxide, $\text{LiNiO}_2$ . Bulletin of Materials Science, 2018, 41, 1.	0.8	0
20	Magnetolectric and magnetodielectric coupling and microwave resonator characteristics of $\text{Ba}_0.5\text{Sr}_0.5\text{Nb}_2\text{O}_6/\text{CoCr}_0.4\text{Fe}_1.6\text{O}_4$ multiferroic composite. Scientific Reports, 2018, 8, 11619.	1.6	37
21	Enhancing the thermoelectric performance of a p-type half-Heusler alloy, $\text{HfCoSb}$ by incorporation of a band-matched chalcogenide, $\text{Cu}_2\text{Te}$ . Journal of Materials Chemistry A, 2018, 6, 14709-14716.	5.2	12
22	Enhanced Thermoelectric Performance in $\text{Mg}_2\text{Si}$ by Functionalized Co-Doping. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700829.	0.8	7
23	Free standing $\text{Cu}_2\text{Te}$ , new anode material for sodium-ion battery. AIP Conference Proceedings, 2018, , .	0.3	3
24	Reply to comments on "Thermoelectric properties of rare earth containing type-I clathrate compound $\text{Dy}_8\text{Al}_{16}\text{Si}_{30}$ ". Journal of Materials Science: Materials in Electronics, 2017, 28, 1149-1150.	1.1	0
25	Giant Enhancement in High-Temperature Thermoelectric Figure-of-Merit of Layered Cobalt Oxide, $\text{LiCoO}_2$ , Due to a Dual Strategy "Co-Substitution and Lithiation. Inorganic Chemistry, 2017, 56, 5827-5838.	1.9	17
26	Thermoelectric properties of Fe-substituted layered compound, $\text{LiCo}_{1-x}\text{Fe}_x\text{O}_2$ . Ionics, 2017, 23, 2651-2655.	1.2	1
27	Bacterial cellulose based flexible multifunctional nanocomposite sheets. Cellulose, 2017, 24, 3341-3351.	2.4	17
28	Flexible bacterial cellulose / permalloy nanocomposite xerogel sheets "Size scalable magnetic actuator-cum-electrical conductor. AIP Advances, 2017, 7, 035107.	0.6	8
29	Thermophysical and magnetic properties of p- and n-type Ti-Ni-Sn based half-Heusler alloys. Journal of Alloys and Compounds, 2017, 710, 191-198.	2.8	6
30	Realizing high figure-of-merit in $\text{Cu}_2\text{Te}$ using a combination of doping, hierarchical structure, and simple processing. Journal of Applied Physics, 2017, 122, .	1.1	28
31	Magnetic behavior of Ni substituted $\text{LiCoO}_2$ "Magnetization and electron paramagnetic resonance studies. Materials Chemistry and Physics, 2017, 198, 266-274.	2.0	6
32	Synthesis, structure and thermoelectric properties of $\text{La}_{1-x}\text{Na}_x\text{CoO}_3$ perovskite oxides. Bulletin of Materials Science, 2017, 40, 1291-1299.	0.8	17
33	Thermoelectric properties of ultra-low thermal conductivity half-Heusler alloy. AIP Conference Proceedings, 2016, , .	0.3	2
34	Interparticle interactions mediated superspin glass to superferromagnetic transition in Ni-bacterial cellulose aerogel nanocomposites. Journal of Applied Physics, 2016, 119, 244312.	1.1	11
35	Effect of trivalent substitution on the magnetic and dielectric properties of Z-type hexaferrite, $\text{Sr}_3\text{Co}_2\text{Fe}_{24}\text{O}_{41}$ . AIP Conference Proceedings, 2016, , .	0.3	0
36	Thermoelectric properties of rare earth containing type-I Clathrate compound, $\text{Dy}_8\text{Al}_{16}\text{Si}_{30}$ . Journal of Materials Science: Materials in Electronics, 2016, 27, 10303-10308.	1.1	4

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37	Large low field room temperature magneto-dielectric response from (Sr <sub>0.5</sub> Ba <sub>0.5</sub> )Nb <sub>2</sub> O <sub>6</sub> /Co(Cr <sub>0.4</sub> Fe <sub>1.6</sub> )O <sub>4</sub> bulk 3-0 composites. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2016, 204, 1-7.	1.7	10
