

M. G. Vidyamandir's

**Loknete Vyankatrao Hiray Arts, Science and Commerce College,**

Panchavati, Nashik-422003

**DEPARTMENT OF PHYSICS**

**Research Paper Publications/Presentations**

**Name of the Faculty: PROF. DR. SUNIL JAGANNATH PATIL**

❖ **Research Papers Published in Journals: 30**

Sr. No.	Title of Paper	Name of Journal	Year of Publication	ISSN Number	DOI/ Online link if any
1)	"Preparation and Characterization of WO <sub>3</sub> Thick Film Resistors using Screen Printing Technique"	Asian journal of organic & medicinal chemistry (AJOMC). Vol. 7	April-June 2022	2456-8937	<a href="http://ajomc.asianpubs.org/">http://ajomc.asianpubs.org/</a>
2)	"Effect of thickness of Iron, Copper, Nickel, Aluminium and Brass on Modulus of Rigidity."	Ajanta International multidisciplinary quarterly research journal Vol. 8, Issue-I, Jan-Mar 2019	Jan-Mar 2019	2277-5730	<a href="https://drive.google.com/drive/folders/12Vs5ZZD3U6p2O5NFOtyLcv5ALSxoHmtf?usp=sharing">https://drive.google.com/drive/folders/12Vs5ZZD3U6p2O5NFOtyLcv5ALSxoHmtf?usp=sharing</a>
3)	Potentiometric Study and Statistical Analysis of Human Urine Samples using Reduced Graphene Oxide Screen Printed Electrodes	Asian Journal of Organic & Medicinal Chemistry (AJOMC)	Vol. 7 No. 2 (April-June, CRNSS 2022) Pp 237-242	2456-8937	<a href="http://ajomc.asianpubs.org/">http://ajomc.asianpubs.org/</a>
4)	Comparative studies of electrical and gas sensing properties of undoped and tin oxide doped with antimony and cadmium	Asian Journal of Organic & Medicinal Chemistry (AJOMC)	Vol. 7 No. 2 (April-June, CRNSS 2022) Pp 306-312	2456-8937	<a href="http://ajomc.asianpubs.org/">http://ajomc.asianpubs.org/</a>
5)	Electrical and Gas Sensing Properties of Cd-doped SnO <sub>2</sub> thin films using PVD Technique	Journal of Emerging Technologies and Innovative Research	Volume 7 Issue 11 , November-2020 pp 975-980	2349-5162	<a href="https://www.jetir.org/">https://www.jetir.org/</a>
6)	"Effect of thickness of Iron, Copper, Nickel, Aluminum and Brass on Modulus of Rigidity."	Ajanta International multidisciplinary quarterly research journal	Vol. 8, Issue-I, Jan-Mar 2019 Pp 94-98	2277-5730	<a href="https://publons.com/journal/525270/an-international-multidisciplinary-quarterly-resea/">https://publons.com/journal/525270/an-international-multidisciplinary-quarterly-resea/</a>
7)	"Preparation and Characterizations of Bi-Doped Tin Oxide Thin Film Gas Sensor' Researcher's World"	Researchers World	Vol.-IX, Special Issue (Jan. 2018) pp 36-39	2231-4172	<a href="https://www.citefactor.org/journal/index/10822/researchers-world-journal-of-arts-science-commerce#.Yrklb_1Byos">https://www.citefactor.org/journal/index/10822/researchers-world-journal-of-arts-science-commerce#.Yrklb_1Byos</a>
8)	The young's modulus of Cu, Al, Fe, Stainless steel and Wood by using Y by bending of a bar technique.	Journal of Ultra-Scientist of Physical Sciences Section B	JUSPS -B Vol. 30(5) May-2018 Pp. 64-67	2231-3478 2319-8052	<a href="http://www.ultraphysicalsciences.org/">http://www.ultraphysicalsciences.org/</a>
9)	"Preparation and Characterization of Titania Thick Film Resistors"	Researchers World	Vol.-IX sp. issue,	2231-4172	<a href="https://www.citefactor.org/journal/index/10822/researchers-world-journal-of-arts-">https://www.citefactor.org/journal/index/10822/researchers-world-journal-of-arts-</a>

