

PROFORMA FOR BIO-DATA (to be uploaded)

1	Name and full correspondence address-	Dr.Davit .B.Dhruv Assistant professor Department of Physics Saurashtra University Rajkot-360005 Gujarat, India
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3	Institution-	Department of Physics, Saurashtra University, Rajkot-360005 Gujarat, India
4	Date of Birth-	October 07, 1987
5	Gender (M/F/T)-	Male
6	Category Gen/SC/ST/OBC-	General (GEN)
7	Whether differently abled (Yes/No)-	NO

8. Academic Qualification (Undergraduate Onwards)

Examinations	Name of the Institution / University	Year of Passing	Percentage of Marks Obtained	Subject
Graduation (B.Sc.)	Saurashtra University	2008	59.14 %	Physics
Post-Graduation (M.Sc.)	Saurashtra University	2011	64.87 %	Physics

9. Ph.D thesis title, Guide's Name, Institute/Organization/University, Year of Award.

Degrees	Title	Name of guide	Date of Award	University
Ph. D.	“STUDIES ON STRUCTURAL TRANSPORT, ELECTRONIC AND MAGNETIC PROPERTIES OF FUNCTIONAL OXIDE”	Prof.N.A.Shah	24-07-2015	Saurashtra University, Rajkot

10. Publications (*List of papers published in SCI Journals, In year wise descending order*).

Sr no	Authors	Title	Name of Journal	Volume	Pages	Year
1.	Davit Dhruv , RK Trivedi, Bhumika Nimavat, Sanjay Kansara, DD Pandya, MJ Keshvani, PS Solanki, Bharat Kataria, DG Kuberkar, NA Shah	Structure-property correlations in monovalent mixed oxide $\text{La}_{1-x}\text{K}_x\text{MnO}_3$ ($0.0 \leq x \leq 0.3$) manganites	Solid State Physics	1512	928-929	2013
2.	Zalak Joshi, Davit Dhruv , N.A. Shah	Effect of Sintering Temperature on Current – Voltage Characteristics of Nanostructured Manganites	Journal of Nanoscience, Nanoengineering and Applications	4	1	2014
3.	Zalak Joshi, Davit Dhruv , Sanjay Kansara, Megha	Dielectric behavior of nanostructured: $\text{Y}_{0.95}\text{Ca}_{0.05}\text{MnO}_3$ Role	AIP Conference Proceedings	1591	1306-1308	2014

	Vagadia, Nishant Barot, PK Mehta, PS Solanki, DG Kuberkar, ssNA Shah	of sintering temperature				
4.	Davit Dhruv , Zalak Joshi, Ashish Ravalia, Sanjay Kansara, DD Pandya, PS Solanki, DG Kuberkar, NA Shah	<u>I-V and C-V</u> <u>characteristics of</u> <u>$Y_{0.95}Ca_{0.05}MnO_3/Si$</u> <u>film</u>	Solid State Physics	1591	1309-1311	2014
5.	S.B. Kansara, Davit Dhruv , Bharat Kataria C.M. Thaker, S. Rayaprol, C.L. Prajapat, M.R. Singh, P.S. Solanki, D.G. Kuberkar, N.A. Shah	Structural, Transport and Magnetic Properties of Monovalent Doped La xNa_xMnO_3 Manganites	Ceramics International	41	7162 –7173	2015
6.	S.B. Kansara, Davit Dhruv , Zalak Joshi, D.D. Pandya, S. Rayaprol, P.S. Solanki, D.G. Kuberkar, N.A. Shah	Structure and Microstructure Dependent Transport and Magnetic Properties of Sol–Gel Grown Nanostructured $La_{0.6}Nd_{0.1}Sr_{0.3}MnO_3$ M anganites: Role of Oxygen	Applied Surface Science	356	1272-1281	2015
7.	Chirag Savaliya, KN Rathod, Davit Dhruv , JH Markna	Preparation of nanostructured copper oxide rods using advanced sonication method	International Journal of Nanoscience and Nanoenginee ring	2	27-31	2015
8.	J.H. Markna, Davit Dhruv , K.N. Rathod, ChiragSavaliya, T.M. Shiyani, D.D. Pandya, A.D. Joshi, N.A. Shah	Charge trap mechanism in hybrid nanostructured ($YMnO_3$) metal– oxide–semiconductor (MOS) devices	Journal of Nano Research	42	92	2016

