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Publications Details

Journal Publications: 2025

1. Prasanna Kumar S, Umesh TK, Compton Profile of Ta for 59.54 keV gamma radiation source for industrial applications, High Technology letters, Volume 31, Issue 6, pp. 558-561, 2025.
2. Uday balegar S, Shashidhar R, Madhukeswara RS, Raghu A, Growth and characterization of oxygen annealed ZnO and Al: ZnO thin films for Enhanced Nitrogen Dioxide gas sensing prepared by RF Sputtering”, Physica Scripta, , Oct 2025 <https://doi.org/10.17485/IJST/v18i24.758>
3. R S Madhukeswara, R. Shashidhar, A. Raghu, GS Prakasha, Influence of air annealing on the characteristics of spray- deposited TiO₂ thin films and their use as NO₂ gas sensors”, Journal of Sol-Gel Science and Technology, Sep 2025 <https://doi.org/10.1007/s10971-025-06915-1>
4. S Uday Balegar, R Shashidhar, A Raghu, Influence of Thickness on Structural, Morphological, Compositional and Optical Properties of RF-Sputtered Al:ZnO Thin Films”, Indian Journal Of Science And Technology, , June 2025 <https://doi.org/10.17485/IJST/v18i24.758>
5. Abhilasha Singh and Shri Singh, Application of thermodynamic model to study the electro-optical and structural properties of ferroelectric liquid crystal W-212, Phase Transitions, <https://doi.org/10.1080/01411594.2025.2528804>.

Journal Publications: 2024

1. Prakasha G.S, Shashidhar R, Madhukeswawa R.S, Influence of isochronical heat treatment on spray-deposited mixed phase tin based thin films for ammonia gas sensor applications, Results in Surfaces and Interfaces, <https://doi.org/10.1016/j.rsurfi.2024.100348>
2. Nityanand Choudhary, Detection and Enhancement of latent fingerprint by powder method using bio-synthesized spherical-shaped bismuth oxychloride nanoparticles, Nursing Research and Practice, 10.21203/rs.3.rs-4685142/v1

3. Sadhna Tiwari, Saransh Saxena, Shivangi Tripathi, Govind Pathak, Abhilasha Singh, Sandeep Kumar, Rajeev Manohar, Investigation of electro-optical and dielectric properties of pure and dispersed nematic liquid-crystal, *Liquid Crystals*, <https://doi.org/10.1080/02678292.2024.2369957>
4. Abhilasha Singh, Thermodynamic model for electro-optical properties of antiferroelectric phase in mesogen W-330-3 and W-331-3, *Soft Materials*, <https://doi.org/10.1080/1539445X.2024.2360010>
5. R.S Madhukeshwara, Shashidhar R, A. Raghu and G.S. Prakasha, Influence of air annealing on the microstructural, morphological, compositional, optical and electrical properties of spray deposited CuO thin films and their utility as MOM gas sensors, *Emergent Materials*, <https://doi.org/10.1007/s42247-024-00738-6>.
6. Prakasha G S, Shashidhar R, Madhukeshwara R S, Effect of post air annealing on the characteristics of spray deposited ZnO thin films and their use as MOS Ethanol gas sensor, *Indian Journal of Pure and Applied Physics*, Volume: 62, 2024, pp 212-221. <https://doi.org/10.56042/ijpap.v62i3.6789>.
7. S. Prasanna Kumar and T.K.Umesh, Studies on the Incoherent scattering of some Steel alloys for Compton Effect in the incident angular range 600--1000, *Aegaeum Journal*, Volume:12, Issue 2, 2024, pp 43-46.

Journal Publications: 2023

1. S. Uday Balegar, N. Srinatha, R. Shashidhar and A Raghu, Annealing temperature dependent structural and optical characteristics of spray pyrolyzed ZnO thin films, *Materials Today Proceedings*, Volume:92, 2023, pp 1453-1458. <https://doi.org/10.1016/j.matpr.2023.05.651>
2. Abhilasha Singh, Ayushi Rastogi and Shri Singh, Thermodynamic model to study the structural and electro-optical properties of chiral antiferroelectric smectic C phase exhibited by mesogenic homologous series 3FnHBM6(s) and W-316 mixture, *Phase Transitions*, Volume:96, 2023, pp 720-730. <https://doi.org/10.1080/01411594.2023.2262701>.
3. Anand B C, R Shashidhar, Nityanand Choudhary, Application of SRCBD S: SnO₂ nanostructured Thin Films as Room Temperature Gas and Humidity Sensors, *Journal of the Korean Physical Society*, Volume:82, 2023, pp 392-410. <http://dx.doi.org/10.1007/s40042-022-00698-2>
4. Anand B C, R Shashidhar, Nityanand Choudhary, Positive impedance and low hysteresis MoS type humidity sensors via SRCBD poly crystalline Sn_xO_y thin films, *Digest Journal of Nanomaterials and Biostructures*, Volume: 18, Issue:1, 2023 pp 695-699, <https://doi.org/10.15251/DJNB.2023.181.93>.
5. K C Sushma, R.B.Basavaraj, D.P.Aarti, M.B.Madhusudhana Reddy, G.Nagaraju, M.S.Rudresha, H.M..Suresh Kumar and K.N.Venkatachalaiah, Efficient red-emitting SrZrO₃:Eu³⁺ phosphor structures for display device applications, *Journal of Molecular Structure*, Volume:1283, 2023 pp 135192, <https://doi.org/10.1016/j.molstruc.2023.135192>

