

Research Publications

Author(s)	Title	Journal/ Proceedings	<u>Status</u> Internatio n al/ National/ Regional/ Local	Vol.No. And IssueNo.	P.P.	Month& Year
Dr. Shahera S.Patel, Jay Ka.Patel	Design of Security System for Furnace Access and Control Based on Radio Frequency Identification	Digital Marketing in the Current Era	National	978-81-954709-7-8		October 223
Dr. Shahera S.Patel	Microcontroller Based Energy Saving Automatic LED Light Control System	Climate Change, Pollution and Sustainable Development	National	978-93-91932-23-7		May 2023
Dr. Shahera S.Patel	Novel Automatic Touch less Hand Sanitizer Dispenser	International Seminar on Global Issues in Multidisciplina ry Academic Research andInnovations	International	978-93-91932-48-0		April 2023
D.K. Dhruv a, B.H. Patel b, S.D. Dhruv a, P.B. Patel b, U.B. Trivedi b, Naveen Agrawal a	Synthesis and microstructural characterization of bulk ZnIn ₂ Se ₄	Materials Today: Proceedings	Scopus/WoS	2214-7853		January 2023
Shahera S.Patel	Design of Security System for Furnace access & Control based on Radio Frequency Identification	Proceedings of national Conference on Innovations, Research and Challenge sin global Business, Finance, Economics, Social Sciences and Applied Sciences (NCICG-2022)	National	ISBN : 978-93-91932-36-7	73,74	November 2022
D.K. Dhruv , B.H. Patel, S.D. Dhruv, P.B. Patel, Naveen Agrawal,Rupak Benerjee, Vikas Patel	Synthesis, Electrical Transport mechanisms & Photovoltaic characteristics of p-ZnIn ₂ Se ₄ /n-Cdte thinfilm heterojunction	Journals of Materials science : Materials in Electronics	International	33	24003-2405	2022
PayalChauhan,Alkesh B. Patel, Som Narayan, Jyoti Prasad, C.K. Sumesh,G.K.Solanki, K.D. Patel, Saurabh S. Soni,P.K.Jha, V.M. Pathak, VikasPatel (ResearchStudent).	Superior electrochemical activityofCdSe thin film by chromium substitutional doping.	Journal of Alloys and Compounds.	International	862	158016	2021

Drishya Kannichankandy,Pratik M.Pataniya,Som Narayan, Vikas Patel (Research Student), C.K.Sumesh,Kireet D.Patel, Gunvant K.Solanki, Vivek M.Pathak	Flexible piezo-resistive pressure sensor based on conducting PANI on papersubstrate. Synthetic Metal	Synthetic Metals	International	273	116697	2021
Dr.Bhalendu S. Vaishnav,DR.Neepa Bharucha,Dr.Smruti D. Vaishnav , Dr.Vibha S.Vaishnav,DR.Jagdish R.Varma	Effects of Yognindra On Well being of Trainee teachers	Journal of Health science and professions education	Online and print	01,01	1-6	2021
D.K. Dhruv , B.H. Patel, S.D. Dhruv, P.B. Patel, Naveen Agrawal	Fabrication and transport properties of thermally evaporated cadmium selenide thin films for photovoltaic applications	Materials Today: Proceedins	International	55(part: 01)	67-72	
Vikas patel , Basumati H. patel.	Photo sensing performance with electro-optically efficient n-Zn1-xMgxO/p-Si heterojunction	Journals of Materials science : Materials in Electronics	International	32	15615-15621	2021
Drishya Kannichankady , PratikM.Pataniya, Som Narayan, Vikas patel,C.K.Sumesh,Kireet D.Patel,Gunvant K. Solanki,Vivek M. Pathak	Flexible Piezo-resistive pressure sensor based on conducting PANI on paper substrate , synthetic metals	synthetic metals	International	273	116697	2021
Vikas patel, Pratik M.Pataniya, C.K.Sumesh	MoS ₂ /WSe ₂ nanohybrids for flexible paper-based photodetectors	Journal of nano technology	International	32 No. 31	315709	2021
Krishna H.Modi, Pratik M.Pataniya, C.K.Sumesh, Vikas patel	Microwave assisted synthesis of SnS nanosheets for fabrication of large area SnS/Si heeterojunction	Solar Energy	International	221	412-417	2021
Pratik M.Pataniya, C.K.Sumesh, Vikas patel	Electrostatic deposition of MoSe ₂ -MoO _x Nanosheets for enhanced Electrolytic Hydrogen evaluation research	Applied Energy Materials	International	4	7891-7899	2021
Pratik M. Pataniya, Sanjay A. Bhakhar, MohitTannarana, ChetanZankat, VikasPate (Research Student),G.K.Solanki, K.D.Patel,PrafullaK. Jha,DattatrayJ.Late, C.K. Sumesh.	Highlysensitiveand flexible pressure sensor based on two-dimensionalMoSe ₂ nanosheets for online wrist pulse monitoring.	Journal of Colloid and Interface Science.	International	584	495 to 504	2021