9.	Davit Dhruv , Zalak Joshi, Sanjay Kansara, D.D. Pandya, J.H. Markna, K. Asokan, P.S. Solanki, D.G. Kuberkar, N.A. Shah	Temperature– Dependent I–V and C–V Characteristics of Chemically–Grown $Y_{0.95}Ca_{0.05}MnO_3/Si$ Thin Films	Materials Research Express	3	036402:1– 9	2016
10.	KinnariThakrar, Davit Dhruv , K.N. Rathod, Zalak Joshi, KevalGadani, D.D. Pandya, J.H. Markna, B.R. Kataria, P.S. Solanki, D.G. Kuberkar, N.A. Shah	Size–Controlled Electrical Properties of Sol–Gel Grown Nanostructured $Gd_{0.95}Ca_{0.05}MnO_3$	Journal of Sol–Gel Science and Technology	79	144-150	2016
11.	KevalGadani, Davit Dhruv , Zalak Joshi, HetalBoricha, K.N. Rathod, M.J. Keshvani, N.A. Shah, P.S. Solanki	Transport Properties and Electroresistance of a Manganite Based Heterostructure: Role of the Manganite – Manganite Interface, 18 (2016) 17740– 17749	Physical Chemistry Chemical Physics	18	17740- 17749	2016
12.	Zalak Joshi, D.D. Pandya, Davit Dhruv , KevalGadani, HetalBoricha, Sanjay Kansara, J.H. Markna, P.S. Solanki, N.A. Shah	Investigations on Structural–Disorder Induced Modifications in the Transport Behavior of Rare– Earth Manganites	Bulletin of Materials Science	39	1109– 1117	2016
13.	Davit Dhruv , Zalak Joshi, Sanjay Kansara, M.J. Keshvani, D.D. Pandya, K. Asokan, P.S. Solanki, D.G. Kuberkar, N.A. Shah	Investigations on Device Characteristics of Chemically Grown Nanostructured $Y_{0.95}Ca_{0.05}MnO_3/Si$ Junctions,	Advanced Science Letters	22	843–848	2016

14.	Rupeshkumar V Ramani, Bharat M Ramani, Anjana D Saparia, Davit Dhruv , Jaysukh Markna	Synthesis and optical characterization of CuO nanoparticles on solar borosilicate glass	Journal of Nano Research	37	68-73	2016
15.	Keval Gadani, Davit Dhruv , Zalak Joshi, Hetal Boricha, Eash Vaghela, DD Pandya, NA Shah, PS Solanki	Zener double exchange polynomial law for metallic region of $\text{La}_{1-x}\text{K}_x\text{MnO}_3$ manganites	AIP Conference Proceedings	1728		2016
16.	Zalak Joshi, Davit Dhruv , Keval Gadani, Hetal Boricha, DD Pandya, PS Solanki, NA Shah	Effect of sintering temperature on the structural and electrical properties of $\text{Zn}_{0.95}\text{Cr}_{0.05}\text{O}$	AIP Conference Proceedings	1728		2016
17.	Hetal Boricha, Davit Dhruv , Zalak Joshi, Alpa Zankat, DD Pandya, AD Joshi, PS Solanki, NA Shah	K-substitution induced electrical band gap engineering in $\text{La}_{1-x}\text{K}_x\text{MnO}_3$ manganites	AIP Conference Proceedings	1728		2016
18.	Hetal Boricha, Zalak Joshi, Davit Dhruv , KN Rathod, Keval Gadani, DD Pandya, Sanjay Kansara, CM Thaker, S Rayaprol, PS Solanki, NA Shah	Charge transport mechanisms in monovalent doped mixed valent manganites	Advanced Materials Proceedings	1	96-103	2016
19.	Jaydeep G Chavda, Rushit Trivedi, Charmy Patel, Davit Dhruv , Ashwini D Joshi, NA Shah, JK Bhimani	A novel of enhanced bandwidth using stacked microstrip patch antenna	Int. J. Curr. Res. Multidiscip.	3	1-6	2016
20.	Davit Dhruv , Zalak Joshi, Keval Gadani, Hetal Boricha, DD Pandya, PS Solanki,	Investigations on rectifying behavior of $\text{Y}_{0.95}\text{Ca}_{0.05}$	AIP Conference Proceedings	1728		2016