Journal Publications: 2022

1. K C Sushma, Santhosh Kumar, G.Nagaraju, M S Rudresha and R B Basavaraj, Color tunable SrZrO₃: Sm³⁺ nanopowders with satisfactory photoluminescent, band engineering properties for warm white LEDs and advanced forensic applications.,

- Journal of molecular structure, Volume:1254, 2022, pp. 302
2. Prasanna Kumar S, Sankarshan BM and Umesh TK, Measurement of the incoherent scattering cross sections and average effective atomic numbers of some sodium salts by gamma irradiation for commercial applications, High technology letters, Volume:28, Issue:9, 2022, pp. 1006-6748
 3. Ayushi Rastogi, Abhilasha Singh, Kaustubh Naik, Archana Mishra and Shilpi Chaudhary, Rajeev Manohar and Avanish Singh Parmar, A systemic review on liquid crystals, nanoformulations and its application for detection and treatment of SARS - CoV- 2 (COVID- 19), Journal of Molecular Liquid, Volume 36, pp 119795, 2022.
 4. Abhilasha Singh, Shashidhar R and Ayushi Rastogi, Thermodynamic model to study the ferroelectric behaviour of lactic acid derivatives with keto linkage group. Phase Transitions, Volume: 95, Issue:10, 2022. 698-706.
 5. Abhilasha Singh, Ayushi Rastogi, Shashidhar R and Sudhaker Dixit, Thermodynamic Model to Study the Phase Transition Properties of Sm CA* Phase in Antiferroelectric Mesogen W- 358 Series. Indian Journal of Pure & Applied Physics, Volume: 60, Issue:8, 2022, pp 695-699.

Journal Publications: 2021

1. Shashidhar R, Nityanand Choudhary, Influence of thickness and illumination on Electrical Properties of MOS capacitor of spray pyrolysed mixed phase CdTe₂O₅ - CdTeO₃ - CdTe film, Emergent materials, 28th April 2021, pp:1-9.
2. Abhilasha Singh, Pankaj Kumar Tripathi, Phase transition properties of ferroelectric and antiferroelectric liquid crystals, Philosophical Magazine, Volume:101, Issue:12, 26th April 2021, pp:1490-1509,

Journal Publications: 2020

1. Shashidhar R, Nityanand Choudhary, Cost effective SnS heterojunction solar cells synthesized by spray pyrolysis, Sol Gel science & technology, Volume 96, September 2020, pp.188-196.
2. Shashidhar R, Nityanand Choudhary, Thickness dependent studies of heterojunction solar cell synthesized on quartz substrate by spray pyrolysis technique, Indian Journal of Pure and applied Physics, Volume 58, January 2020, pp.36-43.
3. Prasanna Kumar S, Sankarshan B M, Umesh T K, Effective atomic number and effective atomic electron densities of some composite material of industrial interest for Compton scattering, , Aegeum Journal, Volume 8, issue 9, 2020.pp 564-567.

Journal Publications: 2019

1. Nityanand Choudhary, Shashidhar R, Luminescence of bio-synthesized rod like Bismuth Oxychloride nanoparticles, Advances in Natural Sciences: Nano Science & Nano Technology, Volume 10, May 2019, 035006 (7 pp)
2. Shubha Singh, Shubham Mishra, Abhilasha Singh, Shri Singh, Application of thermodynamic model to study the ferroelectric properties of biphenyl alkyloxy benzoate homologous series of SSFLC, Phase Transitions, Volume:.92, No. 9, 2019, pp 816 – 823.
3. Abhishek Kumar Mishra, Pankaj Kumar Tripathi, Kamal Kumar Pandey, Fanindra Pati Pandey, Shri Singh, Abhilasha Singh, Electro-optic switching and memory effect in suspension of ferroelectric liquid crystal and iron oxide nanoparticles, Materials Research Express, Volume.6, No. 10, 2019, pp. 1050d2.

