Personal Details:



Prof. Nikesh A. Shah

Designation: Professor

Affiliation: Saurashtra University

Address: Department of Physics, Saurashtra University,

Rajkot - 360 005 (Gujarat) India

E-Mail: snikesh@yahoo.com

drsnikesh@gmail.com

nashah@sauuni.ernet.in

Phone: +91 – 281 – 2588 428 (Office)

Mobile: +91 – 9099939450

Date of Birth: 14.09.1972

Sex: Male

Marital Status: Married

Nationality: Indian

A. **Educational Details:**

Degree: **B.Sc.** (Physics) University: Saurashtra University College / Department: Kotak Science College, Rajkot Year of Passing: 1993 Percentage Obtained: 62% Class / Grade: First Class Degree: M.Sc. (Physics with Electronics) Saurashtra University University: College / Department: **Department of Physics** Year of Passing: 1995 Percentage Obtained: 69.05% Class / Grade: First Class Ph.D. (Physics) Degree: University: Saurashtra University College / Department: **Department of Physics** Year of Passing: 1999 Percentage Obtained: Degree Awarded Class / Grade: Degree Awarded Ph.D. Title:

Studies on substituted Oxide Superconductors

Teaching Experience (19 Years):

Designation	Type of	Name of	Peri	od
Designation	Appointment	Employer	Joining	Leaving
Assistant	Adhoc	V.V.P. Engg.	02/02/99	27/03/00
Professor		College		
Assistant	Parll Time	Department	11/05/2000	11/05/04
Professor	Full Time	of Electronics,		
Sr. Assistant	E ll m	ŕ	11/05/04	11/05/09
Professor	Full Time	Saurashtra		
Associate	D 11 m:	University	11/05/09	16/06/14
Professor	Full Time			
		Department of	16/06/2014	Till Date
Professor	Professor Full Time			
	run Inne	Saurashtra		
		University		

Subjects Taught:

(Physics) SEM 1: Solid State Electronics Devices and Circuits

SEM 2: Solid State Physics

SEM 3: Physics and Chemistry of Nanomaterials

SEM 4: Functional Materials

Electronic Communications

Materials Characterization

Master Degree Projects:

A. 2015 - 2016:

1. Structural and Optical Characterization of V₂O₅

No. of Students: 02

Students: Pathak Shivang; Rathod Hemang

2. Effect of Sintering Temperature on Structural and Dielectric Properties of Nanostructured $HoMnO_3$

No. of Students: 02

Students: Ghosh Susmita; Bhuva Venuka

3. Studies of Structural and Electrical Properties of Vanadium Doped ZnO

nanoparticles

No. of Students: 02

Students: Busa Swati; Joshi Priyanshu

B. 2016 - 2017:

1. Investigations on Structural and Optical Properties of Low Cost Ferrofluids

No. of Students: 02

Students: Hardik Gohil; Parth Mehta

2. Structural and Electrical Characterization of Carbon Nanotube Introduced Matrix ZnO nanocomposites

No. of Students: 01

Students: Komal Dangi

3. Investigations on Structural and Dielectric Behavior of Nanostructured LaMnO₃

Manganites

No. of Students: 02

Students: Prajapati Pooja; Sondarva Sohal; Pithiya Renuka

C. 2017 - 2018:

1. Growth & Characterization of Manganite Based Devices

No. of Students: 02

Students: Ajay Vaishnani; Nitish Premani

2. Study on TiO_2 – ZnO nano-micro composite

No. of Students: 01

Students: Priya Mange

Research Experience:

1. Project Fellow (Project: IUAC-DAEF, Indore)

Department of Physics, Saurashtra University, Rajkot – 360 005 (Gujarat) India

June 1995

to January 1999

2. Assistant Professor

Department of Electronics, Saurashtra University, Rajkot – 360 005 (Gujarat)

India

May 11, 2000

to May 11, 2009

3. Associate Professor

Department of Electronics, Saurashtra University, Rajkot – 360 005 (Gujarat)

India

May 11, 2009

to June 16, 2014

4. Professor

Department of Physics, Saurashtra University, Rajkot - 360 005 (Gujarat) India

June 16, 2014

to Till Date

Research Interests:

- Mixed Valent Manganites: Polycrystalline Bulk, Nanostructures, Thin Films, Devices, Heterostructures and Multilayers
- Dilute Magnetic Semiconductors (DMS): Polycrystalline Bulk, Nanostructures, Thin Films, Devices, Heterostructures and Multilayers
- Multiferroics: Polycrystalline Bulk, Nanostructures, Thin Films, Devices, Heterostructures and Multilayers
- High Temperature Superconductors (HTSC): Polycrystalline Bulk, Nanostructures, Thin Films, Devices, Heterostructures and Multilayers
- Synthesis of Materials: Conventional Solid State Reaction Route Polycrystalline
 Bulk and Sol Gel and Co-precipitation Routes Nanostructures
- Fabrication of Materials: Chemical Solution Deposition (CSD) Technique Thin Films and Pulsed Laser Deposition (PLD) Technique – Thin Films, Devices, Heterostructures and Multilayers
- Studies on Manganites DMS Multiferroics HTSC Based Thin Film Devices,
 Heterostructures and Multilayers for Spintronic Applications
- Swift Heavy Ion (SHI) Irradiation and Low Energy Ion Implantation Studies on Manganite, Multiferroic and HTSC Thin Films
- Temperature and Magnetic Field Dependent Neutron Diffraction (ND)

 Measurements on Manganite and Multiferroic Compounds
- Composites of Manganites Multiferroics, Manganites DMS, Manganites HTSC, Manganites - Semiconductors, Multiferroics - DMS, Multiferroics - HTSC, Multiferroics - Semiconductors, DMS - HTSC, DMS - Semiconductors and HTSC -Semiconductors
- Charge Ordered and RMnO₃ Based Manganite Multiferroics Polycrystalline Bulk, Nanostructures, Thin Films, Devices, Heterostructures and Multilayers
- ZnO, Manganite and Multiferroic Based Nanostructures and Thin Films for Solar Cell and Gas Sensing Applications
- Neutron Diffraction (ND): Temperature and Magnetic Field Dependent Measurements and Manganites and Multiferroics

• Biological Applications: Dilute Magnetic Semiconductors (DMS) and Metal Oxides and Bacterial and Cell Activities

Research Guidance:

A. Ph.D. Students (Completed: 9, on going: 8):

C	Name of the	Date of		
Sr.	Name of the	Registrati	Title of the Thesis	Status
No.	Student	on		
01	Mr. Dhiren D. Pandya		Synthesis, Characterization and Studies on Some Mixed oxide Systems	Completed (2008)
02	Mr. Paresh Kotak	22/09/2005	Intelligent Computer Networks	Completed (2012)
03	Mr. Nayan Jobanputra	31/07/2009	Devising and Evaluation of efficient content delivery in wireless networks for online learning system	Completed (2014)
04	Mr. Dilip Ahir	28/02/2009	Comparative Study of Emerging Trends in Microelectronics Technology as Well as Computer Architecture Techniques And Combining Both to Achieve Optimum Performance Architecture	Completed (2015)
05	Mr. Davit B. Dhruv	01/1/2013	Studies on Structural, Transport, Electronic and Magnetic Properties of Functional Oxide	Completed (2015)
06	Ms. Zalak D. Joshi	01/01/2014	Studies on Some New Multiferroic Oxide Materials	Completed (2016)
07	Mr. S.B. Kansara	01/01/2011	Studies On Doped Mixed Valent Manganites And Functional Oxides	Completed (2016)
08	Ms. Shveti Sejpal	01/01/2014	Design, implementation & Performance analysis of robust digital watermarking techniques for images	Completed (2017)
09	Mr. Keval Gadani	01/01/2016	Transport Studies on functional Oxide Based Thin Film Devices	Completed (2018)
10	Ms. Hetal Boricha	01/01/2016	Synthesis and Characterization of Doped Mixed Oxide Manganites On	
11	Mr. K.N. Rathod	01/01/2016	Fabrication and Investigations On Functional Oxide Based	On Going

			Thin Film Devices		
12	Mr. Vipul Shrimali	01/01/2016	Investigations On the Substitutional Studies of Oxide Multiferroics	On Going	
13	Mr. Bhargav Rajyaguru	01/01/2017	Functional oxide Based Interfaces for Spintronic Applications	On Going	
14	Mr. Khushal Sagapariya	01/01/2017	Fabrication and Studies on Functional Materials Based Heterostructure	On Going	
15	Ms. Sapana Solanki	01/01/2017	Investigations on Functional Properties of Oxide Materials	On Going	
16	Gal Manan	01/01/2018	Fabrication and Studies on Mixed Valent Manganite Based Thin Film Devices	On Going	
17	Ajay Vaishnani	XX/XX/XXX	Studies on various properties of functional oxide composites	Ph.D. Course work	

B. M.Phil. Students (Completed: 12, on going: 00):

Sr. No.	Name of the Student	Title of the Dissertation	Date of the Award of the Degree
01	Ms. Kruti Ravalia	Studies on Multiferroic Behaviour of BiFeO ₃ Thin Films	May-2013
02	Ms. Zalak D. Joshi	Studies on Mixed Valent Manganites by Chemical Routes	May-2013
03	Ms. Hetal Boricha	Dielectric and I–V Studies on Pr _{1-x} Ca _x MnO ₃	May-2014
04	Ms. Nirupa Nakrani	Investigations on the Electric and Transport Properties $ofLa_{1\text{-}x}\text{C}a_xMnO_3$	May-2014
05	Mr. Kunalsinh N. Rathod	Investigation On Structural And Dielectric Properties Of Nanostructured Doped-YMnO ₃	May-2015
06	Ms. Kinnari H. Thakrar	Studies On Sol-Gel Grown Doped - RMnO ₃ Multiferroics	May-2015
07	Ms. Alpa K. Zankat	Studies On Structural, Electrical And Transport Properties Of ZnO Based Composites	July-2016
08	Mr. Khushal S. Sagpariya	Investigations On CSD Grown ZnO Based Thin Film Devices	July-2016
09	Mr. Manan S. Gal	Resistive Switching Effect In Y _{0.95} A _{0.05} MnO ₃	June-2017

10		Temperature Dependent Resistive Switching Across	
10	Mr. Amiras Donga	Manganite Based Heterostructure	July-2017
11	Ma Duaghti Canahai	Investigations on Dielectric Behaviour of BiFeO ₃	A
11	Ms. Drashti Sanghvi	Multiferroics	April-2018
12	Ms. Bharavi Hirpara	Swift Heavy Ion Irradiation Induced Modifications in	April-2018
12	Ms. bilai avi fili pai a	Switching Behavior of Manganite Based Thin Films	Aprii-2016