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			2018, pp. 47-52		<a href="#">science-commerce#.Yrklb_1Byos</a>
10)	“Gas Sensing Studies of Tin Oxide Thin Films Annealed at Different Temperatures”	IRA-International Journal of Technology & Engineering	Vol. 09, Issue 02 Nov. 2017 pp. 10-15	2455-4480	<a href="https://journals.research-advances.org/jte/">https://journals.research-advances.org/jte/</a>
11)	“Effect of Bi doping on Electrical and Gas Sensing Properties of Tin Oxide Thin Film Gas Sensor Prepared by Physical Vapour Deposition Method”	Journal of Research & Development	Vol. 8 Sp.Issue 04 Dec. 2017 pp 93-96	2230-9578	<a href="http://jrdrv.com/">http://jrdrv.com/</a>
12)	“Preparation, Characterization and Gas Sensing Performance of Pure SnO <sub>2</sub> Thin Films Deposited using Physical Vapour Deposition Technique”	IRA-International Journal of Technology & Engineering	Vol.04, Issue 02 Aug. 2016 Pp. 103-116	2455-4480	<a href="https://journals.research-advances.org/jte/">https://journals.research-advances.org/jte/</a>
13)	“Influence of Annealing Temperature on Structural and Electrical characteristics of Pure SnO <sub>2</sub> Thin Films Deposited by Physical Vapour Deposition Technique”	Research Journey-International Multidisciplinary e-Research Journal	Feb. 2016 pp.15-22	2348-7143	<a href="https://www.researchjourney.net/">https://www.researchjourney.net/</a>
14)	“Influence of Firing Temperature on Compositional and Structural Parameters of Screen Printed TiO <sub>2</sub> Thick Films”	Bionano Frontier	Vol. 8 (3), May- 2015, pp 63-66.	0974-0678 2320-9593	<a href="https://www.citefactor.org/journal/index/9760/bionano-frontier#.YrknPIByos">https://www.citefactor.org/journal/index/9760/bionano-frontier#.YrknPIByos</a>
15)	“Role of firing temperature on structural and electrical characteristics of Titania thick film for sensor applications”	Journal of Optoelectronics and Advanced Materials	Vol.17, No. 5-6, May-June 2015, pp. 655-659	1454 - 4164 1841 - 7132 -	<a href="https://joam.inoe.ro/">https://joam.inoe.ro/</a>
16)	“Semiconductor metal oxide compounds based gas sensors: A literature review”	Frontiers of Material Science	Vol. 9(1), 2015, pp.14-37.	2095-0268	<a href="https://www.springer.com/journal/11706">https://www.springer.com/journal/11706</a>
17)	“Effect of Firing Temperature on the Composition and Structural Parameters of Screen Printed	Sensors & Transducers Journal	Vol.9, Sp.Issue Dec.2010, Pp.223-232.	2306-8515 1726/547	<a href="https://www.sensorsportal.com/HTML/DIGEST/Submission.htm">https://www.sensorsportal.com/HTML/DIGEST/Submission.htm</a>