	AD Joshi	MnO ₃ /Si junction				
21.	Jay Pala, Meet Mordiya, Dhruv Virpariya, Ankita Dangodara, Pinal Gandha, Chirag R Savaliya, Joyce Joseph, Tulshi Shiyani, Davit Dhruv , JH Markna	Analysis and design optimization of organic dye sensitized solar cell based on simulation	AIP Conference Proceedings	1837		2017
22.	Davit Dhruv , Zalak Joshi, Sapana Solanki, Khushal Sagapariya, Pratima Makwana, SB Kansara, AD Joshi, DD Pandya, PS Solanki, NA Shah	Temperature dependent dielectric behavior of sol–gel grown Y _{0.95} Ca _{0.05} MnO ₃ /Si junction	AIP Conference Proceedings	1837		2017
23.	Solanki Sapana, Davit Dhruv , Zalak Joshi, Keval Gadani, KN Rathod, Hetal Boricha, VG Shrimali, RK Trivedi, AD Joshi, DD Pandya, PS Solanki, NA Shah	Studies on structural and electrical properties of nanostructured RMnO ₃ (R= Gd & Ho)	AIP Conference Proceedings	1837		2017
24.	Mahesh Chauhan, Davit Dhruv , SA Solanki, Nikesh Shah	Theoretical and Experimental Analysis of Monocrystalline Solar Cell	Kalpa Publications in Engineering	1	478-484	2017
25.	Keval Gadani, M.J. Keshvani, Davit Dhruv , Hetal Boricha, K.N. Rathod, Pooja Prajapati, A.D. Joshi, D.D. Pandya, N.A. Shah, P.S. Solanki	Low Field Magnetoelectric and Magnetotransport Properties of Sol–Gel Grown Nanostructured LaMnO ₃ Manganites	Journal of Alloys and Compounds	719	47–57	2017

26.	Davit Dhruv , Zalak Joshi, KevalGadani, Sapana Solanki, J.H. Markna, A.D. Joshi, K. Asokan, P.S. Solanki, N.A. Shah	Transport Properties of $Y_{0.95}Ca_{0.05}MnO_3/Si$ Thin Film Junction	Physica B: Condensed Matter	518	33–38	2017
27.	K.N. Rathod, KinnariThakrar, KevalGadani, Zalak Joshi, Davit Dhruv , HetalBoricha, Sanjay Kansara, D.D. Pandya, K. Asokan, P.S. Solanki, N.A. Shah	Structural, Microstructural and Dielectric Behavior of Sol–Gel Grown Nanostructured $Y_{0.95}Zr_{0.05}MnO_3$	Materials Chemistry and Physics	198	200–208	2017
28.	K.N. Rathod, Davit Dhruv , KevalGadani, HetalBoricha, Sapana Solanki, A.D. Joshi, D.D. Pandya, K. Asokan, P.S. Solanki, N.A. Shah,	Comparison of Charge Transport Studies of Chemical Solution and Pulsed Laser Deposited Manganite–Based Thin Film Devices	Applied Physics A	123	558:1–8	2017
29.	D.D. Pandya, Zalak Joshi, Davit Dhruv , KevalGadani, HetalBoricha, K.N. Rathod, Sanjay Kansara, J.H. Markna, P.S. Solanki, N.A. Shah	Structural and Transport Studies on Mixed Valent Rare Earth Manganite Ceramics	Transactions on Indian Ceramic Society	76	1–6	2017
30.	Keval Gadani, M.J. Keshvani, BhargavRajyaguru, Davit Dhruv , B.R.	Current–Voltage Characteristics and Electroresistance in $LaMnO_3$ –	Physical Chemistry Chemical Physics	19	29294–29304	2017

	Kataria, A.D. Joshi, K. Asokan, N.A. Shah, P.S. Solanki	$\delta/\text{La}_{0.7}\text{Ca}_{0.3}\text{MnO}_3/\text{LaAlO}_3$ Thin Film Composites,				
31.	V.G. Shrimali, K.N. Rathod, Davit Dhruv , AlpaZankat, KhushalSagapariya, Sapana Solanki, P.S. Solanki, N.A. Shah, B.R. Kataria	Magnetoelectric Properties of Co-doped BiFeO_3 Nanoparticles	International Journal of Modern Physics B	32	1850143:1–9	2018
32.	Zalak Joshi, Davit Dhruv , K.N. Rathod, J.H. Markna, A. Satyaprasad, A.D. Joshi, P.S. Solanki, N.A. Shah	Size Effects on Electrical Properties of Sol–Gel Grown Chromium Doped Zinc Oxide Nanoparticles	Journal Materials Science Technology	34	488–495	2018
33.	K.N. Rathod, Zalak Joshi, Davit Dhruv , KevalGadani, HetalBoricha, A.D. Joshi, P.S. Solanki, N.A. Shah,	Size Effects on Electrical Properties of Chemically Grown Zinc Oxide Nanoparticles	Materials Research Express	5	035040:1–10	32018
34.	Zalak Joshi, Davit Dhruv , K.N. Rathod, HetalBoricha, KevalGadani, D.D. Pandya, A.D. Joshi, P.S. Solanki, N.A. Shah	Low Field Magnetoelectric Studies on Sol–Gel Grown Nanostructured YMnO_3 Manganites	Progress in Solid State Chemistry	49	23-36	2018
35.	Zalak Joshi, Davit Dhruv , KN Rathod, Keval Gadani, AD Joshi, PS Solanki, NA Shah	Magnetoelectric properties of nanostructured YMnO_3 prepared by sol–gel technique	Materials Today: Proceedings	5	9922-9926	2018