List of Publications:

A. International Journals:

1. Effect of Cd and Cd-Ca substitution on the superconductivity in $Y_{1-x}Pr_xBa_2Cu_3O_{7-\delta}$ superconductor

Nikesh A. Shah, M.V. Subbarao, Amish G. Joshi, C.M. Thaker, D.G. Kuberkar and R.G. Kulkarni

J. Supercond. 10, 507 (1997)

Impact Factor: 1.142

2. Compensation of Tc by co-substitution of Ca^{2+} and Co^{3+} in $ErBa_2Cu_3O_{7-\delta}$

K.M. Pansuria, U.S. Joshi, **N.A. Shah**, J.A. Balodia, D.G. Kuberkar, G.J. Baldha and R.G. Kulkarni

Asian J. Phys. 6, 1 (1997)

- Superconductivity in (La_{2-x}Y_x)Ba₂(Ca_yCu_{4+y})O_Z system
 D.G. Kuberkar, Nikesh A. Shah, M.V. Subbarao, Amish G. Joshi and R.G. Kulkarni
 Mater. Lett. 37, 68 (1998)

 Impact Factor: 2.687
- 4. Effect of M and M-Ca substitution on the structure and Superconductivity of $GdBa_2Cu_3O_{7-\delta}$ [M = Mo, Hf]

Amish G. Joshi, Utpal S. Joshi, M.V. Subbarao, **Nikesh A. Shah**, D.G. Kuberkar and R.G. Kulkarni

J. Supercond. 11, 285 (1998)

Impact Factor: 1.142

5. Effect of calcium substitution on superconductivity and hole concentration in $La_{1.5}Ba_{1.5}Cu_3O_Z$

Nikesh A. Shah, D.G. Kuberkar, B.T. Savaliya, M.R. Gonal, Ram Prasad and R.G. Kulkarni

- Bull. Mater. Sci. 21, 463 (1998) Impact Factor: 0.925
- 6. Effect of Mo and Mo-Ca substitution on the superconductivity of GdBa₂Cu₃O_{7-δ} Amish G. Joshi, M.V. Subbarao, **Nikesh A. Shah**, D.G. Kuberkar and R.G. Kulkarni Appl. Supercond. 6, 471 (1998)

 Impact Factor: 1.324
- 7. Effect of Ca substitution on the superconductivity of La_{2.5}Y_{0.5}CaBa₃ (Cu_{0.88}Fe_{0.12})₇O_Z M.V. Subbarao, Amish G. Joshi, **Nikesh A. Shah**, D.G. Kuberkar and R.G. Kulkarni J. Supercond. 11, 375 (1998) Impact Factor: 1.142
- 8. Correlation between hole concentration and Tc in $(La_{2-x}Y_x)Ba_2(Ca_yCu_{4+y})O_Z$ superconductor

D.G. Kuberkar, **Nikesh A. Shah**, M.V. Subbarao, Amish G. Joshi and R.G. Kulkarni Physica B 259, 538 (1999) Impact Factor: 1.453

- 9. Role of Calcium in the evolution of superconductivity in a $(La_{2-x}R_x)Ba_2(Ca_yCu_{4+y})O_Z$ system
 - D.G. Kuberkar, **N.A .Shah**, M.R. Gonal, R. Prasad and R.G. Kulkarni
 J. Supercond. 13, 1, 37 (2000) Impact Factor: 1.142
- 10. Dependence of superconductivity on hole concentration (p_{sh}) in La-2125 perovskite system
 - D.G. Kuberkar, **N.A. Shah**, R.S. Thampi, M.R. Gonal, R. Prasad and R.G. Kulkarni Physica B 281, 924 (2000) Impact Factor: 1.453
- 11. Effect of hole filling by Co & hole doping by Ca on superconductivity of GdBa₂Cu₃O₇₋₈ D.G. Kuberkar, **Nikesh A. Shah**, R.S. Thampi, S. Rayaprol, M.R. Gonal, Ram Prasad and R.G. Kulkarni

Int. J. Inorg. Mater. 3, 59 (2001) Impact Factor: 1.08

- 12. Structural and superconducting properties of La_{2-x}R_xBa₂Ca_yCu_{4+y}O_{10+ δ} (R = Nd, Gd; y = 2x) system
 - D.G. Kuberkar, R.S. Thampi, **Nikesh A. Shah**, Krushna Mavani, S. Rayaprol, R.G. Kulkarni, S.K. Malik and W.B. Yelon

J. Appl. Phys., 89, 7657 (2001) Impact Factor: 2.12

- 13. Critical current density and flux pinning in $La_{2-x}Pr_xCa_{2x}Ba_2Cu_{4+2x}O_z$ (x = 0.1-0.5) superconductors
 - S. Rayaprol, C.M. Thaker, **N.A. Shah**, D.G. Kuberkar

Solid State Commun. 131, 71 (2004) Impact Factor: 1.549

14. Effect of Co-Ga Paired substitution on superconductivity in YBa₂Cu₃O₇ Anjana Dogra, S. Rayaprol, **N.A. Shah**, D.G. Kuberkar

Modern Physics Letters B 18, 485 (2004)

Impact Factor: 0.687

Impact Factor: 1.57

15. Transport and magnetic properties of manganite compounds (La $_{0.7-}$ _2 $_xEu_x$)(Ca $_{0.3}Sr_x$)MnO $_3$ (0.05 \leq x \leq 0.2)

D.S. Rana, C.M. Thaker, K.R. Mavani, J.H. Markna, R.N. Parmar, **N.A. Shah**, D.G. Kuberkar and S.K. Malik

Hyperfine Interactions, 10, 1007 (2005) Impact Factor: 0.92

16. Low temperature Bond valence Sum study of $La_{1.7}Dy_{0.3}Ca_{0.6}Ba_2Cu_{4.6}O_Z$ oxide superconductor

R.N. Parmar, J.H. Markna, C.M. Thaker, S. Rayaprol, J.A. Bhalodia, **N.A. Shah**, D.G. Kuberkar, Keka R. Chakaraborty, P.S.R. Krishna and M. Ramadham

J. Solid State Phenomena, 111, 163 (2006) Impact Factor: 0.39

- 17. Nano Engineering by implanting Al_2O_3 nano particle as sandwiched scattering centers in between the $La_{0.5}Pr_{0.2}Sr_{0.3}MnO_3$ thin film layers
 - J.H. Markna, P.S. Vachhani, **N.A Shah**, P. Misra, B.N. Singh, L.M. Kukreja, D.S. Rana and D.G. Kuberkar
 - J. Nanosci. Nanotechnol. 9, 5687 (2009) Impact Factor: 1.141
- 18. Size dependent modifications in the physical properties of chemical solution deposition and pulsed laser deposition grown $La_{0.7}Ca_{0.3}MnO_3$ manganite thin films: A comparative study
 - J.H. Markna, P.S. Vachhani, **N.A. Shah**, J. John, D.S. Rana, S.K. Malik and D.G. Kuberkar Ind. J. Eng. Mater. Sci. 16, 123 (2009)

 Impact Factor: 0.543
- 19. Structural, Microstructural, Transport and Magnetotransport Properties of Nanostructured La_{0.7}Sr_{0.3}MnO₃Manganites Synthesized by Co-precipitation P.S. Solanki, R.R. Doshi, U.D. Khachar, M.V. Vagadia, A.B. Ravalia, N.A. Shah and D.G. Kuberkar
 - J. Mater. Res. 25, 1799 (2010)

- 20. Substrate Dependent Transport and Magnetotransport in Manganite Multilayer P.S. Vachhani, P.S. Solanki, R.R. Doshi, N.A. Shah, S. Rayaprol and D.G. Kuberkar Physics B 406, 2270 (2011) Impact Factor: 1.453
- 21. Intelligent computer networks: A Game Theoretic Approach to Compute the Traffic Equilibrium of Various Routing Schemes for multimedia applications in wireless networks

Hiteshkumar Nimbar, Paresh Kotak and **Nikesh Shah**IEEE Computer Society, 407–411 (2012) DOI: 10.1109/CSNT.2012.94

- 22. Studies on electrical properties [insulator to metal transition (TIM) and Temperature Sensitivity (TCR)] of La_{0.8-x}Pr_{0.2}Sr_xMnO₃ (x = 0.1 and 0.3) J.H. Markna, D.D. Pandya, S.B. Kansara, Davit Dhruv and **Nikesh A. Shah** Inter. J. Sci. Com. 6, 116–119 (2012)
- 23. Structure Transport Correlations in Mono-valent Na^+ Doped $La_{1-x}Na_xMnO_3$ Manganites

Sanjay Kansara, D.D. Pandya, Bhumika Nimavat, C.M. Thaker, P.S. Solanki, S. Rayaprol, **N.A. Shah** and D.G. Kuberkar

Adv. Mater. Res. 665, 1 (2013)

Impact Factor: 0.23

24. Role of Strain and Microstructure in CSD Grown La_{0.7}Pb_{0.3}MnO₃ Manganite Films: Thickness Dependent SHI Irradiation Studies

Bharat Kataria, P.S. Solanki, Uma Khachar, Megha Vagadia, Ashish Ravalia, M.J. Keshvani, Priyanka Trivedi, D. Venkateshwarlu, V. Ganesan, K. Asokan, **N.A. Shah** and D.G. Kuberkar

Rad. Phys. Chem. 85, 173 (2013)

Impact Factor: 1.375

25. Room Temperature Electroresistance across the Interface in Nanostructured ZnO / $La_{0.7}Sr_{0.3}MnO_3$ / SNTO Heterostructures

Uma Khachar, P.S. Solanki, Sanjay B. Kansara, R.J. Choudhary, D.M. Phase, D.G. Kuberkar and **N.A. Shah**

IEEE Transaction on Nanotechnology 12, 915 (2013) Impact Factor: 1.8

26. Size Induced Tuning of Dielectric Behavior in Nanostructured Y_{0.95}Ca_{0.05}MnO₃ Compounds

N.A. Shah

Appl. Nanosci. 4, 889 (2013)

27. Transport Studies on Substitution Effect in Chemically Grown Nanostructured Manganite Films

Impact Factor: 2.951

N.A. Shah

Int. J. Nanosci. Nanotechnol. 4, 223 (2013)

28. Effect of Sintering Temperature on Dielectric Behavior of Y_{0.95}Ca_{0.05}MnO₃Manganites N.A. Shah

J. Nanosci. Nanoeng. Appl. 3, 2231 (2013)

29. Role of Defects in BiFeO₃Multiferroic Films and their Local Electronic Structure by X-ray Absorption Spectroscopy

Ashish Ravalia, Megha Vagadia, P.S. Solanki, S. Gautam, K.H. Chae, K. Asokan, **N.A. Shah** and D.G. Kuberkar