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	ZrO <sub>2</sub> Thick Film Sensors”			9	
18)	“Photo conductivity study as a function of thickness and composition of Zn-Te thin films for different illuminated conditions at room temperature”	Optoelectronics and Advanced Materials- Rapid Communication	Vol.4, Issue.3, March 2010, pp. 291-294	1842-6573  On-line: ISSN 206 5-3824	<a href="https://oam-rc.inoe.ro/">https://oam-rc.inoe.ro/</a>
19)	“Al-doped TiO <sub>2</sub> Thick Film Resistors as H <sub>2</sub> S Gas Sensor”	Sensors & Transducers Journal	Vol. 9, Sp. Issue, Dec. 2010, pp. 39-47.	2306-8515  e-ISSN 1726/5479	<a href="https://www.sensorsportal.com/HTML/DIGEST/Submission.htm">https://www.sensorsportal.com/HTML/DIGEST/Submission.htm</a>
20)	“Influence of Firing Temperature on Compositional and Structural Properties of TiO <sub>2</sub> thick Films”	Inverties Journal of Science and Technology	Vol.3, No.3, July-Sept. 2010, pp. 184-193	0973-8940)  Online ISSN: 24 54-762X	<a href="https://indianjournals.com/ijor.aspX?target=ijor:ijst1&amp;type=home">https://indianjournals.com/ijor.aspX?target=ijor:ijst1&amp;type=home</a>
21)	“Effect on Ethanol Gas Sensing Performance of Cu Addition to TiO <sub>2</sub> Thick Films”	Sensors & Transducers Journal	Vol. 116, issue 5, May 2010, pp. 28-37	2306-8515  e-ISSN 1726/5479	<a href="https://www.sensorsportal.com/HTML/DIGEST/Submission.htm">https://www.sensorsportal.com/HTML/DIGEST/Submission.htm</a>
22)	“Formulation and Characterization of Cu Doped ZnO Thick Films as LPG Gas Sensor”	Sensors & Transducers Journal	Vol. 9, Sp. Issue, Dec. 2010, pp. 11-20	2306-8515  e-ISSN 1726/5479	<a href="https://www.sensorsportal.com/HTML/DIGEST/Submission.htm">https://www.sensorsportal.com/HTML/DIGEST/Submission.htm</a>
23)	“Study of Microstructural Parameters of Screen Printed ZnO Thick Film Sensors”	Sensors & Transducers Journal	Vol. 117, Issue 6, June 2010, pp.62-70	2306-8515  e-ISSN 1726/5479	<a href="https://www.sensorsportal.com/HTML/DIGEST/Submission.htm">https://www.sensorsportal.com/HTML/DIGEST/Submission.htm</a>
24)	“Influence of Nb <sub>2</sub> O <sub>5</sub> doping on ZnO thick film gas sensors”	Journal of Optoelectronics and Advanced Materials	Vol. 12, Issue 6, 2010, pp. 1255-1261	on-line: 1841-7132)	<a href="https://joam.inoe.ro/">https://joam.inoe.ro/</a>
25)	“Influence of Firing Temperature on Compositional and Structural Characteristics of ZrO <sub>2</sub> Thick Films Gas Sensor”	Sensors & Transducers Journal	Vol. 113, Issue 2, Feb. 2010, Pp.107-114	2306-8515  e-ISSN 1726/5479	<a href="https://www.sensorsportal.com/HTML/DIGEST/Submission.htm">https://www.sensorsportal.com/HTML/DIGEST/Submission.htm</a>

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26)	“Effect of Firing Temperature on Electrical and Structural characteristics of Screen Printed TiO <sub>2</sub> Thick Films”	Opto-electronics & Advanced Materials- Rapid Communications (OAM-RC)	Vol.3 Issue 10, 2009, pp. 1013-1017.	1842-6573  On-line: ISSN 206 5-3824)	<a href="https://oam-rc.inoe.ro/">https://oam-rc.inoe.ro/</a>
27)	“Formulation and characterization of Cr <sub>2</sub> O <sub>3</sub> doped ZnO thick films as H <sub>2</sub> S gas Sensor”	Sensors & Transducers Journal	Vol. 108, Issue 9, Sept. 2009, pp.189- 197	2306-8515  e-ISSN 1726/5479	<a href="https://www.sensorsportal.com/HTML/DIGEST/Submission.htm">https://www.sensorsportal.com/HTML/DIGEST/Submission.htm</a>
28)	“Effect of Firing Temperature on Electrical and Structural characteristics of Screen Printed ZnO Thick Films”	Optoelectronics & Advanced Materials– Rapid Communications	Vol. 3, Iss.9, 2009, pp. 879 – 883	1842-6573  On-line: ISSN 206 5-3824	<a href="https://oam-rc.inoe.ro/">https://oam-rc.inoe.ro/</a>
29)	“Effect on H <sub>2</sub> S Gas Sensing Performance of Nb <sub>2</sub> O <sub>5</sub> Addition to TiO <sub>2</sub> Thick Films”	Sensors & Transducers Journal	Vol. 109, Issue 10, Oct. 2009, pp. 117-125	2306-8515  e-ISSN 1726/5479	<a href="https://www.sensorsportal.com/HTML/DIGEST/Submission.htm">https://www.sensorsportal.com/HTML/DIGEST/Submission.htm</a>
30)	“Ammonia gas Sensing performance of Cr <sub>2</sub> O <sub>3</sub> loaded TiO <sub>2</sub> thick film resistors”	Solid state Science And Technology	Vol. 17, No.2,2009, pp.197-207	0128-7389	<a href="https://myjms.mohe.gov.my/index.php/masshp">https://myjms.mohe.gov.my/index.php/masshp</a>