36.	Keval Gadani, KN Rathod, Zalak Joshi, Davit Dhruv , AD Joshi, K Asokan, NA Shah, PS Solanki	Effect of swift heavy ion irradiation on dielectric properties of manganite based thin films	Materials Today: Proceedings	5	9916-9921	2018
37.	KN Rathod, Keval Gadani, Zalak Joshi, Davit Dhruv , K Asokan, PS Solanki, NA Shah	Transport properties of calcium doped YMnO ₃ thin film	Materials Today: Proceedings	5	9804-9810	2018
38.	N. A. Shah, Davit Dhruv , P. S. Solanki	Investigations on Structural, Optical And Electrical Property of Chemically Grow ZnO-CdO Nano Composite	International Journal of Emerging Technology and Advanced Engineering	8	273 - 275	2018
39.	Meet A Moradiya, Ankita Dangodara, Jay Pala, Chirag R Savaliya, Davit Dhruv , V.R. Rathod, A.D Joshi, N.A. Shah, D.D. Pandya, J.H. Markna	A natural tomato slurry as a photosensitizer for dye-sensitized solar cells with TiO ₂ /CuO composite thin films	Separation Science and Technology	54	207	2019
40.	Bhagyashree Udeshi, Hetal Boricha, Bhargav Rajyaguru, Keval Gadani, K.N. Rathod, Davit Dhruv , S.B. Kansara, R.K. Trivedi, D.D. Pandya, K. Asokan, P.S. Solanki, N.A. Shah	Electrical Behavior and Structure-Property Correlations in La _{1-x} Pr _x MnO ₃ (0 ≤ x ≤ 1) Ceramics	Ceramics International	45	1098-1109	2019
41.	Khushal Sagapariya, Keval Gadani, K.N.	Charge Transport in Chemically Grown	Materials Chemistry	224	229-237	2019

	Rathod, Zalak Joshi, Hetal Boricha, Davit Dhruv , M.J. Keshvani, Bhargav Rajyaguru, S.B. Kansara, A.D. Joshi, K. Asokan, P.S. Solanki, N.A. Shah	Manganite Based Heterostructure	and Physics			
42.	M.V. Kanani, Davit Dhruv , H.K. Rathod, BhargavRajyaguru, A.D. Joshi, P.S. Solanki, N.A. Shah, (2019)	Investigations on Structural, Optical and Electrical Property of ZnO–CuO Core–Shell Nano–Composite	Scripta Materialia	165	25–28	2019
43.	Keval Gadani, K.N. Rathod, Davit Dhruv , Hetel Boricha, Khushal Sagapariya, A.D. Joshi, D.D. Pandya, K. Asokan, P.S. Solanki, N.A. Shah	Defect Dynamics in the Resistive Switching Characteristics of Y _{0.95} Sr _{0.05} MnO ₃ Films Induced by Electronic Excitations	Journal of Alloys and Compounds	788	819–830	2019
44.	PratimaMakwana, Davit Dhruv , Sapana Solanki, HetalBoricha, A. Satyaprasad, M. Ranjan, P.S. Solanki, N.A. Shah	Modifications in Structural, Optical and Electrical Properties of Nanocrystalline CdO: Role of Sintering Temperature	Journal of Sol–Gel Science and Technology	89	866–875	2019
45.	K.N. Rathod, Keval Gadani, Davit Dhruv , HetelBoricha, Alpa Zankat, A.D. Joshi, J.P. Singh, K.H. Chae, K. Asokan, P.S. Solanki, N.A. Shah	Investigations on the Electronic Excitations Through Spectroscopic Measures for Resistive Switching Character of Manganite Thin	Physica Status Solidi B	256	1900264:1 –9	2019