38	Effect of divalent Ba cation substitution with Sr on coupled $\tilde{\text{multiglass}}^{\text{TM}}$ state in the magnetoelectric multiferroic compound Ba <sub>3</sub> NbFe <sub>3</sub> Si <sub>2</sub> O <sub>14</sub> . Scientific Reports, 2015, 5, 9751.	1.6	20
39	Enhanced dielectric constant and relaxor behavior realized by dual stage sintering of Sr <sub>0.5</sub> Ba <sub>0.5</sub> Nb <sub>2</sub> O <sub>6</sub> . AIP Conference Proceedings, 2014, , .	0.3	4
40	Ni <sup>2+</sup> bacterial cellulose nanocomposite; a magnetically active inorganic <sup>2+</sup> organic hybrid gel. RSC Advances, 2013, 3, 12765.	1.7	32
41	Thermoelectric behaviour of p- and n- type Ti-Ni-Sn half Heusler alloy variants and their amorphous equivalents. Materials Research Society Symposia Proceedings, 2013, 1490, 33-40.	0.1	0
42	Low temperature dielectric dispersion and relaxor like behavior in multiferroic Ba <sub>3</sub> NbFe <sub>3</sub> Si <sub>2</sub> O <sub>14</sub> . Journal of Applied Physics, 2012, 111, .	1.1	5
43	Electronic Phase Separation in Multiferroic $\text{Ba}_3\text{NbFe}_3\text{Si}_2\text{O}_{14}$ . IEEE Transactions on Magnetics, 2012, 48, 3529-3531.	1.2	0
44	Effect of Nickel Ferrite on Electrical and Magnetic Properties in LCMO: Nickel Ferrite Nanocomposites. IEEE Transactions on Magnetics, 2011, 47, 2728-2731.	1.2	5
45	COMPARISON OF MAGNETIC BEHAVIOR OF Sr-HEXAFERRITE SYNTHESIZED BY CO-PRECIPIATION, SOL-GEL AND MICROWAVE COMBUSTION TECHNIQUES. International Journal of Nanoscience, 2011, 10, 617-621.	0.4	0
46	Sonochemical stabilization of ultrafine colloidal biocompatible magnetite nanoparticles using amino acid, l-arginine, for possible bio applications. Ultrasonics Sonochemistry, 2010, 17, 730-737.	3.8	60
47	Magnetically responsive bacterial cellulose: Synthesis and magnetic studies. Journal of Applied Physics, 2010, 108, .	1.1	27
48	Cementitious and pozzolanic behavior of electric arc furnace steel slags. Cement and Concrete Research, 2009, 39, 102-109.	4.6	185
49	Magnetic properties of (Fe <sub>1-x</sub> Al <sub>2</sub> O <sub>3</sub> ) <sub>x</sub> and (Fe <sub>50</sub> Ni <sub>50</sub> ) <sub>1-x</sub> (Al <sub>2</sub> O <sub>3</sub> ) <sub>x</sub> nanocomposite magnetic media synthesized using gel like Al <sub>2</sub> O <sub>3</sub> matrix. Journal of Alloys and Compounds, 2009, 482, 155-159.	2.8	1
50	Electrical and magnetic properties of nanocrystalline Fe <sub>100-x</sub> Ni <sub>x</sub> alloys. Journal of Magnetism and Magnetic Materials, 2008, 320, 182-189.	1.0	44
51	Synthesis of Shape Controlled Ferrite Nanoparticles by Sonochemical Technique. Journal of Nanoscience and Nanotechnology, 2008, 8, 4268-4272.	0.9	5
52	Magnetic nanoparticles through sonochemistry. Materials Technology, 2008, 23, 88-93.	1.5	4
53	Microstructural evolution and magnetic properties of size-controlled nanocrystalline Ni in Ni(OH) <sub>2</sub> ZrO <sub>2</sub> composite. Journal of Materials Research, 2007, 22, 1520-1526.	1.2	10
54	Nonlinear spin wave magnetization of solution synthesized Ni nanoparticles. Journal of Applied Physics, 2007, 101, 063901.	1.1	14

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55	Synthesis and properties of nanograined La-Ca-manganiteâ€“Ni-ferrite composites. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2007, 139, 171-176.	1.7	15
56	Ni and Niâ€“nickel oxide nanoparticles with different shapes and a coreâ€“shell structure. <i>Thin Solid Films</i> , 2006, 505, 109-112.	0.8	38
