

Name of the Teacher - Dr. V. B. Bhatkar

Goggle Scholar Link - <https://scholar.google.co.in/citations?user=qQ7I-gAAAAJ&hl=en>

Sr. No.	Title of Research Paper	Name of Journal	Year	Link of the Research Paper
1	Cr <sup>3+</sup> sensitized near infrared emission in Al <sub>2</sub> O <sub>3</sub> : Cr, Nd/Yb phosphors	Journal of Alloys and Compounds	2019	<a href="https://doi.org/10.1016/j.jallcom.2019.03.201">https://doi.org/10.1016/j.jallcom.2019.03.201</a>
2	Broad Band excited NIR emission in Li <sub>2</sub> CeO <sub>3</sub> : Nd/Yb phosphor for modification of solar spectrum	Journal of Alloys and Compounds	2019	<a href="https://doi.org/10.1016/j.jallcom.2018.08.296">https://doi.org/10.1016/j.jallcom.2018.08.296</a>
3	SrB <sub>4</sub> O <sub>7</sub> :Sm <sup>2+</sup> phosphor for solar photovoltaics	AIP Conference Proceedings	2019	<a href="https://doi.org/10.1063/1.5100389">https://doi.org/10.1063/1.5100389</a>
4	Near-infrared emitting Ca <sub>5</sub> (PO <sub>4</sub> ) <sub>3</sub> Cl:Eu <sup>2+</sup> ,Nd <sup>3+</sup> phosphor for modification of the solar spectrum	Luminescence	2018	<a href="https://doi.org/10.1002/bio.3548">https://doi.org/10.1002/bio.3548</a>
5	Morphological and photoluminescence study of NaSrB <sub>5</sub> O <sub>9</sub> : Tb <sup>3+</sup> nanocrystalline phosphor	Journal of Asian Ceramic Societies	2018	<a href="https://doi.org/10.1080/21870764.2018.1529014">https://doi.org/10.1080/21870764.2018.1529014</a>
6	Luminescence in Ca <sub>10</sub> (PO <sub>4</sub> ) <sub>6</sub> O: Eu <sup>2+</sup> , Nd <sup>3+</sup>	Optical Materials	2018	<a href="https://doi.org/10.1016/j.optmat.2018.07.018">https://doi.org/10.1016/j.optmat.2018.07.018</a>
7	NIR emitting K <sub>2</sub> SrCl <sub>4</sub> : Eu <sup>2+</sup> , Nd <sup>3+</sup> phosphor as a spectral converter for CIGS solar cell	Optical Materials	2018	<a href="https://doi.org/10.1016/j.optmat.2018.04.022">https://doi.org/10.1016/j.optmat.2018.04.022</a>
8	Comparative study of nano-sized Al <sub>2</sub> O <sub>3</sub> powder synthesized by sol-gel (citric and stearic acid) and aldo-keto gel method	Optik	2018	<a href="https://doi.org/10.1016/j.ijleo.2017.12.068">https://doi.org/10.1016/j.ijleo.2017.12.068</a>
9	Host sensitized NIR emission in rare-earth doped NaY (MoO <sub>4</sub> ) <sub>2</sub> phosphors	Journal of Alloys and Compounds	2018	<a href="https://doi.org/10.1016/j.jallcom.2017.10.169">https://doi.org/10.1016/j.jallcom.2017.10.169</a>
10	Luminescence in Sr <sub>2</sub> MgAl <sub>22</sub> O <sub>36</sub> :Eu <sup>2+</sup> phosphor	AIP Conference Proceedings	2018	<a href="https://doi.org/10.1063/1.5032783">https://doi.org/10.1063/1.5032783</a>