		Films,				
46.	Manan Gal, KevalGadani, Davit Dhruv , Zalak Joshi, AlpaZankat, BhargavRajyaguru, A.D. Joshi, K. Asokan, P.S. Solanki, N.A. Shah	Thermionic Emission Driven Resistive Switching Behavior in Ca and Sr Doped YMnO ₃ Thin Film Devices	Solid State Communicati ons	303–304	113737:1– 8	2019
47.	K.N. Rathod, KevalGadani, Het alBoricha, KhushalSagapariya, Ajay Vaishnani, Davit Dhruv , A.D. Joshi, J.P. Singh, K.H. Chae, K. Asokan, P.S. Solanki, N.A. Shah	Extraction of Switching Parameters for Sr–Doped YMnO ₃ Thin Film	Physica Status Solidi A	216	1900780:1 –5	2019
48.	V.G. Shrimali, KevalGadani, BhargavRajyaguru, HardikGohil, D.K. Chudasama, Davit Dhruv , A.D. Joshi, D.D. Pandya, P.S. Solanki, N.A. Shah	Size Dependent Dielectric, Magnetic, Transport and Magnetodielectric Properties of BiFe _{0.98} Co _{0.02} O ₃ Nanoparticles	Journal of Alloys and Compounds	817	152685:1– 12	2020
49.	V.G. Shrimali, KevalGadani, BhargavRajyaguru, HimanshuDadhich, VivekPachchigar, Davit Dhruv , A.D. Joshi, M. Ranjan, P.S. Solanki, N.A. Shah	Effects of Annealing Treatment on Microstructure, Electrical and Magnetodielectric Properties of BiFe _{0.98} Co _{0.02} FeO ₃ /Al– Doped ZnO Layered Thin Films Prepared	Journal of Alloys and Compounds	827	154278:1– 12	2020

		by Chemical Solution Deposition				
50.	Bhagyashree Udeshi, Keval Gadani, K.N. Rathod, Hetal Boricha, V.G. Shrimali, Sapana Solanki, Alpa Zankat, V.S. Vadgama, Manan Gal, Davit Dhruv , A.D. Joshi, R.K. Trivedi, P.S. Solanki, N.A. Shah	Effect of Annealing Environments on Structural and Electrical Properties of $\text{La}_{0.5}\text{Nd}_{0.5}\text{MnO}_3$ Manganites	Materials Chemistry and Physics	247	122833:1–8	2020
51.	Sapana Solanki, Davit Dhruv , Hetal Boricha, Alpa Zankat, K.N. Rathod, Bhargav Rajyaguru, R.K. Trivedi, A.D. Joshi, S. Mukherjee, P.S. Solanki, N.A. Shah	Charge Transport Mechanisms and Magnetoresistance Behavior of $\text{La}_{0.6}\text{Pr}_{0.1}\text{Ca}_{0.3}\text{MnO}_3$ Manganite	Journal of Solid State Chemistry	288	121446:1–11	2020
52.	Keval Gadani, K.N. Rathod, V.G. Shrimali, Bhargav Rajyaguru, Bhagyashree Udeshi, V.S. Vadgama, Davit Dhruv , A.D. Joshi, D.D. Pandya, K. Asokan, P.S. Solanki, N.A. Shah,	Effect of 200 MeV Ag^{+15} Ion Irradiation on Structural, Microstructural and Dielectric Properties of $\text{Y}_{0.95}\text{Sr}_{0.05}\text{MnO}_3$ Manganite Films	Solid State Communications	318	113975:1–8	2020
53.	Hetal Boricha, S.B. Kansara, Bhargav Rajyaguru, Sapana Solanki, K.N. Rathod, Davit Dhruv , P.S.	Charge Conduction Mechanisms and MR Behavior of Sol–Gel Grown Nanostructured $\text{La}_{0.6}\text{Nd}_{0.1}\text{Sr}_{0.3}\text{MnO}_3$	Bulletin of Materials Science	43	252:1–12	2020

	Solanki, N.A. Shah	Manganites				
54.	K.N. Rathod, KevalGadani, Davit Dhruv , V.G. Shrimali, Sapana Solanki, A.D. Joshi, J.P. Singh, K.H. Chae, K. Asokan, P.S. Solanki, N.A. Shah	Effect of Oxygen Vacancy Gradient on Ion-Irradiated Ca-Doped YMnO ₃ Thin Films	Journal of Vacuum Science and Technology B	38	062208:1–10	2020
55.	KevalGadani, K.N. Rathod, Davit Dhruv , V.G. Shrimali, BhargavRajyaguru, Joyce Joseph, A.D. Joshi, D.D. Pandya, K. Asokan, P.S. Solanki, N.A. Shah	Defects Induced Resistive Switching Behavior in Ca Doped YMnO ₃ -Based Non-Volatile Memory Devices Through Electronic Excitations	Materials Science in Semiconducting Processing	121	105347:1–14	2021
56.	Davit Dhruv , V.G. Shrimali, KannariThakrar, Zalak Joshi, Sapana Solanki, A.D. Joshi, P.S. Solanki, N.A. Shah	Investigations on the Electrical Properties of Sol-Gel Grown Nanostructured GdMnO ₃	Ferroelectrics	571	230–237	2021
57.	Amiras Donga, K.N. Rathod, KevalGadani, Davit Dhruv , V.G. Shrimali, A.D. Joshi, K. Asokan, P.S. Solanki, N.A. Shah	Thermal Effects on Resistive Switching in manganite – Silicon Thin Film Device	Bulletin of Materials Science	44	71:1–12	2021
58.	Hetal Boricha, Keval Gadani, K.N. Rathod, V.G. Shrimali, Sapana Solanki, Khushal	Resistive and Magnetoresistance Behaviors of BiFeO ₃ Incorporated	Materials Chemistry and Physics	267	124605:1–11	2021