Journal Publications: 2018

1. Shashidhar R, Basavaraj anagadi, Chandra shekhar H D, Nityanand Choudhary, Madhukeshwara R S, Prakasha G S, Bharath M V J, Electrical studies of silicon based heterojunction solar cells prepared by Spray pyrolysis technique, Journal of Electrochemical society of India (In press), August 2018.
2. Sharanabasappa, Kerur B R , Santosh T, Analysis of folk medicinal plants using atomic absorption spectrometer, Indian Journal of Pure and Applied Physics, Volume.68, August 2018, pp 613-615.
3. S.Prasanna Kumar, Sankarshan B M, Umesh T K,,Effective atomic number of polymer blended granite stones for Compton scattering, Indian journal of Pure & Applied Physics, Volume. 56, August 2018, pp. 653-655.

Journal Publications: 2017

1. Nityanand Choudhary & Shashidhar R, Optical properties of amorphous $\text{Se}_{100-x}\text{Bi}_x$ thin films, Journal of Engineering Technology (in press), December 2017.
2. Sharanabasappa, Kerur B R, Santosh T, Accumulation of Elements in Homemade Herbal Medicinal plants, Journal of Pure and Applied Physics, Volume 13, 2017, pp. 50-53.
3. Nityanand Choudhary, Ramakrishna G, Spectroscopic properties of red emitting Eu^{3+} doped Y_2SiO_5 nanophosphors for WLED's on the basis of Judd-Ofelt analysis: Calotropis gigantea latex mediated synthesis, Journal of Luminescence, Volume 181, 2017, pp. 153-163.

Journal Publications: 2016

1. Shashidhar R, Chandrashekar H D, Basavaraj Angadi, Murthy L C S, Poornima. P, Preparation and characterization of spray deposited CdTe thin films towards fabrication of low cost hetero-junction solar cells, Journal of Electrochemical Society of India, Volume. 65, Issue:3-4, July-October 2016, pp 230-240.
2. Chandrashekar H D, Basavaraj Angadi, Murthy L C S, Shashidhar R, Poornima.P, Effect of thickness on Electrical properties of anatase TiO_2 thin films by Spray Pyrolysis technique, Journal of Electrochemical Society of India, Volume. 65, Issue 3-4, July-October 2016, pp 223-229.
3. Angadi, B. Chandrashekar, H.D.Murthy, L.C.S. R. Shashidhar, Poornima.P, Effect of temperature on electrical studies of MOS ($\text{Al}/\text{Al}_2\text{O}_3/\text{Si}$) device, Recent advances in Nano science and Nano technology First Edition, October 2016, pp 1-3.
4. Chandra shekhar H D, Basavaraja angadi, . Shashidhar R, Murthy L C S, Poornima.P, Optical properties of $(\text{TiO}_2)_{1-x}(\text{Al}_2\text{O}_3)_x$ Pseudo binary oxides thin films prepared by spray Pyrolysis technique", Materials Today Proceedings, ELSEVIER, Volume. 3, Issue 6, June 2016, pp 2027-2034.
5. Chandrasheka H D , Basavaraj Angadi, Murthy LCS, Shashidhar R, Poornima.P, Ravikiran Y T, Nano porous $\text{Al}_2\text{O}_3\text{-TiO}_2$ thin film based humidity sensor prepared by spray pyrolysis technique, AIP Conference Proceedings, ISBN: 978-0-7354-1375-7, Volume. 1728, May 2016, pp 020615.
6. Shashidhar R, Basavaraja angadi, Chandra shekhar H D,.Murthy L.C.S, Raman spectral studies of spray deposited CuO thin films, Advanced Science Letters, Volume 22. Issue 2, April 2016, pp 971-975 (5).
7. Chandra shekhar, H D Basavaraja angadi, Shashidhar R, Murthy L.C.S, Poornima.P, Isochronal Effect of Optical Studies of TiO_2 Thin Films Deposited by Spray Pyrolysis Technique, Journal of Advanced Science Letters, Volume. 22, Issue 4, April 2016 pp. 739-744 (6).

8. Sharanabasappa, Kerur B R, Santosh T, Elemental Contents in Ayurvedic Medicinal plants Using AAS Technique”, Instrumentation society of India, Volume,45, 2016 pp.110-112.
9. Choudhary N, Comparative Analysis of Some Thermo-physical Properties of $\text{Se}_{90}\text{Zn}_{10}$ and $\text{Te}_{90}\text{Zn}_{10}$ alloys, *Thermochimica Acta*) communicated.