57	First Indo-Singapore Symposium on â€œAdvanced Functional Materialsâ€“, Mumbai, 2006. <i>Bulletin of Materials Science</i> , 2006, 29, 547-547.	0.8	0
58	ZnS nanoclusters in LB multilayers. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2005, 257-258, 177-182.	2.3	10
59	Structure of polymorphic phases in zinc arachidate LB multilayers. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2005, 257-258, 243-249.	2.3	9
60	Transport and magnetic properties of encapsulated Ni-Ni-O/Zr-O nanostructures. <i>IEEE Transactions on Magnetics</i> , 2005, 41, 3298-3300.	1.2	7
61	Mixed mode electrical transport behavior in nanocrystalline La-Ca-Manganite synthesized by microwave refluxing. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2005, 202, 2790-2799.	0.8	2
62	Metal-substituted organic Cd-arachidate multilayers as soft-x-ray mirrors. <i>Applied Optics</i> , 2005, 44, 3254.	2.1	0
63	Low temperature coefficient of resistivity Agâ€“Cd and Agâ€“Sn alloysâ€“ structure and transport. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2004, 107, 53-57.	1.7	13
64	Microstructure of pulsed laser deposited ceramicâ€“metal and polymerâ€“metal nanocomposite thin films. <i>Applied Physics A: Materials Science and Processing</i> , 2004, 79, 1233-1235.	1.1	9
65	Structure and properties of Laâ€“Caâ€“Mnâ€“O composites prepared by the glass-ceramic method. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2004, 113, 50-55.	1.7	6
66	Interface quality and thermal stability of laser-deposited metal/MgO multilayers. <i>Applied Optics</i> , 2004, 43, 6265.	2.1	8
67	Structure and scattering properties of Ni_80Nb_20-MgO water-window multilayer mirrors. <i>Applied Optics</i> , 2003, 42, 3297.	2.1	1
68	Giant magnetoresistance in laser-deposited permalloy/Ag multilayers. <i>Journal of Applied Physics</i> , 2002, 92, 1171-1173.	1.1	5
69	Structure of CdSâ€“arachidic acid composite LB multilayers. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2002, 198-200, 59-66.	2.3	17
70	Molecular packing in CdS containing conducting polymer composite LB multilayers. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2002, 198-200, 67-74.	2.3	14
71	Molecular packing in cadmium and zinc arachidate LB multilayers. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2002, 198-200, 75-81.	2.3	16
72	Alloyâ€“ceramic oxide multilayer mirrors for water-window soft x rays. <i>Optics Letters</i> , 2001, 26, 1448.	1.7	6

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73	Ni <sub>50</sub> Nb <sub>50</sub> /C amorphous multilayers for "water window" soft X-rays" structure and stability. Vacuum, 2001, 60, 389-394.	1.6	1
74	Thermal stability of 2.4 nm period Ni/Nb/C multilayer x-ray mirror. Applied Physics Letters, 2000, 77, 3654-3656.	1.5	14
75	Structural assembly of Cd-arachidate molecules in multilayers. Journal of Chemical Physics, 1999, 111, 11088-11094.	1.2	12
76	Structure and stability of 2.4 nm period amorphous Ni/Nb/C multilayers. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1999, 57, 165-169.	1.7	2
77	Study of Pt/C X-Ray Multilayer Structure as a Function of Layer Perid Using X-Ray Scattering. Japanese Journal of Applied Physics, 1999, 38, 289.	0.8	4
78	Microstructural dependence of electrical transport in bulk Cu <sub>x</sub> Ge <sub>1-x</sub> alloys. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1998, 52, 185-188.	1.7	1
79	Structure of CdS/Arachidate/Arachidic Acid Composite Multilayers. Langmuir, 1998, 14, 1799-1803.	1.6	21
