

CURRICULUM VITAE

Name and Designation: Dr. Aniruddha Mondal, Associate Professor (Dept. of Physics)

Organization: National Institute of Technology, Durgapur, W.B., India



Communication Address:

Dr. Aniruddha Mondal
 Department of physics
 National Institute of Technology, Durgapur
 P.O.: R.E. College, Dist: Paschim Bardhaman,
 West Bengal, Pin: 713209, India
 Email id: aniruddhamo@gmail.com,
aniruddha.mondal@phy.nitdgp.ac.in
 Phone (Mobile) : +91 9434789024

Summary Sheet

Total Teaching and Research Experience after completion of Ph.D.: 12 Years

Sl. No	Achievements	Funding Agency	Quantity
1	Teaching and Research Experience as Associate Professor in NIT Durgapur (Dept. of Physics)		From October 2018 - To date
2	Teaching and Research Experience as Assistant Professor in NIT Durgapur (Dept. of Physics)		From October 2014- to October 2018
3	Teaching and Research Experience as Assistant Professor in NIT Agartala (Dept. Electronics & Communication Engg.)		4.5 Years
4	Project completed	AICTE, Department of Science & Technology, Govt of India, BRNS	4
5	Project ongoing	CSIR, DST(SERB), SPARC	3
6	Research Experience (Post Ph.D.)	IIT Kanpur, India	1.5 years
		Dongguk University, South Korea	0.5 years
7	International Journal Published (SCI/SCIE)		73
8	International Journal Communicated		3
9	International Conference		55
10	Ph. D Guided		12
11	Ph. D ongoing		4
12	Post Doctoral Fellow Guided		1
13	Post Doctoral Fellow ongoing		1
14	M. Tech Guided		16
15	M. Tech ongoing		1
16	M. Sc Guided		3
17	M. Sc ongoing		1
18	Invited Lectures	MNNIT Allahabad, NIT Manipur, Sarada University (Delhi) IIT(Delhi), NIT Nagaland, Jadavpur University, Optoelectronics factory Raipur	8
19	Workshop Organized	TEQIP-II	3
20	GIAN Organized		3

21	Short Term Course Organized		3
22	Patent Filed		3

Educational Qualification: (Bachelor to Doctoral): Degree, Year, Subject, Institute/University, Location, Remarks

SL.No.	Degree	Institution	Year
1.	Secondary	West Bengal Board of Secondary Education	1994
2.	Higher Secondary	West Bengal Board of Higher Secondary Education	1996
3.	B.Sc. Physics(H)	Calcutta University	2000
4.	M.Sc. Physics (Special: Electronics)	CSJM University, Kanpur	2002
5.	Ph.D. (Electronic Science)	Calcutta University (Department of Electronic Science)	2008

Professional Experience (last 5): Academic and Research

S. No.	Position and organization	Nature of Job	Period
1.	Post-Doctoral Fellow (Indian Institute Of Technology Kanpur, Dept.-Electrical Eng.) -----Principal Investigator -----Professor Utpal Das	Research (Fabrication of 128X128 array detector and growth, Characterization of SiC nano- dash)	From March 2008 to August 2009
2.	Research Professor/Assistant Professor (Millimeter-wave Innovation Technology Research Center (MINT), Dongguk University, Seoul 100-715) ----- Principal Investigator ----- Professor Jin-Koo Rhee	Research (Nano-wire Growth by Oblique angle Deposition for Solar Cell application and Design of InN HEMT)	From August 2009 to February 2010
3.	Assistant Professor (National Institute of Technology Agartala, Dept- Electronics and Communication Eng., Tripura – West, Pin-799055)	Teaching And Research	From April 2010 to October 2014
4.	Assistant Professor (National Institute of Technology Durgapur, Dept- Physics, West Bengal, Pin-713209)	Teaching And Research	From October 2014 to October 2018
5.	Associate Professor (National Institute of Technology Durgapur, Dept- Physics, West Bengal, Pin-713209)	Teaching And Research	From October 2018 to date

Awards and Distinctions: NA

Summary of research output (papers, patents, technology development):

List of Patents:

1. **Aniruddha Mondal (principal investigator)**, Jay Chandra Dhar, ChitralkhaNgangbam and KalyankumarChattaopadhyay, “An Axial SiOx-TiO2 Heterostructure Nanowire Array useful for Simultaneous Multi-band Detection” (Application Number: 448/KOL/2014, Publication date: 23/05/2014, Journal No. 21/2014), an Indian patent. (Further confirmation may be taken from Indian patent agent Mr. AmitavaChakraborty (IN/PA-1467)(M.No. 09681445270, e-mail: amitava268111@gmail.com)

2. **Aniruddha Mondal (principal investigator)**, Ajitabh Kumar Tiwari, “Fabrication of Zigzag TiO2 Detection” (Application Number: 756/KOL/2014), an Indian patent. (Further confirmation may be taken from Indian patent agent Mr. Amitava Chakraborty(IN/PA-1467)(M.No.09681445270, e-mail: amitava268111@gmail.com).