❖ **Research Papers Presented in Conferences/Workshops/Seminars/Webinars: 16**

INTERNATIONAL LEVEL				
Sr. No.	Conference topic	Title of the paper	Place	Year
1	Innovations in teaching Learning and Evaluation in Higher Education	Physical Properties of Zink Sulphide (ZnS) Thin Film by Electrochemical Deposition.	L.V.H. Arts, Sci. and commerce college Panchavati, Nashik, M.S., India.	23-24 Jan. 2019
2	Emerging trends and issues in research and development	“Study of some parameters of semiconductor metal oxide thick film resistors”	MSG College, Malegaon Camp, Malegaon, M.S., India	17-18 Feb. 2016
3	Emerging trends and challenges in science and technology	“Structural parameters of Screen printed TiO <sub>2</sub> thick film“	Bionano Frontier and International So. of science and technology Mumbai in association with Sinsil International Ltd. Bangkok, Thailand	3-5 Nov. 2014

4	Nanoscience and Nanotechnology	“Role of Firing temperature on structural and electrical characteristics of Titania thick film sensors	B.B.A. Central University, Lucknow, U.P., India.	18-20 Nov.2013
5	Frontiers in material science for energy and Environment	“Study of firing temperature on the composition, structural parameters of screen printed ZrO <sub>2</sub> thick sensors”	Loyola college, Chennai, Tamil Nadu, India.	11-13 Jan. 2012
6	Interdisciplinary Science Conference	“Influence of firing Temperatures on Compositional and Structural properties of ZrO <sub>2</sub> thick films”	Jamia Millia Islamia Central University	2-4 December 2010
7	workshop and symposium on synthesis and characterization Glass / glass ceramics	“Study of Compositional and Micro Structural Parameters of ZrO <sub>2</sub> Thick Film Sensors with Firing Temperatures”	Centre for Material for Electronics Technology C-MET, Pune	7-10, July 2010
8	Sensing Technology	. “Effect of Firing Temperature on the Composition and Structural Parameters of Screen Printed ZrO <sub>2</sub> Thick Film Sensors”	Salento University, Lecce, Italy.	3-5 June 2010

#### NATIONAL LEVEL

9	“Material Science: Advancement and Innovations	Chaired a Session	L. K. Dr. P. R. Ghogare Science College, Dhule. Chaired a Session	20 Feb. 2019.
10	“Non Conventional Energy sources for Rural development of India.”	Chaired a Session	Uttamrao Patil Arts & Science College Dahivel, Dist. Dhule	6 Jan. 2018
11	“Recent development in Nanomaterial’s & their Applications.	TiO <sub>2</sub> , WO <sub>3</sub> Thick film resistors as LPG gas Sensor	”G. T. Patil Arts, Science and Commerce College, Nandurbar	5-6 Feb. 2016
12	Recent Trends in Advanced Communication.”	RF Based Remote Robot for detection of gas in hazardous area	L.V.H. College, Panchavati, Nashik, Dist. Nashik,	12-13, Jan. 2015.
13	“Nanomaterials Avenue	Role of firing temperature on structural and electrical characteristics of TiO <sub>2</sub> thick film sensors.	”. K.T.H.M. College, Nashik, Dist. Nashik	21-23, Oct. 2013
14	Advanced Materials and its Applications	Study of Morphological and Structural parameter of TiO <sub>2</sub> -WO <sub>3</sub> composites.	SVS Arts and Science College, Dondaicha.	1-2, Feb. 2013
15	Applications of Electronics in Astronomy & Astrophysics	Participation	K.T.H.M. College, Nashik, Dist.Nashik	28-30, Mar. 2013.
16	“Preparation of Nanomaterials and their Applications	Study of Phase Transformation of Screen Printed ZrO <sub>2</sub> Thick film Sensors with firing	A. S. C. College, Nandagaon, Dist. Nashik,	20-22, Feb. 2010

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