80	Structure and normal incidence soft-x-ray reflectivity of Ni/Nb/C amorphous multilayers. Applied Optics, 1997, 36, 1472.	2.1	9
81	Comment on the effects of overlayer thicknesses on the electrical resistivity of polycrystalline Cu/Cr double-layered thin films. Journal of Physics Condensed Matter, 1996, 8, 4857-4859.	0.7	0
82	Effect of Sb <sub>2</sub> O <sub>3</sub> and ZrO <sub>2</sub> as nucleating agents on the glass crystal transformation in Bi-Sr-Ca-Cu-O system. Journal of Materials Science Letters, 1995, 14, 1627-1630.	0.5	0
83	Thermal-history-dependent magnetization behaviour in Cr/Cu multilayers. Philosophical Magazine Letters, 1995, 71, 107-112.	0.5	3
84	Amorphous Ni <sub>50</sub> Nb <sub>50</sub> /C multilayers for soft x rays made by pulsed laser deposition. Applied Physics Letters, 1995, 67, 1547-1548.	1.5	0
85	Rapid solidification of cobalt-titanium alloys induced by nanosecond laser pulses. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1994, 179-180, 243-248.	2.6	9
86	Structure and properties of reactivity sputtered <sup>13</sup> Mo <sub>2</sub> N hard coatings. Thin Solid Films, 1994, 245, 1-3.	0.8	24
87	Kinetics of growth of the Ti-Co. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1993, 24, 1869-1875.	1.4	3
88	The effect of fluctuations on the electrical transport behaviour in YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-x</sub> . Journal of Physics Condensed Matter, 1992, 4, 7891-7898.	0.7	0
89	Conduction mechanism in crystalline InSe-In <sub>6</sub> Se <sub>7</sub> composite. Solid State Communications, 1992, 81, 47-49.	0.9	3
90	Magnetic flux relaxation in YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-x</sub> thin film: Thermal or athermal. Thin Solid Films, 1992, 217, 156-160.	0.8	0

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91	The limits of glass formation by pulsed laser quenching in Nb—Ni alloys. Scripta Metallurgica Et Materialia, 1991, 25, 2209-2214.	1.0	9
92	Magnetic flux relaxation in YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-x</sub> thin film: thermal or athermal. Thin Solid Films, 1991, 206, 137-142.	0.8	0
93	Solidification of Fe <sub>40</sub> Ni <sub>40</sub> B <sub>20</sub> at high undercooling. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1991, 133, 799-802.	2.6	14
94	Electromigration failure in YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-x</sub> thin films. Applied Physics Letters, 1991, 58, 759-761.	1.5	10
95	Rapid solidification of polymorphic transition metals induced by nanosecond laser pulses. Applied Physics Letters, 1991, 59, 411-413.	1.5	1
96	Temperature dependence of the anisotropy in magnetic relaxation in YBa <sub>2</sub> /Cu <sub>3</sub> /O <sub>7-2</sub> / thin films. IEEE Transactions on Magnetics, 1991, 27, 1083-1085.	1.2	3
97	Structure and temperature dependence of conductivity of Ag <sub>2.5</sub> Se—Se composite. Journal of Applied Physics, 1990, 68, 3413-3417.	1.1	3
98	Solidification of germanium at high undercoolings: morphological stability and the development of grain structure. Acta Metallurgica Et Materialia, 1990, 38, 233-242.	1.9	38
99	Structure and electron transport anomalies in InSe—In <sub>6</sub> Se <sub>7</sub> composite. Journal of Applied Physics, 1989, 66, 5885-5889.	1.1	1
100	Metastable phases formed by nanosecond laser-quenching of metals and binary alloys. Materials Science and Engineering, 1988, 98, 105-109.	0.1	16