11	Rare earth activated NaY (MoO <sub>4</sub> ) <sub>2</sub> phosphors for NIR emission	AIP Conference Proceedings	2018	<a href="https://doi.org/10.1063/1.5032784">https://doi.org/10.1063/1.5032784</a>
12	Fabrication of polycaprolactone/zirconia nanofiber scaffolds using electrospinning technique	Journal of Polymer Research	2017	<a href="https://doi.org/10.1007/s10965-017-1388-z">https://doi.org/10.1007/s10965-017-1388-z</a>
13	Ultra-violet to visible quantum cutting in YPO <sub>4</sub> : Gd <sup>3+</sup> , Tb <sup>3+</sup> phosphor via down conversion	Materials discovery	2017	<a href="https://doi.org/10.1016/j.md.2017.05.003">https://doi.org/10.1016/j.md.2017.05.003</a>
14	Visible quantum cutting in green-emitting BaF <sub>2</sub> : Gd <sup>3+</sup> , Tb <sup>3+</sup> phosphor: An approach toward mercury-free lamps	St. Petersburg Polytechnical University Journal: Physics and Mathematics	2017	<a href="https://doi.org/10.1016/j.spjpm.2017.06.005">https://doi.org/10.1016/j.spjpm.2017.06.005</a>
15	Visible quantum cutting in Tb <sup>3+</sup> doped BaGdF <sub>5</sub> phosphor for plasma display panel	Journal of Materials Science: Materials in Electronics	2017	<a href="https://doi.org/10.1007/s10854-016-5811-8">https://doi.org/10.1007/s10854-016-5811-8</a>
16	The Epidermic Diseases Treatment With Ultraviolet Spectrum	International Journal of Researches in Biosciences, Agriculture and Technology	2017	<a href="https://ijrbat.in/special_abstract_view&amp;paper=827">https://ijrbat.in/special_abstract_view&amp;paper=827</a>
17	Quality Enhancement of Polycaprolactone/Hydroxyapatite Nanocomposite Scaffold using Novel In-situ Sol-Gel Method	Trends in Biomaterials and Artificial Organs	2016	<a href="https://www.researchgate.net/publication/321039578_Quality_enhancement_of_polycaprolactone_hydroxyapatite_nanocomposite_scaffold_using_novel_in-situ_sol-gel_method">https://www.researchgate.net/publication/321039578_Quality_enhancement_of_polycaprolactone_hydroxyapatite_nanocomposite_scaffold_using_novel_in-situ_sol-gel_method</a>
18	Combustion synthesis and photoluminescence in novel red emitting yttrium gadolinium pyrosilicate nanocrystalline phosphor	Journal of Alloys and Compounds	2016	<a href="https://doi.org/10.1016/j.jallcom.2016.02.203">https://doi.org/10.1016/j.jallcom.2016.02.203</a>
19	Synthesis and Luminescence Properties of Ce <sup>3+</sup> doped host YBaB <sub>9</sub> O <sub>16</sub> phosphor	Research Journal of Chemical Sciences 6 (6), 47-49	2016	<a href="http://www.isca.in/rjcs/Archives/v6/i6/10.ISCA-RJCS-2016-122.php">http://www.isca.in/rjcs/Archives/v6/i6/10.ISCA-RJCS-2016-122.php</a>
20	Evaluation of biological activities of nanocrystalline tetragonal zirconia synthesized via sol-gel method	International Journal of Pharmacy and	2016	<a href="https://innovareacademics.in/journals/index.php/ijpps/article/view/11095">https://innovareacademics.in/journals/index.php/ijpps/article/view/11095</a>

		Pharmaceutical Sciences		
21	Synthesis, characterization and photoluminescence in novel lead calcium diborate doped with Mn 2+	Optik-International Journal for Light and Electron Optics	2016	<a href="https://doi.org/10.1016/j.ijleo.2015.09.192">https://doi.org/10.1016/j.ijleo.2015.09.192</a>
22	Energy Transfer and Visible Quantum Cutting in BaF <sub>2</sub> co-doped with Gd <sup>3+</sup> , Eu <sup>3+</sup> Phosphor synthesis via wet chemical method followed by Reactive Atmosphere Process	International Journal of Luminescence and applications 6 (2), 131-134	2016	<a href="http://ijlindia.org/wp-content/uploads/2015/07/Volume6/Issue2/183.pdf">http://ijlindia.org/wp-content/uploads/2015/07/Volume6/Issue2/183.pdf</a>