Meswa Patel,Pratik M.Pataniya, VikasPatel (Research Student) C.K.Sumesh,Dattatray J.Late	Large Area Broadband and Highly Sensitive Photodetectorbased on ZnO-WS ₂ /Si heterojunction (ISSN:0038-092X)	Solar Energy	International	Vol. 206	P:974-982	2020
Vishal Dhamecha, Basumati Patel, Dhananjay Dhruv, AndrejNowicki	ResistiveSwitching Memory effects in Chalcogenide Semiconductor ZnGa ₂ Se ₄ thin films (ISSN:0267-0844)	Surface Engineering	International	Vol.3 6 No.1	P:100-105	2020
Vibha Vaishnav	Education for New India:Insightsfrom Gandhian Teaching	University News59(35)	National	Vol. 59, Issue 35	P:156-160	2019
B.S.Vaishnav,S.B. Vaishnav, V.Vaishnav, N.D.Bharucha,J.R. Varma	Transformative Effects of Yoga-Nidra on Hedonic and Eudemonic Dimensions of Well-being: A QualitativeStudyin Trainee Teachers	International Journal of Yoga-Philosophy and Parapsychology	International	Volume 11	P:17-23	March 2019
Bhalendu S.Vaishnav,Smruti B. Vaishnav, Vibha S.Vaishnav, Jagdish R. Varma	Effect of Yoga-Nidra on AdolescentsWell-being : A Mixed MethodStudy	International Journal of Yoga ISSN: 0973-6131	International	Volume 11, Issue3	P:245-248	September -December 2018
B. H. Patel, V. D. Dhamecha	DC and AC Electricalproperties of flash evaporated ZnGa ₂ Se ₄ thin films	International Journal of Research in Electronics andComputer Engineering (IJRECE) (ISSN:2393-9028)	International	Volume 6	P:1340	July-September -2018
Vikas A.Patel, B.H.Patel, D.Dhamecha andDhananjay K.Dhruv	Fabrication of ZnMgO thin films by Pulsed Laser DepositionMethod	IndianJournal of Technical Education (IJTE)	National	1	P:176-178	2017
O. V.Dobrozhan,A.S.Opanasyuk, D.I.Kurbatov U.B.Trivedi, C.J.Panchal,Priya Suryavanshi,V.A.Kheraj	Thermoelectric Propertiesofthe Collodial Bi ₂ S ₃ -based Nanocomposites	Journal Of Nano and Electronic Physics ISSN:0975 2595	International	Vol.9,No. 4	P:4028	2017
V.D.Dhamecha, B.H.Patel, P.B.Patel and V.A.Patel	Significance of Substrate temperatures on the deposition of ZnGa ₂ Se ₄ thinfilms by Flash evaporation Technique	International Research Journal of Engineering and Technology (IRJET) e-ISSN : 2395-0056	International	Vol.4,No. 3	P:253	2017