J. Appl. Phys. 116, 153701 (2014)

30. Effect of Sintering Temperature on Current – Voltage Characteristics of Nanostructured Manganites

Zalak Joshi, Davit Dhruv and N.A. Shah

J. Nanosci. Nanoeng. Appl. 4, 1 (2014)

31. Voltage Controlled TCR (Temperature Sensitivity) in Nanostructured $Y_{0.95} Ca_{0.05} MnO_3/Si, \, p\text{-n Junction Diode}$

Davit Dhruv, J.H. Markna, P.S. Solanki and N.A. Shah

J. Nanosci. Nanoeng. Appl. 4, 29 (2014)

32. Effect of Grain Morphology and Swift Heavy Ion Irradiation on the Transport Properties of Chemically Synthesized Manganite Films

M.J. Keshvani, Brinda Vyas, Malay Udeshi, Sadaf Jethva, Savan Katba, Priyanka Trivedi, Megha Vagadia, Ashish Ravalia, Davit Dhruv, Zalak Joshi, Sanjay Kansara, D.D. Pandya, P.S. Solanki, **N.A. Shah** and D.G. Kuberkar

J. Appl. Sci. 1, 37 (2014)

- 33. Transport and Magnetotransport Studies on Sol-Gel Grown Nanostructured Manganites
 - N.A. Shah, P.S. Solanki, Ashish Ravalia and D.G. Kuberkar

Appl. Nanosci. 5, 135 (2015) Impact Factor: 2.951

- 34. Modifications in Device Characteristics of La_{0.6}Pr_{0.2}Sr_{0.2}MnO₃/SrNb_{0.002}Ti_{0.998}O₃Manganites by Swift Heavy Ion Irradiation Ashish Ravalia, Megha Vagadia, Priyanka Trivedi, P.S. Solanki, P.S. Vachhani, K. Asokan, R.J. Choudhary, D.M. Phase, **N.A. Shah** and D.G. Kuberkar Ind. J. Phys. 89, 137 (2015) Impact Factor: 0.967
- 35. Structural, Transport and Magnetic Properties of Monovalent Doped La $_{x}$ Na $_{x}$ MnO $_{3}$ Manganites
 - S.B. Kansara, Davit Dhruv, Bharat Kataria, C.M. Thaker, S. Rayaprol, C.L. Prajapat, M.R. Singh, P.S. Solanki, D.G. Kuberkar and **N.A. Shah**

Ceram. Int. 41, 7162 (2015) Impact Factor: 3.057

Transport Studies on La_{0.8-x}Pr_{0.2}Sr_xMnO₃ Manganite Films
 P.S. Solanki, R.R. Doshi, Ashish Ravalia, M.J. Keshvani, Swati Pandya, V. Ganesan, N.A.
 Shah and D.G. Kuberkar

Physica B 465, 71 (2015) Impact Factor: 1.453

37. Studies on Charge Transport in Al–Doped La_{0.7}Ca_{0.3}Mn_{1-x}Al_xO₃Manganites

J.S. Rathod, M.J. Keshvani, P.S. Solanki, D.D. Pandya, Bharat Kataria, **N.A. Shah** and

D.G. Kuberkar

Physica B 478, 1 (2015) Impact Factor: 1.453

38. Structure and Microstructure Dependent Transport and Magnetic Properties of Sol-Gel Grown Nanostructured La_{0.6}Nd_{0.1}Sr_{0.3}MnO₃Manganites: Role of Oxygen S.B. Kansara, Davit Dhruv, Zalak Joshi, D.D. Pandya, S. Rayaprol, P.S. Solanki, D.G. Kuberkar and **N.A. Shah**

Appl. Sur. Sci. 356, 1272 (2015) Impact Factor: 4.439

39. Investigation on the Dielectric Response of NdMnO $_3$ /LSAT Thin Films: Effect of 200 MeV Ag $^{+15}$ Ion Irradiation

Malay Udeshi, Brinda Vyas, Priyanka Trivedi, Savan Katba, Ashish Ravalia, P.S. Solanki, **N.A. Shah**, K. Asokan, S. Ojha and D.G. Kuberkar

- NIM B 365, 560 (2015)
- Experimental Investigation on TiO2 Nano Fluid Preparation and its Properties
 D.B.Lokwani, P.P.Rathod, J. H. Markana, N. A. Shah
 International Journal of Advance Research in Engineering, Science & Technology
 (IJAREST) 2, 6 (2015)
 Impact Factor: 2.125

Impact Factor: 1.323

- 41. Optical Characterization and Surface Morphology of Copper Nanoparticles on Borosilicate Glass
 - Ramani R. V., Ramani B. M., Saparia A. D., Davit Dhurv, Markna J. H. and **N.A.Shah** International Journal of Chemical and Physical Sciences, 4, 2 (2015)
- 42. Magnetoresistance in Oxide Compounds: Structural and Electronic transport Properties
 - J. H. Markana, K.N. Rathod, A.D. Joshi, B.R. Kayaria, N. A. Shah
 International Journal of Advance Research in Engineering, Science & Technology
 (IJAREST) 2, 10 (2015)
 Impact Factor: 2.125
- 43. Revolutionary Therapies and Manipulation of Nanoparticles to Cure Cancer Kacha Pinank, Babiya Kaushik, Vasvani Shyam, Margil Amrutia, Nehal U. Faldu, Jay Garach, Monapara Tushar, Ghata Bhayani, Davit B. Dhruv, T. Shiyani, K. N. Rathod, Chirag Savaliya, Ashvini D. Joshi, Dhiren Pandya, **N. A. Shah** and J. H. Markna Journal of Bioelectronics and Nanotechnology, 1(1) 5: (2016)
- 44. Charge Trap Mechanism in Hybrid Nanostructured (YMnO₃) Metal-Oxide-Semiconductor (MOS) Devices
 - J. H. Markna, Davit B. Dhruv, K. N. Rathod, Chirag Savaliya, T. M. Shiyani, Dhiren Pandya, Ashvini D. Joshi, **N. A. Shah**
 - Journal of Nano Research, 42, 92 99 (2016) Impact Factor: 0.49
- 45. Temperature–Dependent I–V and C–V Characteristics of Chemically–Grown $Y_{0.95}Ca_{0.05}MnO_3/Si\ Thin\ Films$
 - Davit Dhruv, Zalak Joshi, Sanjay Kansara, D.D. Pandya, J.H. Markna, K. Asokan, P.S. Solanki, D.G. Kuberkar and **N.A. Shah**
 - Mater. Res. Exp. 3, 036402 (2016) Impact Factor: 1.151
- 46. Size–Controlled Electrical Properties of Sol–Gel Grown Nanostructured Gdo 95 Cao 05 MnO3

Kinnari Thakrar, Davit Dhruv, K.N. Rathod, Zalak Joshi, Keval Gadani, D.D. Pandya, J.H. Markna, B.R. Kataria, P.S. Solanki, D.G. Kuberkar, and **N.A. Shah**

J. Sol-Gel Sci. Technol. 79, 144 (2016)

Impact Factor: 1.745

47. Investigations on Structural-Disorder Induced Modifications in the Transport Behavior of Rare-Earth Manganites

Zalak Joshi, D.D. Pandya, Davit Dhruv, Keval Gadani, Hetal Boricha, Sanjay Kansara, J.H. Markna, P.S. Solanki and **N.A. Shah**

Bull. Mater. Sci. 39, 1109 (2016)

Impact Factor: 0.925

48. Investigations on Device Characteristics of Chemically Grown Nanostructured $Y_{0.95}Ca_{0.05}MnO_3/Si$ Junctions

Davit Dhruv, Zalak Joshi, Sanjay Kansara, M.J. Keshvani, D.D. Pandya, K. Asokan, P.S. Solanki, D.G. Kuberkar and **N.A. Shah**

Adv. Sci. Lett. 22, 834 (2016)

Impact Factor: 0.420

49. Transport Properties and Electroresistance of a Manganite Based Heterostructure:

Role of the Manganite – Manganite Interface

Keval Gadani, Davit Dhruv, Zalak Joshi, Hetal Boricha, K.N. Rathod, M.J. Keshvani, **N.A. Shah** and P.S. Solanki

Phys. Chem. Chem. Phys. 18, 17740 (2016)

Impact Factor: 3.906

- 50. Preparation of CuO Quantum Dots by Cost-Effective Ultrasonication Technique
 K. N. Rathod, Chirag Savaliya, K.R. Bariya, S.H. Vasani, R.V. Ramani, B.M. Ramani,
 Ashvini D. Joshi, Dhiren Pandya, N. A. Shah and J. H. Markna
 International Journal of Nanoscience, 16, 1750019 (2017)
- 51. Size Effects on Electrical Properties of Sol–Gel Grown Chromium Doped Zinc Oxide Nanoparticles

Zalak Joshi, Davit Dhruv, K.N. Rathod, J.H. Markna, A. Satyaprasad, A.D. Joshi, P.S. Solanki and **N.A. Shah**

J. Mater. Sci. Technol. 34, 488 (2017)

Impact Factor: 3.6

52. Structural and Transport Studies on Mixed Valent Rare Earth Manganite Ceramics
D.D. Pandya, Zalak Joshi, Davit Dhruv, Keval Gadani, Hetal Boricha, K.N. Rathod,
Sanjay Kansara, J.H. Markna, P.S. Solanki and **N.A. Shah**

Trans. Indian Ceram. Soc. 76, 03 (2017)

Impact Factor: 0.760

53. Charge Transport Mechanisms in Sol-Gel Grown La_{0.7}Pb_{0.3}MnO₃/LaAlO₃ Manganite Films

Eesh Vaghela, M.J. Keshvani, KevalGadani, Zalak Joshi, HetalBoricha, K. Asokan, D. Venkateshwarlu, V. Ganesan, **N.A. Shah** and P.S. Solanki

Phys. Chem. Chem. Phys. 19, 5163 (2017)

Impact Factor: 3.906

54. Low Field Magnetoelectric and Magnetotransport Properties of Sol-Gel Grown Nanostructured LaMnO₃ Manganites

Keval Gadani, M.J. Keshvani, Davit Dhruv, Hetal Boricha, K.N. Rathod, Pooja Prajapati, A.D. Joshi, D.D. Pandya, N.A. Shah and P.S. Solanki

J. Alloy. Comp. 719, 47 (2017)

Impact Factor: 3.77

55. Transport and Magnetoresistance studies on polycrystalline La_{0.4}Dy_{0.1}Ca_{0.5}MnO₃: Role of Phase Separation

A. Krichene, W. Boujelben, S. Mukherjee, P.S. Solanki, N.A. Shah

Acta mater. 131, 491 (2017)

