

# Vemula Venkatramu

## List of Publications by Year in descending order

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79  
papers

2,601  
citations

147801

31  
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197818

49  
g-index

79  
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79  
docs citations

79  
times ranked

1962  
citing authors

#	ARTICLE	IF	CITATIONS
1	Optical spectroscopy of Sm <sup>3+</sup> ions in phosphate and fluorophosphate glasses. <i>Optical Materials</i> , 2007, 29, 1429-1439.	3.6	179
2	Fluorescence spectroscopy of Sm <sup>3+</sup> ions in P <sub>2</sub> O <sub>5</sub> -PbO-Nb <sub>2</sub> O <sub>5</sub> glasses. <i>Physica B: Condensed Matter</i> , 2008, 403, 3527-3534.	2.7	170
3	Bright White Upconversion Emission from Tm <sup>3+</sup> /Yb <sup>3+</sup> /Er <sup>3+</sup> -Doped Lu <sub>3</sub> Ga <sub>5</sub> O <sub>12</sub> Nanocrystals. <i>Journal of Physical Chemistry C</i> , 2008, 112, 17745-17749.	3.1	148
4	Optical characterization of Er <sup>3+</sup> -doped zinc fluorophosphate glasses for optical temperature sensors. <i>Sensors and Actuators B: Chemical</i> , 2013, 186, 156-164.	7.8	107
5	Luminescence properties of Dy <sup>3+</sup> ions in a variety of borate and fluoroborate glasses containing lithium, zinc, and lead. <i>Journal of Alloys and Compounds</i> , 2004, 374, 22-26.	5.5	103
6	Optical properties of Sm <sup>3+</sup> ions in zinc potassium fluorophosphate glasses. <i>Optical Materials</i> , 2013, 36, 242-250.	3.6	75
7	Optical properties of Nd <sup>3+</sup> doped bismuth zinc borate glasses. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2014, 122, 422-427.	3.9	69
8	Nanocrystalline lanthanide-doped Lu <sub>3</sub> Ga <sub>5</sub> O <sub>12</sub> garnets: interesting materials for light-emitting devices. <i>Nanotechnology</i> , 2010, 21, 175703.	2.6	65
9	Spectroscopic and dielectric studies of Sm <sup>3+</sup> ions in lithium zinc borate glasses. <i>Journal of Non-Crystalline Solids</i> , 2013, 376, 106-116.	3.1	65
10	Synthesis, structure and luminescence of Er <sup>3+</sup> -doped Y <sub>3</sub> Ga <sub>5</sub> O <sub>12</sub> nano-garnets. <i>Journal of Materials Chemistry</i> , 2012, 22, 13788.	6.7	62
11	Spectroscopic properties of Sm <sup>3+</sup> ions in phosphate and fluorophosphate glasses. <i>Journal of Non-Crystalline Solids</i> , 2013, 365, 85-92.	3.1	62
12	Effect of P <sub>2</sub> O <sub>5</sub> addition on structural and luminescence properties of Nd <sup>3+</sup> -doped tellurite glasses. <i>Journal of Alloys and Compounds</i> , 2016, 684, 322-327.	5.5	59
13	Fluorescence line narrowing spectral studies of Eu <sup>3+</sup> -doped lead borate glass. <i>Journal of Non-Crystalline Solids</i> , 2005, 351, 929-935.	3.1	58
14	Optimization of N doping in TiO <sub>2</sub> nanotubes for the enhanced solar light mediated photocatalytic H <sub>2</sub> production and dye degradation. <i>Environmental Pollution</i> , 2021, 269, 116170.	7.5	58
15	1.53 $\mu$ m luminescence properties of Er <sup>3+</sup> -doped Sr-Al phosphate glasses. <i>Ceramics International</i> , 2015, 41, 5765-5771.	4.8	57
16	Thermal and optical properties of Nd <sup>3+</sup> ions in Ca-Al fluorophosphate glasses. <i>Journal of Luminescence</i> , 2015, 166, 328-334.	3.1	55
17	Sol-gel synthesis and thermal stability of luminescence of Lu <sub>3</sub> Al <sub>5</sub> O <sub>12</sub> :Ce <sup>3+</sup> nano-garnet. <i>Journal of Alloys and Compounds</i> , 2011, 509, 859-863.	5.5	53
18	Composition and concentration dependence of spectroscopic properties of Nd <sup>3+</sup> -doped tellurite and metaborate glasses. <i>Optical Materials</i> , 2011, 33, 928-936.	3.6	49