O.V.Diachenko,A.S.Opanasyuk,D.I. Kurbatov, P.B.Patel , C.J.Panchal,Priya Suryavanshi, V.A.Kheraj	ThePerformance Optimization of Thin-Film Solar ConvertersBased on n-ZnMgO/p-CuO Heterojunctions	Journal Of nano and Electronic PhysicsISSN :2077-6772	International	Vol.9,No. 4	P:4002	2017
K.J.Patel,G.G.Bhatt, S.S.Patel , R.R.Desai,J.R.Ray,C.J.Panchal,Priya Suryavanshi, V.A.Kheraj,A.S.Opanasyuk	Thickness – dependent Electrochromic Properties of Amorphous TungstenTrioxide Thin Films	Journal Of nano and Electronic PhysicsISSN :2077-6772	International	Vol.9,No. 3	P:3040	2017
Shahera S.Patel	Design and Development of Laboratorybased model of rework system for BGA semiconductor devices	Journal of Pure and Applied Sciences–“ PRAJNA” ISSN:0975 2595	Regional	Vol.24-25	P:195-201	December 2017
Shahera S.Patel	Design and Modeling of a MagneticLevitation System	Journal of Emerging Technologies &Innovative Research (JETIR) ISSN:2349-5162	International	Vol.4, Issue12	P:118-121	December 2017
Shahera S.Patel	Easytechnicalguide to understand PC motherboard, troubleshoot problems and its repair: Part III	International journal on Future Revolutionin Computer Science &Communicati on Engineering (IJFRCSCE) ISSN : 2454-4248	International	Vol.3, Issue12	P:278-280	December 2017
Patel K. J.,BhattG. G., Patel P. B.,Lakshminarayana D. , Panchal C. J.,DesaiM. S.,SuryavanshiPriya	Solid-State Electrochromic Device for Reflectance Modulation	Invertis Journal of Science &Technology	International	Volume :9,Issue: 1	11-15	2016
DiachenkoO.V.,Opanasyuk A.S., Kurbatov D.I., PatelS.S.,DesaiR.R.,Lakshminarayana D. , PanchalC.J.,Suryavanshi Priya	Structure and Substructure Properties of MagnesiumOxide Thin Films	Invertis Journal of Science &Technology	International	Volume: 9,Issue: 2	72-78	2016
ShaheraS.Patel	Addressing Overvoltage ProtectionforHigh Voltage Loads	International Journal of Recent and Innovation Trends in Computing& Communication(IJRITCC)	International	Vol. : 4, Issue:3	496-501	2016
D. K. Dhruv,B. H. Patel&D.Lakshminarayana,	Fabrication and electrical characterizationof p-ZnIn ₂ Se ₄ /n-Si heterojunctiondiode structure	Materials Research Innovations	International	<u>Vol.:</u> 20, <u>Issue:</u> 4,	285-292	2016

D. K. Dhruv, B. H. Patel	Fabrication and electrical characterization of Al/p-ZnIn ₂ Se ₄ thin film schottky diode structure	Material Science in Semiconductor Processing	International			
Berestok T.O., Opanasyuk A.S., Kurbatov D.I., Cheong H., Trivedi U.B. Lakshminarayana D., Panchal C.J., Suryavanshi Priya	Effect of reaction time on structural properties of ZnO:Al films	Invertis Journal of Renewable Energy	International	Volume: 5, Issue : 4	181-190	2015
JN Panchal, SG Patel, V S Vaishnav	Room Temperature detection of benzene vapours by Tin Oxide nano clusters	Sensors and Transducers Journal,	International	7/190	35-39	2015
D.K. Dhruv and B.H. Patel	Significance of substrate temperature on the electrical properties of flash evaporated polycrystalline ZnIn ₂ Se ₄ thin films	International Journal of Innovative Research in Electrical, Electronics, Instrumentation and Control Engineering (IJIREICE)	International	Vol-03	59-11	2015
D. K. Dhruv, A. Nowicki, B.H. Patel, V. D. Dhamecha	Memory switching characteristics in amorphous ZnIn ₂ Se ₄ thin films	Surface Engineering (UK),	International	Vol-31 Issue-7	556-562	2015
V S Vaishnav, SG Patel, J N Panchal,	Development of ITO thin film sensor for detection of benzene	Sensors and Actuators B: Chemical	International	206,	381-388	2015
V S Vaishnav, SG Patel, J N Panchal	Development of indium tin oxide thin film toluene sensor	Sensors and Actuators B: Chemical,	International	201	165-172,	2015
Shahera S. Patel, D.R. Patil,	Synthesis and Processing of ZnO Nano –Sized Particles for Gas Sensing using ultrasonication	Journal of Environmental Research and Development	International	Vol.9, No.3A,	872-877,	2015
R.R. Attarde, G.B. Shelke, Y.B. Patil, S D Patil, D R Patil, Shahera S Patel	Nano structured Manganese oxide thick film resistors as ethanol gas sensors,	Journal of Research and Development	National	5/05,	1-7,	2015
Shahera S. Patel,	Stepper motor precise position control system using DTMF technology	International Journal on Recent and Innovation Trends in Computer and Communication,	International	3/5,	3324-3327,	2015
S D Patil, Y.B. Patil, D R Patil, Shahera S Patel,	Particle size dependent gas sensing performance of ZnO nanorods based thick film registers	International Journal on Recent and Innovation Trends in Computer and Communication	International	3/8,	5063-5061	2015