Impact Factor: 6.036

56. Effect of Charge ordering and phase separation on the electrical and magnetoresistive properties of polycrystalline La_{0.4}Eu_{0.1}Ca_{0.5}MnO₃

A. Krichene, W. Boujelben, S. Mukherjee, N.A. Shah, P.S. Solanki

J. Phy. Chem. Solids 114, 21 (2018)

Impact Factor: 2.207

57. Strain and morphology control over electrical behavior of pulsed laser deposited BiFeO₃ films

Kruti Ravaliya, Ashish Ravalia, D.D. Pandya, P.S. Solanki, N.A. Shah

Thin Solid Film 645, 436 (2018)

Impact Factor: 1.939

58. Magnetoelectric properties of Co-doped BifeO₃ nanoparticles

> V.G. Shrimali, K.N. Rathod, Davit Dhruv, Alpa Zankat, Khushal Sagapariya, Sapana Solanki, P.S. Solanki, N.A. Shah and B.R. Kataria

> International journal of Modern Physics B 32, 1850143 (2018) Impact Factor: 0.769

59. Sonochemical synthesis, characterization, thermal and semiconducting behavior of nano-sized azidopentaamminecobalt (III) complexes containing anion, CrO₄²⁻ or $Cr_2O_7^{2-}$

Ritu Bala, Jagriti Behal, Nikesh A Shah, K.N Rathod, Vinit Prakash, Ranjan C Khunt

Ultrasonics sonochemistry, 41, 72 (2018)

Impact Factor: 6.012

60. A natural tomato slurry as a photosensitizer for dye-sensitized solar cells with TiO_2/CuO composite thin films

Meet A Moradiya, Ankita Dangodara, Jay Pala, Chirag R Savaliya, Davit Dhruv, V.R. Rathod, Ashwini D Joshi, **N.A. Shah**, Dhiren Pandya, JH Markna

Separation Science and Technology (2018)

Impact Factor: 1.207

(DOI: 10.1080/01496395.2018.1444053)

61. Role of antimony in the charge transport mechanisms for La $_{0.\ 67}$ Ca $_{0.\ 33}$ Mn $_{1-x}$ Sb $_x$ O $_3$ manganites

B.R. Kataria, Pankaj Solanki, D.D. Pandya, P.S. Solanki, **N.A. Shah**Physica B 541, 43 (2018)

Impact Factor: 1.745

62. Role of Gallium in the charge transport mechanisms for La $_{0.67}$ Ca $_{0.33}$ Mn $_{1-}$ $_x$ Ga $_x$ O $_3$ manganites

B.R. Kataria, Ashish Ravalia, A.U. Vyas, D.D. Pandya, P.S. Solanki, **N.A. Shah**Physica B 545, 182 (2018)

Impact Factor: 1.745

63. Low Field Magnetoelectric Studies on Sol-Gel Grown Nanostructured YMnO₃ Manganites

Zalak Joshi, Davit Dhruv, K.N. Rathod, Hetal Boricha, Keval Gadani, D.D. Pandya, A. D. Joshi, P.S. Solanki and **N. A. Shah**

Prog. Solid State Chem. 49, 23 (2018)

Impact Factor: 9.313

64. Structural, microstructural and dielectric behavior of sol – gel grown nanostructured $Y_{0.95}Zr_{0.05}MnO_3$

K.N. Rathod, Kinnari Thakrar, Keval Gadani, Zalak Joshi, Davit Dhruv, Hetal Boricha, Sanjay Kansara, D.D. Pandya, K. Asokan, P.S. Solanki and **N.A. Shah**

Mater. Chem. Phys. 198, 200 (2017) Impact Factor: 2.201

65. Comparison of Charge Transport Studies of Chemical Solution and Pulsed Laser
Deposited Manganite Based Thin Film Devices

K.N. Rathod, Davit Dhruv, Keval Gadani, Zalak Joshi, Hetal Boricha, Sapana Solanki, A.D. Joshi, D.D. Pandya, K. Asokan, P.S. Solanki and N.A. Shah

Appl. Phys. A 123:558, 1–8 (2017)

Impact Factor: 1.064

66. Size Effects on Electrical Properties of Chemically Grown Zinc Oxide Nanoparticles K.N. Rathod, Zalak Joshi, Davit Dhruv, Keval Gadani, Hetal Boricha, A. D. Joshi, P.S. Solanki and N. A. Shah

Mater. Res. Exp 5, 03540 (2018)

Impact Factor: 1.151

67. Mechanism of anti-bacterial activity of Zinc Oxide nanoparticle against carbapenem resistant Acinetobacter baumannii

Vishvanath Tiwari, Neha Mishra, Keval Gadani, Piyush S. Solanki, Nikesh Shah, Monalisa Tiwari

Frontiers in Microbiology, 09, 1218 (2018)

Impact Factor: 4.02

68. Electrical behavior and structure-property correlations in La_{1-x}Pr_xMnO₃ $(0 \le x \le 1)$ ceramics

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

Ceramics International, 45, 1098 (2019)

Impact Factor: 3.057

69. Studies on transport properties of manganite based nano-micro particles-matrix composites

Hardik Gohil, Hetal Boricha, K.N. Rathod, Keval Gadani, Bhargav Rajyaguru, A.D. Joshi, D.D. Pandya, K. Asokan, N.A. Shah and P.S. Solanki

J. Alloy. Comp. 775, 1016 (2019)

Impact Factor: 3.77

70. Magnetic phase separation in polycrystalline $Pr_{0.5-x}Bi_x Sr_{0.5}MnO_3$ (x ≤ 0.15)

A. Krichene, W. Boujelben, S. Mukherjee, N.A. Shah, P.S. Solanki

Ceramics International, 45, 3849 (2019)

Impact Factor: 3.057

71. Charge Transport in Chemically Grown Manganite Based Heterostructure Khushal Sagapariya, Keval Gadani, K.N. 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**

Impact Factor: 2.210

Mater. Chem. Phys. 224, 229 (2019)

72. Modifications in structural, optical and electrical properties of Nanocrystalline CdO: role of sintering temperature

Pratima Makwana, Davit Dhruv, Sapana Solanki, Hetal Boricha, A Satyaprasad, M Ranjan, P.S. Solanki and **N.A. Shah**

J. Sol-Gel Sci. Technol. (2019) DoI: 10.1007/s10971-018-4876-7

Impact Factor: 1.745

B. Technical (Electronics)

1. RF AMPLIFIER

M.N. Jivani and **N.A. Shah**

Lab Experiments, 6, 222 (2006)

2. Understanding Basic Logic Gates using Parallel Port Interfacing

M.N. Jivani and N. A. Shah

Lab Experiments, 9, 20 (2009)

3. PCB Fabrication made simple: The Toner Transfer Method

M.N. Jivani and N. A. Shah

Lab Experiments, 9, 2 (2009)

4. Variable Power Supply from fixed 3-terminal regulator IC

EFY, 38, 95-96 (2006)

5. Parallel port output capabilities using different languages

EFY, 39, 68-74 (2007)

6. TOKEN NUMBER DISPLAY

EFY, 40, 52-58 (2008)

7. Realization RS-232 : An Extended PC communication

- Electronics Maker, 120, 70-74 (2006)
- 8. Water Level Indicator Circuit a construction project Electronics Maker, 124, 36-42 (2006)
- 9. Future High Density Holographic Data Storage: Revolution Electronics Maker, 90-92 (2008)

C. National Journals

- Studies on CMR Manganites: Nanostructured, Thin Films and Devices
 Uma Khachar, P.S. Solanki, R.R. Doshi, Megha Vagadia, Ashish Ravalia, V. Ganesan,
 R.J. Choudhary, D.M. Phase, N.A. Shah and D.G. Kuberkar
 VAK A Journal of Saurashtra University, 4, 76 (2011)
- 2. Structural, Transport and Magnetotransport Studies on La $_{0.67}$ Ca $_{0.33}$ Mn $_{1-}$ $_x$ Ga $_x$ O $_3$ Manganites

B.R. Kataria, A.B. Ravalia, Megha Vagadia, PriyankaTrivedi, U.D. Khachar, M.J. Keshvani, P.S. Solanki, C.M. Thaker, Sanjay Kansara, Davit Dhruv, D.D. Pandya, D.G. Kuberkar and **N.A. Shah**

VAK – A Journal of Saurashtra University, 6, 76 (2011)

- 3. Parallelism Trends to be Studied and Misconceptions to be Eliminated for Future High Performance System
 - National Journal of System and Information Technology, 4, 143-148 (2011)
- 4. Power Consumption Reduction using Microarchitecture Techniques for Modern Multicore Microprocessors

N.A. Shah, D.H. Ahir

Current Trends in Information Technology, 3, 16–20 (2013)

- 5. Psychrophiles: Cold Adaptation
 Chirag Raval, leena Ambasana, J.H. Markna, Davit Dhruv, **N.A. Shah**Research & Reviews: A Journal of Life Sciences, 3, 15–20 (2013)
- Current Aspects of Nanomedicine for Cancer
 Chirag Raval, J.H. Markna, N.A. Shah

- Research & Reviews: Journal of oncology and Hematology, 3, 1–4 (2014)
- 7. Study on Dielectric Properties of Nanostructured Composite of ZnO- $La_{0.45}Pr_{0.25}Sr_{0.3}MnO_3Bulk \ Ceramic$

J.H. Markna, Davit Dhruv, R.V. Ramani, Sanjay Kansara, Dhiren Pandya, **N.A. Shah** Nano Trends: A Journal of Nanotechnology and Its Applications, 17, 1 (2015)

D. International Conference Proceedings

- 1. Superconductivity of the single phase La_{3.5-x-z}M_zBa_{3.5-x}Ca_{2x}Cu₇Oz system

 Book: "Proce. of Workshop on High Temperature Superconductivity" (1997)
- 2. Structural and oxygen stoichiometric studies on La_{1.5-x}Ba_{1.5-y}Ca_{x+y}Cu₃O_z system Book: "Proce. of Seminar on X-ray Spectroscopy and Allied Areas" (1997)
- 3. SHI Induced Structural Modifications and Improved Transport in La_{0.7}Ca_{0.3}O₃/LAO Manganite Films
 - D.D. Pandya, P.S. Solanki, J.H. Markna, C.M. Thaker, Ravi Kumar, D.G. Kuberkar, **N.A. Shah**

AIP Conference Proceedings 1349, 939 (2011)

Dielectric and Magnetic Behavior of Sol-Gel Grown BiFeO₃ Multiferroic
 A.B. Ravalia, M.V. Vagadia, U.D. Khachar, R.R. Doshi, P.S. Solanki, B.T. Savalia, N.A.