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19	Er <sup>3+</sup> -doped tellurite glasses for enhancing a solar cell photocurrent through photon upconversion upon 1500Ånm excitation. <i>Materials Chemistry and Physics</i> , 2017, 199, 67-72.	4.0	49
20	Synthesis and luminescence properties of Er <sup>3+</sup> -doped Lu <sub>3</sub> Ga <sub>5</sub> O <sub>12</sub> nanocrystals. <i>Journal of Luminescence</i> , 2008, 128, 811-813.	3.1	45
21	Optical properties of Yb <sup>3+</sup> -doped phosphate laser glasses. <i>Journal of Alloys and Compounds</i> , 2011, 509, 5084-5089.	5.5	44
22	Spectroscopic study of Nd <sup>3+</sup> ion-doped Zn-Al-Ba borate glasses for NIR emitting device applications. <i>Optical Materials</i> , 2020, 107, 110018.	3.6	43
23	Near-infrared and upconversion luminescence of Tm <sup>3+</sup> and Tm <sup>3+</sup> /Yb <sup>3+</sup> -doped oxyfluorosilicate glasses. <i>Journal of Non-Crystalline Solids</i> , 2019, 507, 1-10.	3.1	40
24	Optical and X-ray induced luminescence of Sm <sup>3+</sup> -doped borotellurite and fluoroborotellurite glasses: A comparative study. <i>Journal of Luminescence</i> , 2019, 213, 19-28.	3.1	40
25	Luminescence and decay characteristics of Tb <sup>3+</sup> -doped fluorophosphate glasses. <i>Journal of Asian Ceramic Societies</i> , 2018, 6, 82-87.	2.3	38
26	Structure, morphology and optical characterization of Dy <sup>3+</sup> -doped BaYF <sub>5</sub> nanocrystals for warm white light emitting devices. <i>Optical Materials</i> , 2017, 70, 16-24.	3.6	36
27	Synthesis of Ca <sub>2</sub> SiO <sub>4</sub> :Dy <sup>3+</sup> phosphors from agricultural waste for solid state lighting applications. <i>Ceramics International</i> , 2017, 43, 16622-16627.	4.8	36
28	Role of Dy <sup>3+</sup> at Sm <sup>3+</sup> energy transfer in the tuning of warm to cold white light emission in Dy <sup>3+</sup> /Sm <sup>3+</sup> co-doped Lu <sub>3</sub> Ga <sub>5</sub> O <sub>12</sub> nano-garnets. <i>New Journal of Chemistry</i> , 2018, 42, 1260-1270.	2.8	36
29	Chemical pressure effects on the spectroscopic properties of Nd <sup>3+</sup> -doped gallium nano-garnets. <i>Optical Materials Express</i> , 2015, 5, 1661.	3.0	34
30	Lattice Dynamics Study of Nanocrystalline Yttrium Gallium Garnet at High Pressure. <i>Journal of Physical Chemistry C</i> , 2014, 118, 13177-13185.	3.1	33
31	Optical properties of Er <sup>3+</sup> -doped K-Ca-Al fluorophosphate glasses for optical amplification at 153 1/4µm. <i>Optical Materials Express</i> , 2015, 5, 1689.	3.0	32
32	Visible upconversion in Er <sup>3+</sup> /Yb <sup>3+</sup> co-doped LaAlO <sub>3</sub> phosphors. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2017, 171, 229-235.	3.9	28
33	Lanthanide-doped Y <sub>3</sub> Ga <sub>5</sub> O <sub>12</sub> garnets for nanoheating and nanothermometry in the first biological window. <i>Optical Materials</i> , 2018, 84, 46-51.	3.6	25
34	Luminescence characteristics of Nd <sup>3+</sup> -doped Ba-Al-fluorophosphate laser glasses. <i>Journal of Alloys and Compounds</i> , 2008, 451, 697-701.	5.5	24
35	Optimizing white light luminescence in Dy <sup>3+</sup> -doped Lu <sub>3</sub> Ga <sub>5</sub> O <sub>12</sub> nano-garnets. <i>Journal of Applied Physics</i> , 2014, 116, .	2.5	24
36	Raman and photoluminescence studies of europium doped zinc-fluorophosphate glasses for photonic applications. <i>Journal of Non-Crystalline Solids</i> , 2019, 505, 115-121.	3.1	24