Shahera S.Patel	Overvoltage protection using crowbar devices for low voltage loads	International Journal on Recent and innovation trends in computer and communication,	International	3/12,	6703-6705,	2015
Shahera S. Patel, D.R.Patil, B.H.Brahmbhatt,	Development of Microcontroller Based Low Cost pH Meter,	International Journal of Basic and Applied Research	International	Vol.4	P:297-300,	2014
D. K. Dhruv, B. H. Patel and V. D. Dhamecha	Fabrication and characterization of the Au/p-ZnIn ₂ Se ₄ /n-Si/Al heterojunction for photovoltaic applications	Proceedings of National Conference on Advances in Electronics & Its Interdisciplinary Applications (NCAEIA-2014)	International			2014
VS Vaishnav, SG Patel, J N Panchal	Development of ITO thin film sensor for the detection of formaldehyde at room temperature,	Sensors and Actuators B: Chemical	International	202	1002-1009,	2014
Shahera S. Patel, D.R.Patil and B.H. Brahmbhatt	Design of a low cost temperature controller for high temperature furnaces used in crystal growth,	International Journal of Research in Engineering and Technology (IJRET),	International	03,	187-192,	2014
Shahera S.Patel,	Stepper Motor Control using Microprocessor for Preparation of Homogeneous Compound Semiconducting Materials,	, International Journal of Science and Research (IJSR),	International	3	, 2004 – 2008,	2014
Shahera S.Patel	Advancement in Soldering Technology – Main Issues and its Perspectives-PART 1	International Journal of Recent and Innovation Trends in Computing and Communication (IJRITCC)	International	Volume 2, Issue 9,	2883-2886,	2014.
Shahera S.Patel,	Advancement in Soldering Technology – Main Issues and its Perspectives-PART 2,	, International Journal of Recent and Innovation Trends in Computing and Communication (IJRITCC),	International	Volume 2, Issue 10,	3307-3310	2014

Shahera S.Patel	Advancement in Soldering Technology –Main Issues and its Perspectives-PART 3	International Journal of Recent and Innovation Trends in Computing and Communication (IJRITCC),	International	Volume 2, Issue 11,	3784-3787,	2014
B.H.Patel, D.K.Dhruv	Growth of flash evaporated ZnIn ₂ Se ₄ thin films,	The International journal of Applied Science and Engineering Research	International		2277-8442	,2013
V.S.Vaishnav, S.G.Patel, J.N.Panchal	Fabrication & Application of Thin Film Semiconductor Sensors for the Detection of VOCs	Advanced Materials Research	International	Vol. 665,	85-92	2013
Shahera S.Patel, D.R.Patil, B.H.Brahmbhatt	A Simple and Reliable Improved design of Instrumentation based Temperature Controller	International Journal of Innovative Research and Studies	International	Vol.2, Issue 12	420-423	2013
R R Desai, D Lakshminarayana, C.J.Panchal, P.B.Patel, MS Desai and N Padha,	Barrier inhomogeneities of Al/p-In ₂ Te ₃ thin film Schottky diodes	Journal of Nano and Electronic Physics (Ukraine),	International	Vol.3 No-1,	P-995-1004,	2011,
J R Ray, M S Desai, C.J.Panchal, P.B.Patel	Magnetron sputtered Al-Zno thin film for photovoltaic applications	Journal of Nano and Electronic Physics (Ukraine),	International	Vol.3 No-1,	755-765,	2011,
U. B.Trivedi, C.J.Panchal	Simulation of CIGS thin film solar cells using AMPS-1D	Journal of Nano and Electronic Physics	International	3 No.1	747-754	2011
U.B.Trivedi, D. Lakshminarayana, I.L.Kothari, N.G.Patel. H.N.Kapse, P.B.Patel and C.J.Panchal	Amperometric Glucose Biosensor based on Immobilization of Glucose in polyethylenimine and poly (carbamolysulphonate) polymer matrix	Sensors and Transducer	International	Vol.19, Issue-8,	129-141	2011