Shah, D.G. Kuberkar

AIP Conference Proceedings 1349, 1143 (2011)

5. Structure-Property Correlations in La_{1-x}Na_xMnO₃ Manganites

N.A. Shah, D.D. Pandya, C.M. Thaker, Sanjay Kansara, P.S. Solanki, C.L. Prajapat, M.R. Singh, S. Rayaprol, D.G. Kuberkar

AIP Conf. Proc. 1349, 1447, 1137 (2012)

6. Dielectric Behavior of PLD Grown BiFeO₃ Multiferroic Thin Films

Ashish Ravalia, Megha Vagadia, **N.A. Shah**, D.D. Pandya, Devang D. Shah , P.K. Mehta and D.G. Kuberkar

AIP Conference Proceedings 1447, 921 (2012)

7. Manycore Architecture – A roadmap to future processors

Proceeding of International Conference on Innovative Science & Engineering Technology 453-457 (2011)

8. Structure – Property Correlations in Monovalent Mixed Oxide $La_{1-x}K_xMnO_3$ (0.0 $\leq x \leq$ 0.3) Manganites

Davit Dhruv, R.K. Trivedi, Bhumika Nimavat, Sanjay Kansara, D.D. Pandya, M.J. Keshvani, P.S. Solanki, Bharat Kataria, D.G. Kuberkar, **N.A. Shah**AIP Conference Proceedings 928, 1512 (2013)

9. Studies on the Dielectric Behavior of Cu-doped NdMnO₃

Malay Udeshi, Savan Katba, Ashish Ravalia, Megha Vagadia, P.S. Solanki, M.J. Keshvani, C.M. Thaker, **N.A. Shah**, D.G. Kuberkar

AIP Conference Proceedings 1303-1305 (2014)

10. I-V and C-V Characteristics of Y_{0.95}Ca_{0.05}MnO₃/Si Film

Davit Dhruv, Zalak Joshi, Ashish Ravalia, Sanjay Kansara, D.D. Pandya, P.S. Solanki, D.G. Kuberkar, **N.A. Shah**

AIP Conference Proceedings 1309-1311 (2014)

11. Dielectric Behavior of Nanostructured $Y_{0.95}Ca_{0.05}MnO_3$: Role of Sintering Temperature

Zalak Joshi, Davit Dhruv, Sanjay Kansara, Megha Vagadia, Nishant Barot, P.K. Mehta, P.S. Solanki, D.G. Kuberkar, N.A. Shah

AIP Conference Proceedings 1306-1308 (2014)

12. Structural Properties and Gas Sensing Behavior of Sol-Gel Grown Nanostructured Zinc Oxide

Bhargav Rajyaguru, Keval Gadani, K.N. Rathod, Sapana Solanki, S.B. Kansara, D.D. Pandya, **N.A. Shah**, P.S. Solanki

AIP Conference Proceedings 1728, 020514 (2016)

13. Zener Double Exchange Polynomial Law for Metallic Region of La_{1-x}K_xMnO₃

Manganites

Keval Gadani, Davit Dhruv, Zalak Joshi, Hetal Boricha, Eesh Vaghela, D.D. Pandya, N.A. Shah, P.S. Solanki

AIP Conference Proceedings 1728, 020516 (2016)

14. Effect of Sintering Temperature on the Structural and Electrical Properties of

Zno.95Cro.05O

Zalak Joshi, Davit Dhruv, Keval Gadani, Hetal Boricha, D.D. Pandya, P.S. Solanki, **N.A. Shah**

AIP Conference Proceedings 1728, 020421 (2016)

15. K–Substitution Induced Electrical Band Gap Engineering in La_{1-x}K_xMnO₃ Manganites Hetal Boricha, Davit Dhruv, Zalak Joshi, Alpa Zankat, D.D. Pandya, A.D. Joshi, P.S. Solanki, **N.A. Shah**

AIP Conference Proceedings 1728, 020523 (2016)

16. Studies on Structural and Electrical Properties of Nanostructured GdMnO₃

Sapana Solanki, K.N. Rathod, Bhargav Rajyaguru, S.B. Kansara, J.H. Markna, R.K. Trivedi, D.D. Pandya, P.S. Solanki, **N.A. Shah**

AIP Conference Proceedings 1728, 020524 (2016)

17. Investigations on Rectifying Behavior of Y0.95Ca0.05MnO3/Si Junction

Davit Dhruv, Zalak Joshi, Keval Gadani, Hetal Boricha, D.D. Pandya, A.D. Joshi, P.S. Solanki, **N.A. Shah**

AIP Conference Proceedings 1728, 020525 (2016)

18. Studies on Structural and Electrical Properties of Pure and Doped h-YMnO₃

K.N. Rathod, Bhargav Rajyaguru, Sapana Solanki, V.G. Shrimali, Khushal Sagapariya, J.H. Markna, P.S. Solanki, **N.A. Shah**

AIP Conference Proceedings 1728, 020527 (2016)

19. Charge Transport mechanisms in Monovalent Doped Mixed Valent Manganites Hetal Boricha, Zalak Joshi, Davit Dhruv, K.N. Rathod, Keval Gadani, D.D. Pandya, S.B. Kansara, C.M. Thaker, S. Rayaprol, P.S. Solanki, **N.A. Shah**Advanced Materials Proceedings 1, 96 (2016)

20. Studies on Structural and Electrical Properties of Nanostructured RMnO₃ (R = Gd & Ho)

Sapana Solanki, Davit Dhruv, Zalak Joshi, Keval Gadani, K.N. Rathod, Hetal Boricha, V.G. Shrimali, R.K. Trivedi, A.D. Joshi, D.D. Pandya, P.S. Solanki, **N.A. Shah**AIP Conference Proceedings 1837, 040029 (2017)

21. Temperature Dependent Dielectric Behavior of Sol-Gel grown Y_{0.95}Ca_{0.05}MnO₃/Si Junction

Davit Dhruv, Zalak Joshi, Sapana Solanki, Khushal Sagapariya, Pratima Makwana, S.B. Kansara, A.D. Joshi, D.D. Pandya, P.S. Solanki, **N.A. Shah**AIP Conference Proceedings 1837, 040056 (2017)

- 22. Investigations on Structural, Optical and Electrical Properties of V₂O₅ Nanoparticles Khushal Sagapariya, K.N. Rathod, Keval Gadani, Hetal Boricha, V.G. Shrimali, Bhargav Rajyaguru, Amiras Donga, A.D. Joshi, D.D. Pandya, **N.A. Shah**, P.S. Solanki AIP Conference Proceedings 1837, 030006 (2017)
- 23. Effect of Vanadium Substitution on Structural and electrical Properties of Sol–Gel Grown Nanostructured Zinc Oxide

Hetal Boricha, Bhargav Rajyaguru, Keval Gadani, K.N. Rathod, V.G. Shrimali, Bhagyashree Udeshi, M.J. Keshvani, A.D. Joshi, D.D. Pandya, P.S. Solanki, **N.A. Shah** AIP Conference Proceedings 1837, 040007 (2017)

- 24. Investigations on Magnetoelectric Behavior in BiFeo.95Coo.05O3 Nanoparticles

 V.G. Shrimali, Keval Gadani, K.N. Rathod, Hetal Boricha, Pooja Prajapati, M.J.

 Keshvani, B.R. Kataria, A.D. Joshi, D.D. Pandya, **N.A. Shah**, P.S. Solanki

 AIP Conference Proceedings 1837, 040052 (2017)
- 25. Transport Properties of Calcium Doped YMnO₃ Thin Film

 K.N. Rathod, Keval Gadani, Zalak Joshi, Davit Dhruv, A.D. Joshi, K. Asokan, **N.A. Shah**,

 P.S. Solanki

Materials Today Proceedings 5, 9804 (2018)

26. Investigations on Charge Transport Mechanisms in Mixed Valent La_{0.5}Pr_{0.3}Ba_{0.3-x}MnO₃ Manganites

Hetal Boricha, Bhargav Rajyaguru, Zalak Joshi, J.H. Markna, D.D. Pandya, A.D. Joshi, P.S. Solanki, **N.A. Shah**

Materials Today Proceedings 5, 9910 (2018)

27. Effect of Swift Heavy Ion Irradiation on Dielectric Properties of Manganite Based Thin Films

Keval Gadani, K.N. Rathod, Zalak Joshi, Davit Dhruv, A.D. Joshi, K. Asokan, **N.A. Shah**, P.S. Solanki

Materials Today Proceedings 5, 9916 (2018)

28. Magnetoelectric Properties of Nanostructured YMnO₃ Prepared by Sol-Gel Technique

Zalak Joshi, Davit Dhruv, K.N. Rathod, Keval Gadani, A.D. Joshi, P.S. Solanki, **N.A. Shah**

Materials Today Proceedings 5, 9922 (2018)

29. Fabrication and Characterization of Manganite Based p-n Junction

Bhargav Rajyaguru, Hetal Boricha, V.G. Shrimali, A.D. Joshi, K. Asokan, **N.A. Shah**, P.S. Solanki

Materials Today Proceedings 5, 9927 (2018)

E. National Conference Proceedings

- 1. I–V Studies on La_{0.7}(Ca/Sr)_{0.3}MnO₃ Manganite Thin Films Grown by Chemical Solution Deposition (CSD) Method
 - P.S. Vachhani, R.N. Parmar, P.S. Solanki, J. Raval, J.H. Markna, **N.A. Shah**, J.A. Bhalodia, D.S. Rana, D.G. Kuberkar
- Department of Atomic Energy Solid State Physics Symposium India 50, 517
 (2005)

- 2. Temperature Dependent I–V Characteristics of Manganite Based p–n Junction Diodes
 - U.D. Khachar, P.S. Vachhani, P.S. Solanki, R.R. Doshi, **N.A. Shah**, R.J. Choudhary, D.M. Phase, D.G. Kuberkar
 - Department of Atomic Energy Solid State Physics Symposium India 54, 821 (2009)
- Transport and Magnetotransport in PLD and CSD Grown La_{0.5}Pr_{0.2}Sr_{0.3}MnO₃ Manganite Films: A Comparative Study
 Dhiren Pandya, P.S. Solanki, J.H. Markna, C.M. Thaker, N.A. Shah, D.G. Kuberkar
 Department of Atomic Energy Solid State Physics Symposium India 54, 895 (2009)
- Physico-chemical analysis of bore wells drinking water of Mansa taluka territory
 Proceedings of the National Seminar on Scientific Wealth of Physics 2012 (SWP 2012) 35 (2012)
- Harmful effects of electromagnetic wave Radiations (3 khz-300 Ghz) on lives
 Proceedings of the National Seminar on Scientific Wealth of Physics 2012 (SWP 2012) 49 (2012)
- Scope of virtual laboratories in teaching and learning: a review
 Proceedings of the National Seminar on Scientific Wealth of Physics 2012 (SWP 2012) 83 (2012)
- Study and Analysis of Symmetric Key-Cryptograph DES, Data Encryption Standard
 Proceedings of the National Seminar on Scientific Wealth of Physics 2012 (SWP 2012) 68 (2012)
- Investigations on BaTiO₃ Based Ferroelectric Field Effect Transistor (Fe FET) for Non – Volatile Memory Applications
 Megha Vagadia, Ashish Ravalia, Priyanka Trivedi, Uma Khachar, M.J. Keshvani, P.S. Solanki, Davit Dhruv, B.R. Kataria, D.S. Rana, K. Asokan, N.A. Shah, D.G. Kuberkar Proceedings of the National Seminar on Scientific Wealth of Physics – 2012 (SWP – 2012) 11 (2012)