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37	Quantum cutting and near-infrared emissions in Ho <sup>3+</sup> /Yb <sup>3+</sup> codoped transparent glass-ceramics. <i>Journal of Luminescence</i> , 2020, 226, 117424.	3.1	23
38	Efficient visible upconversion luminescence in Er <sup>3+</sup> and Er <sup>3+</sup> /Yb <sup>3+</sup> co-doped Y <sub>2</sub> O <sub>3</sub> phosphors obtained by solution combustion reaction. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2014, 126, 306-311.	3.9	22
39	Intense up-conversion luminescence in Er <sup>3+</sup> /Yb <sup>3+</sup> co-doped CeO <sub>2</sub> powders. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2014, 122, 704-710.	3.9	22
40	Optical nanothermometer based on the calibration of the Stokes and upconverted green emissions of Er <sup>3+</sup> ions in Y <sub>3</sub> Ga <sub>5</sub> O <sub>12</sub> nano-garnets. <i>RSC Advances</i> , 2014, 4, 57691-57701.	3.6	22
41	Nanocrystalline Sm <sup>3+</sup> -doped Lu <sub>3</sub> Ga <sub>5</sub> O <sub>12</sub> garnets: An intense orange-reddish luminescent material for white light emitting devices. <i>Journal of Luminescence</i> , 2016, 179, 533-538.	3.1	22
42	Optical and luminescence properties of Dy <sup>3+</sup> ions in SrAl phosphate glasses for yellow laser applications. <i>Applied Physics B: Lasers and Optics</i> , 2014, 117, 75-84.	2.2	21
43	High pressure luminescence of Nd <sup>3+</sup> in YAlO <sub>3</sub> perovskite nanocrystals: A crystal-field analysis. <i>Journal of Chemical Physics</i> , 2018, 148, 044201.	3.0	21
44	1.06 $\mu$ m laser transition characteristics of Nd <sup>3+</sup> -doped fluorophosphate glasses. <i>Materials Chemistry and Physics</i> , 2009, 117, 131-137.	4.0	20
45	Gram-scale synthesis of ZnS/NiO core-shell hierarchical nanostructures and their enhanced H <sub>2</sub> production in crude glycerol and sulphide wastewater. <i>Environmental Research</i> , 2021, 199, 111323.	7.5	20
46	Stokes and anti-Stokes luminescence in Tm <sup>3+</sup> /Yb <sup>3+</sup> -doped Lu <sub>3</sub> Ga <sub>5</sub> O <sub>12</sub> nano-garnets: a study of multipolar interactions and energy transfer dynamics. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 14720-14729.	2.8	19
47	Photon avalanche upconversion in Ho <sup>3+</sup> /Yb <sup>3+</sup> co-doped transparent oxyfluoride glass-ceramics. <i>Chemical Physics Letters</i> , 2014, 600, 34-37.	2.6	17
48	Structural, elastic and vibrational properties of nanocrystalline lutetium gallium garnet under high pressure. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 9454-9464.	2.8	17
49	Effect of pressure on luminescence properties of Sm <sup>3+</sup> ions in potassium niobate tellurite glass. <i>Journal of Luminescence</i> , 2008, 128, 718-720.	3.1	16
50	Optical properties of Yb <sup>3+</sup> ions in fluorophosphate glasses for 1.0 $\mu$ m solid-state infrared lasers. <i>Applied Physics B: Lasers and Optics</i> , 2013, 113, 527-535.	2.2	16
51	Infrared-to-Visible Light Conversion in Er <sup>3+</sup> /Yb <sup>3+</sup> :Lu <sub>3</sub> Ga <sub>5</sub> O <sub>12</sub> Nanogarnets. <i>ChemPhysChem</i> , 2015, 16, 3928-3936.	2.1	14
52	Structural, vibrational and dielectric studies of Sm <sup>3+</sup> -doped MgAl zincfluorophosphate glasses. <i>Physica B: Condensed Matter</i> , 2013, 431, 69-74.	2.7	13
53	Efficient Nd <sup>3+</sup> sensitized Yb <sup>3+</sup> emission and infrared-to-visible energy conversion in gallium nano-garnets. <i>RSC Advances</i> , 2016, 6, 78669-78677.	3.6	13
54	Blue-green cooperative upconverted luminescence and radiative energy transfer in Yb <sup>3+</sup> -doped tungsten tellurite glass. <i>Journal of Luminescence</i> , 2016, 169, 233-237.	3.1	13