3. **Aniruddha Mondal (principal investigator)**, Monidipa Ghosh, Shyam Murli Manohar Dhar Dwivedi, Chiranjib Ghosh, Sagarika Deepthy, Rini Lahiri, “Amorphous Silicon Monoxide Based Nanowire Electrode Biosensor” (Application Number: TEMP/E-1/8348 /2019-KOL, Ref. No.: 201931007981).

Five major sponsored R&D projects completed/handled:

SL. No.	Title	Agency	Year	Duration	Amount(INR)
1.	Thermo-Chromic Variable Emittance Coating	ISRO	2022	2 Years (Ongoing)	21,78,000/-
2.	Titanium dioxide (TiO ₂)/VO ₂ NWs heterostructure as a stable optical switch	DST-SERB	2021	3 Years (Ongoing)	49,19,992/-
3.	Universal advanced low-cost nano-hybrid platform for air pollution, water, and bio-fluids (Principal Investigator)	SPARC (IIT KGP)	2019	02 years (Ongoing)	58,46,065/-
4.	Evaluation of the role of Vitamin D in obesity, cardiovascular diseases, and diabetes using SiO _x /TiO ₂ nanowire-based sensor (Principal Investigator)	DST (SERB)	2017	3 years (Completed)	48,64,174/-
5.	A unique technique for Synthesis of InN Nano-Wire assembly for the application of optical sensor (Principal Investigator)	DAE	2016	3 years (Completed)	33,23,900/-
6.	To develop and fabricate an efficient TiO ₂ nanowire array-based UV detector using plasmonic nanoparticles array (Principal Investigator)	CSIR	2016	3 years (Ongoing)	~ 17,00,000/-
7.	Synthesis of In ₂ O ₃ Nano-Wire assembly and UV detector (Principal Investigator)	DST (SERB)	2012	3 years (Completed)	53,96,000/-
8.	High-Efficiency In ₂ O ₃ /Si Nano-wire based heterojunction solar cell (Principal Investigator)	AICTE	2011	2 years (Completed)	15,30,000/-
9.	Modernization of Computer Laboratory	AICTE	2011	1 Year (Completed)	15,00,000/-

PhD Thesis Supervised:

No.	Name of student/ research scholar	Title of Thesis	Doctorate	Year of Completion	Co-guide (If any)
1.	P Chinnamuthu	Synthesis of Metal and Metal Oxide Nano-Wires and Its Characterization	Doctorate	2013	No
2.	Aparna Ganguly	Plasmonic based optoelectronic devices	Doctorate	2015	Yes
3.	Jay Chandra Dhar	SiO _x /TiO ₂ heterostructure nanowire based Optoelectronic devices	Doctorate	2016	No
4.	Naorem Khelchand Singh	SiO _x /In ₂ O ₃ nanowire based Photo-detector	Doctorate	2016	No
5.	Subhro Chakrabarty	TiO ₂ nanoparticle based UV detector	Doctorate	2016	Yes
6.	Mitra Barun Sarkar	Indium doped TiO ₂ thin film and its photocatalytic properties	Doctorate	2018	Yes
7.	Bijit Choudhuri	Studies on glancing angle synthesized low dimensional TiO ₂ and its heterostructures based optical detector	Doctorate	2017	Yes
8.	Chitralkha Ngangbam	Ag nanoparticle dispersed in TiO ₂ nanowire based UV-Vis detector	Doctorate	2018	Yes
9.	Rini Lahiri	Studies on Optoelectronic and Electronic Performance of Glancing Angle Deposited Low Dimensional Erbium Doped TiO ₂ Material	Doctorate	2019	No
10.	Anupam Ghosh	Low dimensional thin film and its porous structure for optoelectronic device application	Doctorate	2020	No

11.	Shyam Murli Manohar Dhar Dwivedi	A unique technique of InN nanowire for optical sensor application	Doctorate	2021	No
12.	Avijit Dalal	Mg doped TiO ₂ Nanostructures on GaAs and Si Substrate for the application of MOS Devices, Deep UV Photodetectors and Breath Sensor for Health Monitoring	Doctorate	On-going	No
13.	Sanjib Mondal	Fabrication of Erbium doped TiO ₂ Thin Film and Its Nanostructures for the application of UV Photodetectors and Gas Sensors for the purpose of Environmental Monitoring.	Doctorate	On-going	No
14.	Ankita Chaudhuri	GaO ₂ based UV detector	Doctorate	On-going	No
15.	Iman Biswas	Low-cost, Perovskite-based optoelectronic devices for photo-sensing applications	Doctorate	On-going	No