- 9. Sintering Temperature Dependent Transport and Magnetotransport of Sol Gel Grown Nanostructured Lao.7Cao.3MnO3 Manganites
 - M.J. Keshvani, M.J. Modi, Uma Khachar, R.R. Doshi, P.S. Solanki, C.M. Thaker, **N.A. Shah**, D.G. Kuberkar

Proceedings of the National Workshop on Functional Oxides, Nanomaterials and Devices – 2012 (NWFOND – 2012) 54 (2012)

- 10. Studies on Mono-valent La_{1-x}Na_xMnO₃ Manganites
 - Sanjay Kansara, Bhumika Nimavat, Jalshikhaba S. Rathod, D.D. Pandya, C.M. Thaker, P.S. Solanki, M.R. Gonal, S. Rayaprol, **N.A. Shah**, D.G. Kuberkar Proceedings of the National Workshop on Functional Oxides, Nanomaterials and Devices 2012 (NWFOND 2012) 44 (2012)
- 11. Large Room Temperature Electroresistance in Manganite Based Heterostructure
 Uma Khachar, P.S. Solanki, P.S. Vachhani, J.H. Markna, R.J. Choudhary, D.M. Phase,
 N.A. Shah, D.G. Kuberkar

Proceedings of the National Workshop on Functional Oxides, Nanomaterials and Devices – 2012 (NWFOND – 2012) 30 (2012)

Book Published as single Author or as Editor

Sr. No.	Title with page nos.	Type of Book & Authorship	Publishers & ISSN / ISBN No
1	Internet & Web from concepts to applications 1-100	Reference Subject Book (National)	Saurashtra University under UGC unassigned grant
2	Fundamentals of Electromagnetics pp. 1-156	Reference Subject Book (National)	Saurashtra University under UGC unassigned grant
3	Exploring Parallal Port using C Language	Reference Subject Book (National)	Saurashtra University under UGC unassigned grant
4	Spark Reading Materials for UGC sponsored Refresher Course pp. 1-103	Reference Subject Book (National)	UGC Academic Staff college ISBN: 978-81-923069-3-3
5	PC Hardware & Future Technology Reading Material pp. 1-84	Reference Subject Book(National)	UGC Academic Staff College
6	Recent Trends in Functional Material Research Proceedings of NWFOND-2012 pp.1-62	Edited Book (National)	Saurashtra University ISBN: 978-81-92306-90-2
7	Computer Networking: From Theory to Practice pp. 1-194	Reference Subject Book (National)	Swarnim Gujarat Prakashan, Saurashtra University ISBN: 978-81-923069-4-0
8	Studies on monovalent doped mixed valent microstructural manganites pp. 1-58	Reference Book (International)	LAP Lambert Academic Publishing, Germany (International Publisher) ISBN: 978-3—659-44322-0
9	Nano Magnetoresistive Hybrid Devices pp. 1-60	Reference Subject Book (National)	Saurashtra University (UGC) ISBN: 978-81-923069-7
10	Nanoelectronics: It Bigger Than Imagination pp. 1-88	Reference Subject Book (National)	Saurashtra University (UGC) ISBN: 978-81-9230-69-6-4
11	Nanoscience and applications pp. 1-70	Reference Subject Book (National)	Sanskruti Prakashan ISBN: 978-93-83977-00-0
12	Dielectric behavior in Nanostructured YCMO compound pp. 1-61	Reference Subject Book (International)	LAP Lambert Academic Publishing, Germany (International Publisher) ISBN: 978-3-8465-3786-2

Articles / Chapters published in Books

Sr.	Title with page nos.	Book Title Editor &	ISSN / ISBN No
No.		Publisher	
1	Boosting the system performance: PC Secrete Formulas pp.91-95	Disha Darshan UGC-ASC, Saurashtra University	ISBN: 978-81-923069-2-6

Research Projects:

Sr. No.	Title	Agency	Period	Grant/Amount	As PI/Co- PI	Status
1	Development of oxide Nanomaterials: Thin films for device applications	GUJCOST, Gandhinagar	2005 – 2008	39.85 Lakhs	Co-PI	Completed
2	Temperature and Field sensitivity studies of manganite thin films	IQAC, Saurashtra University	2006- 2008	0.40 Lakhs	PI	Completed
3	Synthesis and characterization of recording power read head and magnetic sensing type CMR materials	UGC, New Delhi	2009- 2011	0.95 Lakhs	PI	Completed
4	Studies on Transport and Magnetotransport Behavior of Functional Oxide Based Thin Film Devices	DAE – BRNS, Mumbai	2013 - 2016	23.17 Lakhs	Co-PI	Completed
5	Development and Studies on Functional Oxide Thin Film Devices for Spintronic Applications	DST, New Delhi	2013 – 2016	56.00 Lakhs	Co-PI	Completed
6	Swift Heavy Ion (SHI) Irradiation Studies on Doped YMnO ₃ Based Thin Film Devices	Inter University Accelerator Centre (IUAC), New Delhi	2015- 2018	6.03 Lakhs	PI	Completed
7	Current – Voltage Characteristics of Doped Yttrium Manganese Oxide Films	Saurashtra University, Rajkot	2016- 2018	1.00 Lakhs	PI	Completed
8	Swift Heavy Ion (SHI) Irradiation Studies on Manganite Based Thin Film Devices	Inter University Accelerator Centre (IUAC), New Delhi	2016- 2019	6.03 Lakhs	Co-PI	On going
9	Investigations on Manganite – BiFeO ₃ Multiferroic Composites	UGC-DAE CSR, Mumbai	2017- 2020	7.686 Lakhs	PI	On going
10	Electro and Magnetotransport	Inter University	2017- 2020	6.03 Lakhs	Co-PI	On going

	Studies on Manganite Based Thin Films and	Accelerator Centre (IUAC),				
	Devices: Role of Swift	New Delhi				
	Heavy Ion Irradiation DST – FIST	DST	2018-	198 Lakhs	Coordinator	On going
11	(Level II)	New Delhi	2019	170 Edikiis	dooramator	ongoing
12	UGC - SAP (Phase III)	UGC New Delhi	2018- 2019	121 Lakhs	Coordinator	On going

Patent:

SR. NO	NAME OF STUDENTS/NAME OF GUIDE	TITLE OF PROJECT	Reference number (If any) / Date of filing	STATUS OF PATENTING
1	J.HMarkna, Dilip G. Kuberkar, Nikesh A. Shah, Dhiren D. Pandya,Chetan M. Thakar, Piyush S. Solanki,Davit B. Dhruv, Gandha Pinal P.,DangodaraAnkita D., Shyam H. Vasvani, Kaushik R. Babiya,Nehal U. Faldu,Tushar G. Monapara	Carbon Nano- Dot Based Lycopericum Solar Cell	Patent No 1570/MUM/20 15 Date:16/04/20 15	Published

Research Collaborations:

A. International Collaborations:

1. Dr. A. Krichene (University of Sfax, Tunisia)

B. National Collaborations:

- 1. Dr. V. Ganesan (UGC-DAE CSR, Indore, India)
- 2. Dr. R.J. Choudhary (UGC-DAE CSR, Indore, India)
- 3. Dr. D.M. Phase (UGC-DAE CSR, Indore, India)

- 4. Dr. S. Rayaprol (UGC-DAE CSR, Mumbai, India)
- 5. Dr. Sudip Mukherjee (UGC-DAE CSR, Mumbai, India)
- 6. Dr. K. Asokan (IUAC, New Delhi, India)
- 7. Dr. Mukesh Ranjan (IPR, Gandhinagar, India)
- 8. Dr. Vishvanath Tiwari (Central University of Rajasthan, Ajmer, India)

List of Journal for which Manuscripts have been Reviewed

- > Applied Nano Science
- > Thin Solid Films
- > Physica B
- > Physica Scripta
- Physica Status Solidi B
- Physics & Astronomy International Journal
- Physics Related Journal
- Computer and Technology Based Journal
- ➤ International Journal of Materials Science and Application
- > Journal of Inorganic and Organometallic Polymers and Materials
- > Journal of Materials Science Materials in Electronics
- ➤ Journal of Physics D-Applied Physics
- Materials Research Express
- Materials Science in Semiconductor Processing
- Measurement Science and Technology
- Solid State Symposium

Member in Editorial Board:

- ➤ International Journal of Nano Science and Technology ISSN: 2328-5443
- International Journal of Science and Advanced Technology (IJSAT)
- > Journal of Electronics and Communication Engineering (JECE)
- ➤ International Journal of Electronics and Communication Engineering (IJECE) ISSN(Print): 2278-9901; ISSN(Online): 2278-991X
- Scientific Board of Computer, Electrical & Electronic Engineers, International Institute of Engineers (www.iieng.org)

Awards and Event Recognitions for Research Presentation:

- First Prize for best paper presented in an International Workshop on "High Temp. Superconductivity - Ten Years After Its Discovery" held at University of Rajasthan, Jaipur (1996)
- International Crystallography Union Young Scientist Award for attending International School on Powder Diffraction Techniques held at Jadhavpur University, Calcutta (1998)
- 3. First Prize won in Paper presentation at National seminar on "EMERGING TECHNOLOGY & APPLICATION, 1-2 October held at Department of Computer Science, Saurashtra University, Rajkot (2006)
- 4. Prof. DolarraiMakad Award for Excellence in Research (Electronics) for (2011-12)
- 5. Felicitation by Commissioner of Higher Education, Gujarat for academic excellence in Higher Education on 21st Feb. at Saurashtra University, Rajkot (2013)
- 6. Prof. DolarraiMakad Award for Excellence in Research (Physics) for (2015-16)
- 7. Smt. R. D. Gardi "*Dikra Nu Ghar Vrudhaashram*" Dholra Award Received, Rajkot **(2016)**
- 8. Best Poster Award for Poster Presentation Presented in *Silver Jubilee National Conference on* "Study of Matter Using Intense Radiation Sources and Under Extreme Conditions" held at UGC-DAE Consortium for Scientific Research, Indore, India November 03–06, (2016)
- 9. First Rank for Oral Presentation Award Presented in *International Science Symposium on* "Recent Trends in Science and Technology" held at Christ Collage Rajkot, India February 26–27, (2017)
- 10. First Rank for Poster Presentation Award Presented in *One Day National Seminar on* "Recent Trends in Experimental Condensed Matter Physics" held at Department of Physics, Saurashtra University, Rajkot, India March 21, (2017)
- 11. Best Poster Award for Poster Presentation National Seminar on Advances in Nanomaterials Research (ANR-2018) held at Department of Nanoscience & Advanced Materials Saurashtra University, Rajkot, India February 15, (2018)