	Sagapariya, Alpa Zankat, Davit Dhruv , A.D. Joshi, D.D. Pandya, S. Mukherjee, P.S. Solanki, N.A. Shah	$\text{La}_{0.7}\text{Ca}_{0.3}\text{MnO}_3$ Composites				
59.	K.N. Rathod, Hetal Boricha, KhushalSagapariya, BharaviHirpara, Davit Dhruv , A.D. Joshi, D.D. Pandya, J.P. Singh, K.H. Chae, K. Asokan, P.S. Solanki, N.A. Shah	Probing Charge Transport in Manganite Film Through Switching Parameters	Current Applied Physics	28	98–103	2021
60.	Akshay Surani, Davit Dhruv , Divyarajsinh Zala, D.K. Chudasama, Kush Vachhani, Faizal Mirza, Himanshu Dadhich, P.S. Solanki, N.A. Shah, A.D. Joshi	Investigations on structural, microstructural and electrical properties of sol–gel spin coated $\text{Bi}_{0.85}\text{La}_{0.15}\text{FeO}_3$ thin film	Physica B: Physics of Condensed Matter	639	413982:1– 10	2022
61.	Divyarajsinh Zala Davit Dhruv , Faizal Mirza, Neeta A. Bhammar, HardikGohil, Himanshu Dadhich, Alpa Zankat, K.N. Rathod, Sanjay Kansara, A.D. Joshi, P.S. Solanki, N.A. Shah	Preparation and characterization of CdO-ZnO core shell nano particles: Prepared by two step wet chemical method	Optical Materials	131	112684	2022
62.	Sangita Chavda,	Studies on optical and	Journal of	104	169-177	2022

	Nehanshi Limbasiya, Poonam Vamja, Ajay Vaishnani, Kush Vachhani, Bharavi Hirpara, Manjula Kandoliya, Keval Gadani, Davit Dhruv , A. D. Joshi, P. S. Solanki, N. A. Shah	electrical properties of CdO/Al ₂ O ₃ composites	Sol-Gel Science and Technology			
63.	Smit Kacha, Siddharth Shah, Davit Dhruv	Investigating characteristics of expansive soil of Rajkot modified with flyash and nanolime	Materials Today: Proceedings	63	314-319	2022
64.	Khushal Sagapariya, Davit Dhruv , Bhagyashree Udeshi, DD Pandya, AD Joshi, PS Solanki, NA Shah	Irradiation effect on structural and electrical properties of YMnO ₃ /ITO/glass thin film	Materials Today Communications	36		2023
65.	Bhargav Rajyaguru, Keval Gadani, Davit Dhruv , V Ganesan, K Asokan, NA Shah, PS Solanki	Tunable resistive nature of LaMnO ₃ /Nd _{0.7} Sr _{0.3} MnO ₃ interfaces: Role of swift heavy ion irradiation	Ceramics International	49	23912-23939	2023
66.	DK Chudasama, VG Shrimali, Ajay Vaishnani, CM Panchasara, Nisarg Raval, Urvashi Jambukiya, A Amouri, Davit Dhruv , AD Joshi, PS Solanki, NA Shah, DD Pandya	Investigation on Structural, optical and electrical properties of BiFeO ₃ : ZnO nano-micro particles-matrix composite	Journal of Alloys and Compounds	960	170771	2023