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55	Role of the local structure and the energy trap centers in the quenching of luminescence of the Tb <sup>3+</sup> ions in fluoroborate glasses: A high pressure study. <i>Journal of Chemical Physics</i> , 2010, 132, 114505.	3.0	11
56	Photon avalanche upconversion in Ho <sup>3+</sup> -doped gallium nano-garnets. <i>Optical Materials</i> , 2015, 39, 16-20.	3.6	11
57	Effect of high pressure on photoluminescence properties of Eu <sup>3+</sup> : Ba-Al fluorophosphate glasses. <i>Journal of Alloys and Compounds</i> , 2011, 509, 1172-1177.	5.5	10
58	Near infrared broadband and visible upconversion emissions of erbium ions in oxyfluoride glasses for optical amplifier applications. <i>Optics and Laser Technology</i> , 2020, 127, 106167.	4.6	10
59	Near-infrared and blue cooperative Yb <sup>3+</sup> luminescence in Lu <sub>3</sub> Sc <sub>2</sub> Ga <sub>3</sub> O <sub>12</sub> nano-garnets. <i>Materials Research Bulletin</i> , 2018, 101, 347-352.	5.2	9
60	Dysprosium doped niobium zinc fluorosilicate glasses: Interesting materials for white light emitting devices. <i>Optik</i> , 2019, 176, 457-463.	2.9	9
61	Luminescence properties of Lu <sub>3</sub> Al <sub>5</sub> O <sub>12</sub> :Tb <sup>3+</sup> nano-garnet. <i>Journal of the Korean Physical Society</i> , 2014, 64, 1859-1865.	0.7	8
62	Structural and Luminescence Properties of Ho <sup>3+</sup> /Yb <sup>3+</sup> -Doped Lu <sub>3</sub> Ga <sub>5</sub> O <sub>12</sub> Nano-Garnets for Phosphor Applications. <i>Journal of Nanoscience and Nanotechnology</i> , 2012, 12, 4495-4501.	0.9	7
63	Photoluminescence from the <sup>5</sup> D <sub>4</sub> level of Tb <sup>3+</sup> ions in Ba-Al fluorophosphate glass under pressure. <i>Journal of Non-Crystalline Solids</i> , 2007, 353, 1813-1817.	3.1	6
64	Infrared emissions in MgSrAl <sub>10</sub> O <sub>17</sub> :Er <sup>3+</sup> phosphor co-doped with Yb <sup>3+</sup> /Ba <sup>2+</sup> /Ca <sup>2+</sup> obtained by solution combustion route. <i>Journal of Luminescence</i> , 2013, 134, 396-400.	3.1	6
65	Structural and luminescence properties of Sm <sup>3+</sup> -doped Ca <sub>2</sub> SiO <sub>4</sub> phosphors from agricultural waste. <i>Materials Today: Proceedings</i> , 2018, 5, 15081-15085.	1.8	6
66	Optical and radiative properties of Sm <sup>3+</sup> ions activated alkali-bismuth-germanate glasses. <i>Journal of Luminescence</i> , 2019, 214, 116566.	3.1	6
67	Role of excitation wavelength and dopant concentration on white light tunability of dysprosium doped titania-fluorophosphate glasses. <i>Optical Materials</i> , 2021, 111, 110593.	3.6	6
68	Solid state thiazole-based fluorophores: Promising materials for white organic light emitting devices. <i>Dyes and Pigments</i> , 2021, 187, 109077.	3.7	6
69	Structure, and opto-dielectric investigations of Cu <sup>2+</sup> -doped calcium bismuth silicate glass ceramics. <i>Optical Materials</i> , 2021, 113, 110876.	3.6	6
70	Optical Absorption and EPR Studies on Gamma-Ray Irradiated RE <sup>3+</sup> -Doped Fluorophosphate Glasses. <i>Journal of Inorganic and Organometallic Polymers and Materials</i> , 2018, 28, 594-602.	3.7	5
71	Stokes and upconverted luminescence in Er <sup>3+</sup> /Yb <sup>3+</sup> -doped Y <sub>3</sub> Ga <sub>5</sub> O <sub>12</sub> nano-garnets. <i>Dalton Transactions</i> , 2021, 50, 9512-9518.	3.3	5
72	ZrxCa <sub>30-x</sub> P <sub>70</sub> thermoluminescent bio glass, structure and elasticity. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2021, 119, 104517.	3.1	5

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73	Spectroscopic properties of Ho <sup>3+</sup> -doped SrAl phosphate glasses. Applied Physics A: Materials Science and Processing, 2014, 115, 689-696.	2.3	4
74	Agricultural waste for the development of low cost Ca <sub>2</sub> SiO <sub>4</sub> :Pr <sup>3+</sup> phosphors. Journal of Luminescence, 2022, 250, 119059.	3.1	4
75	Spectroscopic Properties of Yb <sup>3+</sup> -Doped Silicate Glasses. Zeitschrift Fur Physikalische Chemie, 2017, 232, 51-60.	2.8	3
76	Optical properties of Er <sup>3+</sup> -doped K-Ca-Al fluorophosphate glasses. , 2015, , .		1
77	Lanthanide-Doped Tellurite Glasses for Solar Energy Harvesting. , 2018, , 249-273.		1
78	Pressure-dependent luminescence properties of Tb <sup>3+</sup> -doped BaAl fluorophosphate glass. High Pressure Research, 2009, 29, 219-223.	1.2	0
79	Effect of concentration on spectral properties of lanthanide ions-doped fluorophosphate glasses. Materials Today: Proceedings, 2018, 5, 14981-14985.	1.8	0