12. Best Poster Award for Poster Presentation International Conference on Materials for Energy Applications (ICME) held at S.S. Jain Subodh P.G. (Autonomous) College, Jaipur (Raj.), India during December 06 – 08, (2018)

Events Organized:

A. International/National Events:

1	Proceedings of the National Workshop on Functional Oxides, Nanomaterials and Devices – 2012						
	(NWFOND - 2012)						
	Department of Physics, Saurashtra University, Rajkot, India						
	1-2 March 2012						
2	National Workshop on X-ray Diffraction Techniques for Materials Characterization - 2014						
	(X'Raydiate – 2014)						
	Department of Physics, Saurashtra University, Rajkot, India						
	September 04–05, 2014						
3	2 nd One-Day Seminar on "Frontiers in Research on New Materials"						
	Department of Physics, Saurashtra University, Rajkot, India						
	23 rd January 2015						
4	DST - SERB School on "Ion Interaction With Matter"						
	Department of Physics, Saurashtra University, Rajkot, India						
	March 2-21, 2015						
5	One Day National Workshop On "Techniques For Materials Characterizations"						
	Department of Physics, Saurashtra University, Rajkot, India						
	October 21, 2015						
6	International Conference on Material Science & Technology 2016 (ICMTech – 2016)						
	University of Delhi, India						
	March 01-04, 2016						
7	International Conference on Functional Oxides and Nanomaterials (ICFONM – 2016)						
	Department of Physics, Saurashtra University, Rajkot, India						
	November 11–13, 2016						
8	One Day National Workshop on "Recent Trends in Experimental Condensed Matter Physics"						
	Department of Physics, Saurashtra University, Rajkot, India						
	March 21, 2017						

→ International / National: Conferences / Seminars / Symposia / Workshops / Schools (Attended)

- 1. International Workshop on High Temperature Superconductivity- Ten Years After Its Discovery held at Department of Physics, Jaipur 16-21 Dec. (1996)
- 2. DAE Solid State Physics Symposium 1996 held at Bhabha Atomic Research Centre (BARC), Trombay, Mumbai 27–31 Dec. (1996)

- 3. The 6th National Seminar on X-ray Spectroscopy and Allied Areas held at Govt. P.G.Arts & Science College, Ratlam (M.P.) 17-19 Nov. **(1997)**
- 4. DAE Solid State Physics Symposium held at BRNS, Department of Atomic Energy at Cochin University of Science & Technology, Kerala 27–31 Dec. (1997)
- 5. Ninth Annual General Meeting of MRSI held at Materials Research Society of India at IIT Madras 11-13, Feb.(1998)
- 6. 41st DAE Solid State Physics Symposium held at Kurukshetra University, Kurukshetra 27-31, Dec. (1998)
- 7. The 5th IUMRS International Conference in Asia Bangalore held at The international Union of Material Research Societies at IIS, Jawaharlal Nehru Centre for advanced scientific research, Bangalore 13-16, Oct. **(1998)**
- 8. The 4th National Conference on "Indian Society of Statistics, Computer and Application held at Saurashtra University, Rajkot 24–26 Nov. **(2001)**
- 9. International Workshop on Nanomaterials, Magnetic Ions and Magnetic Semiconductors studies mostly by Hyperfine Interactions held at Department of Physics, Faculty of Science, MS University of Baroda, 10–14 Feb. (2004)
- 10. National Seminar on Emerging Technologies & Applications held at Department of Computer Science, Saurashtra University, Rajkot 25–26 Feb. (2004)
- 11. International Conference on Nano Science and Technology held at Indira Gandhi Centre for Atomic Research Kalpakkam, TN, 27–29 Feb. (2004)
- 12. Seminar on Current Trends in Materials Research held at Department of Physics, Saurashtra University, Rajkot 28 Feb. **(2005)**
- 13. 8th International Conference on Nanostructured Materials NANO–2006 held at I.I.Sc., Bangalore 20-25 Aug.(2006)
- 14. National Seminar on Recent Trends in Materials Science held at Department of Physics, Saurashtra University, Rajkot 25 March (2007)
- 15. DAE-BRNS 4th National Symposium on Pulsed Laser Deposition of Thin Films and Nanostructured Materials held at DAE-BRNS and Saurashtra University, Rajkot 3-5 Oct. (2007)

- 16. National Seminar on Advances in Material Research held at Department of Physics, Saurashtra University, Rajkot 15 Feb. **(2008)**
- 17. Workshop on synthesis and characterization of Nano-structured Materials held at Applied Physics Department, Faculty of Technology, MS University of Baroda, Baroda 30 March (2008)
- 18. 21st AGM MRSI Meeting held at Material Research Society of India at MS University of Baroda, Baroda 9–11 Feb. **(2010)**
- 19. National Workshop on X-ray Diffraction Techniques and Applications 2010 held at Department of Physics, Saurashtra University, Rajkot 17–19 March **(2010)**
- 20. International conference on Information, Knowledge & Research in Engineering, Technology & Sciences held at G.K.Bharad Institute of Engineering, Rajkot and A.E.S., Sangli, Maharashtra 24-25 March (2012)
- 21. Nanotechnology-Innovative Materials, Processes, Products and Applications held at Bharati Vidyapeeth University, Pune 18-19, Oct. **(2012)**
- 22. International Conference and Workshop on Nanostructured Ceramics and Other Nanomaterials held at Department of Physics & Astrophysics, University of Delhi, New Delhi 13–16 March (2012)
- 23. National Seminar on Scientific Wealth of Physics held at H & H B Kotak Institute of Science, Rajkot 26 Aug. **(2012)**
- 24. International Conference on Innovative Technologies in Engineering and Sciences, held at V.V.P. Engineering College, Rajkot, 22–23 Dec. **(2012)**
- 25. Current Trends in Research and Applications of Physical Sciences in Gujarat held at S.P. University, V.V. Nagar 29 Dec. **(2012)**
- 26. National Seminar on Nanostructured and Thin film coationg-2014 held at Gujcost, Gandhinagar VVP Engineering College, Rajkot 24 Jan. **(2014)**
- 27. "National Workshop on X-ray Diffraction Techniques for Materials Characterization 2014" (X' Raydiate 2014) held at Department of Physics, Saurashtra University, Rajkot during 4–5 September (2014)
- 28. 2nd One-Day Seminar on "Frontiers in Research on New Materials" held at Department of Physics, Saurashtra University, Rajkot on January (**2015**)

- 29. DST SERB School on "Ion Interaction with Matter" held at Department of Physics, Saurashtra University, Rajkot during March 02 21, (2015)
- 30. One Day National Workshop on "Techniques for Materials Characterizations" held at Department of Physics, Saurashtra University, Rajkot October 21, (2015)
- 31. International Conference on Condensed Matter & Applied Physics- 2015 (ICC 2015) at Bikaner, Rajasthan on October 30- 31, **(2015)**
- 32. 9th National Level Science Symposium-2016 on Recent in Science and Technology to be held at Christ College, Rajkot, February 14 (**2016**)
- 33. International Conference on Functional Oxide and Nanomaterials (ICFONM-2016) held at Department of Physics, Saurashtra University, Rajkot during November 11 13, (2016)
- 34. One Day National Workshop on "Recent Trends in Experimental Condensed Matter Physics" held at Department of Physics, Saurashtra University, Rajkot March 21, (2017)
- 35. One Day Workshop on "DATA ANALYSIS USING SPSS" organized by Department of Statistics, Saurashtra University, Rajkot, Gujarat on 31st July (2017)
- 36. 4thInternational Conference on Nanoscience and Nanotechnology (ICONN-2017) held at Department of Physics and Nanotechnology, SRM University, Kattankulathur, Chennai, India during August 09 11, (**2017**)
- 37. National Seminar on Advances in Nanomaterials Research (ANR-2018) held at Department of Nanoscience & Advanced Materials Saurashtra University, Rajkot, India February 15, (2018)
- 38. One Day National Workshop on "Patent" held at Saurashtra University, Rajkot, July 28, (2018)
- 39. International Conference on Materials For Energy Applications (ICME) held at S.S. Jain Subodh P.G. (Autonomous) College, Jaipur (Raj.), India during December 06 08, (2018)

<u>Lectures Delivered by the Teacher at the Institutions of Higher Education (UGC:HRDC Rajkot)</u>

No.	Topic	Date(s)	Name of the Scheme under which the
			lecturer was arranged
1	Special Summer School	02/06/2014 to 22/06/2014	SSS-2014
2	Interaction Programme	12/01/2015 to 01/02/2015	OP-108
3	Course Coordinator	25/05/2015 to 14/06/2015	SSS-2015
4	Micro Teaching	20/07/2015 to 16/08/2015	OP-108
5	Micro Teaching	20/07/2015 to 16/08/2015	OP-109
6	Impact of API on Higher Education	01/02/2016 to 28/02/2016	OP-110
7	Impact of API on Higher Education	29/02/2016 to 27/03/2016	OP-111
8	Impact of API on Higher Education	29/02/2016 to 20/03/2016	RC-211

Expert Talks / Invited Lectures Delivered:

Sr. No.	Title of Lecture / Academic Session	Title of Conference / Seminar etc	Organized by
1	Participant's presentation 23/07/2008	Refresher Course (RC) SSS-08	UGC-ASC, Rajkot
2	Participant's presentation 23/03/2010	RC-184	UGC-ASC, Rajkot
3	Visible PC Hardware Prospective 25/03/2010	RC-184	UGC-ASC, Rajkot
4	Build a PC from Scratch and Installing Operating System 26/03/2010	RC-184	UGC-ASC, Rajkot
5	Visible PC Hardware Prospective 23/03/2011	RC-190	UGC-ASC, Rajkot
6	Participant's presentation 26/05/2011	Orientation Program (OP)- 93	UGC-ASC, Rajkot
7	The Visible PC: Fundamental & Hardware perspective 30/05/2011	OP-191	UGC-ASC, Rajkot
8	Visible PC Hardware Perspective 20/09/2011	RC-191	UGC-ASC, Rajkot
9	Computer Applications 03/12/2011	Ph.D. Course Work Sanskrit Departments	Saurashtra University
10	Participant's presentation 16/03/2012	RC-192	UGC-ASC, Rajkot
11	Participant's presentation 17/03/2012	RC-192	UGC-ASC, Rajkot
12	Participant's presentation 29/08/2012	RC-195	UGC-ASC, Rajkot