67.	DK Chudasama, VG Shrimali, Sangita Chavda, Payal Joshi, Urvashi Jambukiya, VS Vadgama, Davit Dhruv , PS Solanki, AD Joshi, NA Shah, DD Pandya	Characterization of BiFeO ₃ –Al ₂ O ₃ nano-composites: A study of structural, microstructural, electrical, and magnetic properties	Journal of Alloys and Compounds	965	171510	2023
68.	Urvashi Jambukiya, Mayur Parmar, Neeta A Bhammar, KN Rathod, Debashish Sarkar, MR Gonal, Davit Dhruv , PS Solanki, DD Pandya, NA Shah, AD Joshi	Investigation on various properties of Dy _{0.7} Ca _{0.3} MnO ₃ : TiO ₂ based nano-micro composites	Journal of Alloys and Compounds	967	171532	2023
69.	VR Chandegara, Payal Joshi, Sangita Chavda, HM Oza, Mayur Parmar, Davit Dhruv , PS Solanki, DD Pandya, AD Joshi, NA Shah, RK Trivedi	<u>Studies on properties of green synthesised CuO/ZnO nano particle/nano rod composites in PVA matrix</u>	Optical Materials	145	<u>114369</u>	November 2023
70.	Bhargav Rajyaguru, KevalGadani, MJ Keshvani, Davit Dhruv , AD Joshi, K Asokan, RJ Choudhary, DM Phase, NA Shah, PS Solanki	Enormous electroresistance and field effect studies on LaMnO ₃ – δ /La _{0.7} Ca _{0.3} MnO ₃ /LaAlO ₃ manganite–manganite composite structure	Materials Research Bulletin	170	112548	2024
71.	Manan Gal, Mayur Parmar, Payal Joshi, Sangita Chavda, CM Panchasara, Neeta A Bhammar, PS Solanki,	Electrical and surface properties of chemically deposited SrTiO ₃ films on ITO/glass substrate	Chemical Physics		112363	2024

	Davit Dhruv , AD Joshi, NA Shah					
72.	Nisarg Raval, Bharavi Hirpara, CM Panchasara, Bhargav Rajyaguru, MR Gonal, Davit Dhruv , AD Joshi, PS Solanki, NA Shah	Investigations on structural and electrical properties of YMnO ₃ based mixed valent manganites	Chemical Physics Letters		141411	2024
73.	Keval Gadani, Faizal Mirza, Davit Dhruv , K Asokan, PS Solanki, NA Shah, AD Joshi	Charge transport studies on pulsed laser deposited grown manganite based thin film device	Applied Physics A	130	278	2024
74.	Bhargav Rajyaguru, Keval Gadani, Himanshu Dadhich, Davit Dhruv , V Ganesan, K Asokan, NA Shah, PS Solanki	Influence of swift heavy ion irradiation on charge transport and conduction mechanisms across the interface of LaMnO ₃ and La _{0.7} Ca _{0.3} MnO ₃ manganites	Ceramics International	50	16615- 16638	2024
75.	Hardik Gohil, Keval Gadani, Hetal Boricha, Bhargav Rajyaguru, Himanshu Dadhich, Nisarg Raval, Davit Dhruv , VR Rathod, NP Barde, PP Bardapurkar, RJ Gohel, K Asokan, NA Shah, PS Solanki	Sensing characteristics and EPR Studies on composite manganites: Role of nanoparticles in the micron sized matrix lattice	Materials Research Bulletin	173	112680	2024
76.	Keval Gadani, Faizal Mirza, Davit Dhruv , AD Joshi, K Asokan, PS Solanki, NA Shah	Thickness dependent structural and electrical properties of	Applied Physics A	130	716	2024

		pulsed laser deposited $\text{Y}_{0.95}\text{Ca}_{0.05}\text{MnO}_3$ thin films and the effect of high energy oxygen ion irradiation				
77.	Shivani Punj, Rajib Mondal, Souvik Chatterjee, Davit B Dhruv, Ashok Kumar, Alesh Kumar, Jashandeep Singh	Structural, magnetic, dielectric properties of double perovskite- $\text{La}_2\text{NiFeO}_6$ synthesized by wet chemical route	Applied Physics A	131	109	2025
78.	HK Rathod, Davit Dhruv, MV Kanani, Alpa Zankat, RK Trivedi, AD Joshi, PS Solanki, NA Shah	Investigation on optical illumination effect on transport properties and resistive switching of poly crystalline $\text{BiFeO}_3/\text{ITO}$ heterojunction	Chemical Physics		112782	2025
79.	Krutik Joshi, VR Chandegara, HC Kamdar, Sangita Chavda, Urvashi Jambukiya, Ajay Vaishnani, Jaspreet Singh, Neeta A Bhammar, PS Solanki, Davit Dhruv, NA Shah	Structural, Electrical, and Optical Studies of sol-gel synthesized nanostructured NiO in micro ZnO matrix	Next Research		100461	2025
80.	Nisarg Raval, Himriti Trivedi, CM Panchasara, Bhargav Rajyaguru, Keval Gadani, Davit Dhruv, AD Joshi, PS Solanki, NA Shah	Positive colossal electroresistance and field effect studies of bilayered metal oxide/manganite p-n junction heterostructure under different measurement protocols	Surfaces and Interfaces		107149	2025

81.	Manan Gal, Mayur Parmar, HM Oza, Bharavi Hirpara, Ajay Vaishnani, Keval Gadani, PS Solanki, Davit Dhruv, AD Joshi, NA Shah	Electrical and transport properties of chemically deposited YMnO ₃ /Si thin film	Chemical Physics		112879	2025
82.	Faizal Mirza, Zalak Joshi, Hetal Boricha, Urvashi Jambukiya, Davit Dhruv, Keval Gadani, DD Pandya, PS Solanki, NA Shah, AD Joshi	Magnetic and transport properties of doped YMnO ₃ thin films	Physica B: Condensed Matter	714	417426	2025
83.	Manan Gal, Mayur Parmar, Payal Joshi, VR Chandegara, Nisarg Raval, Kush Vachhani, TC Pandya, PS Solanki, AD Joshi, Davit Dhruv, NA Shah	Temperature Effect on Resistive Switching Properties of Amorphous La _{0.7} Ca _{0.3} MnO ₃ /ITO Thin Film	Physica B: Condensed Matter		417933	2025
84.	DK Chudasama, VG Shrimali, Sangita Chavda, Payal Joshi, HK Rathod, PS Solanki, AD Joshi, Davit Dhruv, NA Shah, DD Pandya	Structural, Optical, Magnetic, and Electric Properties of BiFeO ₃ -SiO ₂ Nanocomposites with Varying Concentrations of Amorphous Silica	Materials Today Communications		114323	2025
85.	Nisarg Raval, Himriti Trivedi, Mayur Parmar, CM Panchasara, Bharavi Hirpara, Keval Gadani, Sukriti Hans, M Ranjan, Sanjay Kosara, Dhiraj Bhatia, Bhargav Rajyaguru,	Thickness-dependent charge transport across CdO/La _{0.3} Ca _{0.7} MnO ₃ n-n junction interfaces	Materials Science in Semiconductors or Processing	200	110011	2025

	Kunalsinh Naransinh Rathod, Davit Dhruv, PS Solanki, NA Shah					
86.	Mayur Parmar, Nisarg Raval, VR Chandegara, Sangita Chavda, HC Kamdar, TC Pandya, PS Solanki, AD Joshi, Davit Dhruv, Jashandeep Singh, NA Shah, DD Pandya	Dual-mode (light/dark) electrical and microstructural characterization of CdO//Gd _{0.3} Sr _{0.7} MnO ₃ //STO n-n heterojunctions	Applied Physics A	131	946	2025
87.	Sangita Chavda, Payal Joshi, HM Oza, VR Chandegara, Jashandeep Singh, PS Solanki, Davit Dhruv, DD Pandya, AD Joshi, NA Shah, RK Trivedi	Dielectric and conductivity response of Sol-Gel derived Mn ₃ O ₄ nanoparticles to frequency and temperature variations	Journal of Electroceramics			2025

11. Detail of patents.

S.No	PatentTitle	NameofApplicant(s)	PatentNo.	AwardDate/Publication Date	Agency/Country	Status
1	“Carbon nano-dot based lycopersicum solar cell”	Dr.Davit.B.Dhruv	201721000819	10/02/2017	India	Published
2	A NOVEL PROCESS OF PREPARING ALUMINA NANO POWDER	Dr.Davit.B.Dhruv	202121012255	29/11/2023	India	Published
3	A super hydrophobic	Dr.Davit.B.Dhruv	202121000483	29/07/2022	India	Published

	coating liquid composition					
4	A MULTIPURPOSE CRYOSTAT PROBE FOR MEASURING ELECTRICAL PROPERTIES	Dr.Davit.B.Dhruv	202121034926	03/02/2023	India	Published

12 .Books / Reports / Chapters / Generalarticles etc.

S.No	Title	Author'sName	Publisher	Year of Publication
1	The Art of Vision: Characterization of Nanomaterials	Davit Dhruv	Green Flag Foundation	2014
2	The Art of Creation: Fabrication of Nano Devices	Davit Dhruv	Shree Avdhut Education Trust	2015
3	Introduction to Nanotechnology in Electronics	Dr. Bharat Kataria & Dr. Davit Dhruv	J. K. Print Shop	2017