13	Participant's presentation 29/08/2012	RC-195	UGC-ASC, Rajkot
14	PC Fundamentals: Hardware Point of View 13/09/2012	OP-96	UGC-ASC, Rajkot
15	Computer Fundamentals 27/10/2012	Ph.D. Course Work at Gujarati Department	Saurashtra University
16	Computer Applications in Research 02/11/2012	Ph.D. Course Work at Gujarati Department	Saurashtra University
17	Basic internet and E-mailing 27/12/2012	UGC NET/GSET	UGC NET/GSET Coaching Centre
18	Information Communication and Technology (ICT) 24/12/2012	UGC NET/GSET	UGC NET/GSET Coaching Centre
19	Fundamentals of Computer 09/03/2013	Remedial coaching	UGC Remedial Coaching Centre
20	Tools And Techniques Of PC Hardware 11/03/2013	Remedial coaching	UGC Remedial Coaching Centre
21	PC Hard Disk Drive And Data 12/03/2013	Remedial coaching	UGC Remedial Coaching Centre
22	Optical Storage And Application In PC 13/03/2013	Remedial coaching	UGC Remedial Coaching Centre
23	PC Troubleshooting Techniques 28/03/2013	Remedial coaching	UGC Remedial Coaching Centre
24	Higher Education System 22/06/2013	UGC NET/GSET	UGC NET/GSET Coaching Centre
25	Higher Education System: Governance Polity And Administration 23/06/2013	UGC NET/GSET	UGC NET/GSET Coaching Centre
26	Structure Of The Institutions For Higher Learning And Research In India 30/08/2013	UGC NET/GSET	UGC NET/GSET Coaching Centre
27	Higher Education Setup 31/08/2013	UGC NET/GSET	UGC NET/GSET Coaching

			Centre
28	Participant's presentation 04/10/2013	OP-100	UGC-ASC, Rajkot
29	Participant's presentation 05/10/2013	OP-100	UGC-ASC, Rajkot
30	Quantitative Research 12/11/2013	Ph.D. Course Work at Physics Department	Saurashtra University
31	Computer Application 08/11/2013	Ph.D. Course Work at Physics Department	Saurashtra University
32	Computer Application 07/11/2013	Ph.D. Course Work at Physics Department	Saurashtra University
33	Quantitative Research 06/11/2013	Ph.D. Course Work at Physics Department	Saurashtra University
34	Higher Education System: Governance Polity And Administration 01/12/2013	UGC NET/GSET	UGC NET/GSET Coaching Centre
35	Preparation of Research Article/ Paper	Research Interaction program	UGC-ASC, Rajkot
36	Computer Applications in Research 06/12/2013	Ph.D. Course Work at Gujarati Department	Saurashtra University
37	Participant's presentation 09/12/2013	RC-201	UGC-ASC, Rajkot
38	Formal Distance Education 20/12/2013	UGC NET/GSET	UGC NET/GSET Coaching Centre
39	Research Methodology 19/11/2013 11.00 to14.00	Ph.D. Course Work at Electronics Department	Saurashtra University
40	Research Methodology 19/11/2013 15.00 to18.00	Ph.D. Course Work at Electronics Department	Saurashtra University
41	Research Methodology 23/11/2013 11.00 to14.00	Ph.D. Course Work at Electronics Department	Saurashtra University
42	Research Methodology 23/11/2013 15.00 to18.00	Ph.D. Course Work at Electronics Department	Saurashtra University
43	Research Methodology 30/11/2013 11.00 to14.00	Ph.D. Course Work at Electronics Department	Saurashtra University
44	Research Methodology 30/11/2013 15.00 to18.00	Ph.D. Course Work at Electronics Department	Saurashtra University
45	"Make In India" Inspire Science Camp 21st July, 2018	Student Startup and Innovation Policy (SSIP)	Christ Collage Rajkot, India

Chairperson at National/International Conferences / Seminar etc.

International Conference on Materials For Energy Applications (ICME) held at S.S.
 Jain Subodh P.G. (Autonomous) College, Jaipur (Raj.), India during December 06 – 08, (2018)

Memberships:

A. National Level:

1. Name of Society: Ion Beam Society of India

Place of Society: Inter University Accelerator Centre (IUAC), New

Delhi, India

Time Duration of Membership: Life Time Membership

2. Name of Society: Photonics Society of India

Place of Society: Cochin University of Science and Technology,

Cochin

Time Duration of Membership: Life Time Membership

Present Responsibilities:

- > Senate Member, Science Faculty (Elected in Teachers Penal)
- Member, Board of University Teachers (BUT)
- Coordinator, CCDC & CCC, Saurashtra University, Rajkot
- Coordinator, Center for Excellence : Nanotechnology, SU, Rajkot
- Member Board of Study Physics, SU, Rajkot
- Joint Editor, Saurashtra University Journal of Applied Sciences
- Member, IQAC, Saurashtra University, Rajkot
- Coordinator, UGC-DRS Phase III (121 Lacs Project)

- Coordinator, DST FIST Level II (195 Lacs Project)
- Coordinator, Department of NanoScience (200 Lacs GoG project)

Extension Activities:

- Member of Board of Study Electronics, Dr. B.A. Marathawada University, Aurangabad
- > Member of Board of Study Electronics, Saurashtra University, Rajkot
- ➤ Working as an observer National Institute of Electronics and Information Technology, Govt. of India for DOAEEC Examination
- Worked as a coordinator , Gujarat State Eligibility Test (GSLET) conducted by MS University, Vadodara
- ➤ Worked as a Superintendent/Deputy Superintendent National Eligibility Test (NET) since last three years conducted by UGC, New Delhi
- ➤ Member of Saurashtra University Center Admission Committee (SUCAB)
- ➤ Worked as a Coordinator, Ph.D. Eligibility Test 2013 (PET) conducted by SUCAB
- Founder President of Saurashtra University Researchers Association (SURA)
- Active member of KCG, Gujarat State from Saurashtra University representative
- Academic Member of RUSA Committee, SU
- ➤ Committee Member in Publication Department, Saurashtra University for Diary, Calendar, Annual Report etc.
- Worked as an Asst. Coordinator in IGNOU
- ➤ IGNOU counselor to share knowledge.
- Resource Person in Academic Staff college, SU
- ➤ Life Member of Photonic Society, Cochin
- ➤ Member of Indian Science Congress, Calcutta
- Worked as a President of Information Society of Saurashtra and Society of Computer Hardware
- ➤ Worked as a Committee Member in various University's extension activities.
- Worked as a Technical Advisor in I.T. colleges, Gujarat

- ➤ NAAC Department Coordinator (From 25th Oct.2005 to 13 June 2014) for Quality enhancement work.
- ➤ Coordinator in orientation programmes and refresher courses organized by UGC: HRDC, Saurashtra University, Rajkot

Dr. Nikesh A. Shah



Dr. Nikesh A. Shah, Professor in Physics working at Department of Physics, Saurashtra University, Rajkot. He has completed his B.Sc. (Physics) and M.Sc. (Physics with Electronics) from Saurashtra University, Rajkot in 1993 and 1995, respectively. He has completed his Ph.D. in oxide superconductors from Department of Physics, Saurashtra University, Rajkot. He did his research work on Neutron Diffraction Studies on High Temperature Superconductors at BARC, Mumbai. He has been awarded for best research paper presentation award 02 in international and 01 in national event. He has been awarded Prof. Dolarrai Makad Award for Excellence in Research (Electronics) for 2011-12 and (Physics) for 2015–16. He has been felicitated by Commissioner of Higher Education, Gujarat for Academic Excellence in Higher Education in 2013 at Saurashtra University, Rajkot. On Campus, present responsibilities as Senate Member (Science Faculty), Coordinator CCDC (Career Counseling & Development Centre), Center for Excellence: Nanotechnology, UGC-DRS Phase III (121 Lacs project), DST-FIST Level II (198 Lacs project) and Department of Nanoscience (200 Lacs project), also Member, Board of Study Physics (Electronics) and Internal Quality Assurance Cell (IQAC), Saurashtra University, Rajkot. He is working on functional oxide materials such as mixed valent manganites, multiferroics, diluted magnetic semiconductors, high temperature superconductors and metal oxides. He has an expertise to work on polycrystalline bulk, nanostructures, thin films, devices, heterostructures, bilayers, multilayers and composites (powders and thin films) consists of various functional oxides. He has capability to work with various synthesis methods and fabrication techniques such as solid state reaction route, sol-gel method, co-precipitation, chemical solution deposition, pulsed laser deposition and RF/DC sputtering. He has proficiency to deal with the research on some special techniques such as swift heavy ion irradiation, low energy ion implantation and temperature-magnetic field dependent neutron diffraction. He has also an expertise to deal with materials research including gas sensors, solar cells, high energy radiation and bio-physics based activities. 09 Research Scholar have been Ph.D. Degree Awarded (02 from Engineering field and 01 from IT field) and 08 Research Scholars are working for Ph.D. under his guidance. 12 Students have been M.Phil. Degree Awarded under his guidance. He has published 135 international research articles in reputed journals and 36 national conference proceedings through various international and national events. He has also published 14 books under UGC unassigned Grant and published 5 Technical Articles in Magazines of Electronics Field. He Solar Cell. has published one patent on He has organized International/National/Conference/School/Workshop at Saurashtra University, Rajkot. He has delivered talks as expert in various government institutes and colleges. He was also coordinator in orientation programmes, refresher courses and short term courses at UGC: Human Resource development centre (HRDC), Saurashtra University, Rajkot. He has also delivered his talks in orientation programmes and refresher courses organized by UGC: HRDC, Saurashtra University, Rajkot. Minor/Major 06 research projects completed funded by UGC/GUJCOST and 03 major research project completed funded by DAE-BRNS, SERB and IUAC. He has been sanctioned for 02 major research projects as principal investigator and 04 major research projects as co-investigator. He is the member of Editorial Board in reputed 08 international journals. He has reviewed 37 articles for different 15 internationally reputed journals. He has strong research collaborations with Sfax University, Tunisia; UGC-DAE CSR, Indore; UGC-DAE CSR, Mumbai; IUAC, New Delhi; IPR, Gandhinagar; Central University of Rajasthan, Ajmer; UGC-DAE CSR, Kalpakkam.