Any other relevant information:

Reviewer:

- Electronic Device Letter (IEEE), Physica E (Elsevier), Materials Science and Engineering: B (Elsevier), Material Letters (Elsevier), Journal of Applied Physics, Journal of Alloys and Compounds, Plasmonics, Journal of Electronic Material etc.

Workshop/ GIAN Course Organized:

1. “Molecular Beam Epitaxy (MBE) Technology in the Field of Material Synthesis and Device Fabrication” a Course With 5 Days Duration Funded By Global Initiative Network (GIAN), 2016.
2. “Development of Microstructure and Nanostructure by Physical Vapour Deposition for the application of Optoelectronic Device” a Course with 5 Days Duration Funded by Global Initiative Network (GIAN), 2018.
3. “Smart Materials and its Applications in Engineering” a Course with 5 Days Duration Funded by TEQIP, 2018.
4. “Polymers and hybrid composites for the application in electronic and photonic devices”, a Course with 5 Days Duration Funded by Global Initiative Network (GIAN), 2018.

Invited Lecture:

1. “Fascinating GLAD Technique for hetero nanowire and nanowire fabrication aimed at optoelectronic devices” **Indian Institute of Technology Delhi, 30-31st March 2018.**
2. “National conference on recent development in nanoscience & nanotechnology”, at **Jadavpur University, 29th January 2019.**
3. Visit **Opto Electronics Factory, Raipur, Dehradun, 25-28th November 2018.**
4. National level workshop on recent trends in nanoelectronics”, at **National Institute of Technology Nagaland 26-28th April 2018.**

Academic visit: Nottingham university, Department of applied physics and astronomy, UK. (2016).

Seventy-Seven plus Journal and Fifty-Six conference publications out of which last five year publications are listed Below:

Book Chapter:

1. Anupam Ghosh, Shyam Murli Manohar Dhar Dwivedi, **Aniruddha Mondal**, “Trap-Assisted Enlarged Photoresponsivity of Er-doped In₂O₃ Thin Films”, **Optical and Wireless Technologies**, LNEE, volume 546, 57-64, | April 2019.

Journal:

2005

1. S. Dhar, N. Halder, **A. Mondal**, Bhavtosh Bansal, and B. M. Arora ‘Detailed studies on the origin of nitrogen-related electron traps in dilute GaAs layers grown by liquid phase epitaxy’ **Semiconductor Science and Technology**, **20**, pp.1168-1172 (2005). **(I.F. 2.28)**

2006

2. **A. Mondal**, T.D Das, N. Halder, S. Dhar and J. Kumar ‘Growth of dilute GaSbN layers by liquid-phase epitaxy’ **Journal of Crystal Growth**, **297**, pp.4-6 (2006) **(I.F. 1.74)**

2007

3. S. Dhar, N. Halder and **A. Mondal** ‘Investigation of Deep Level Traps in Dilute GaAsN Layers Grown by Liquid Phase Epitaxy’ **Thin solid films** **515**, pp.4427-4429 (2007) **(I.F. 1.86)**

2008

4. S. Dhar, **A. Mondal**, T.D Das ‘Hall mobility and electron trap density in GaAsN grown by liquid phase epitaxy’ **Semiconductor Science and Technology**, **23**, 254182 (2008). **(I.F.2.28)**

2009

5. **Aniruddha Mondal** and Utpal Das ‘Optical quality SiC nano-structures by spin-on technique and anneal on Si’ **J. Phys. D: Appl. Phys.** **42**, 234002 (2009). (I.F. 2.37)

2010

6. **Aniruddha Mondal**, Mi-Ra Kim, Yeon-SikChae and Jin-Koo Rhee, Sunanda Dhar and TusharDhabal Das ‘Optical Absorption Studies of GaSbN Grown by Using Liquid Phase Epitaxy’ **Journal of the Korean Physical Society**, Vol. **56**, No. **4**, April 2010, 1167-1171 (I.F. 0.4)

2011

7. **Aniruddha Mondal** and Paul Samy Chinnamuthu ‘Synthesis of indium nanowires by oblique angle deposition’ **Journal of Nanophotonics**, **5**, 053522 (2011), DOI:10.1117/1.3630050. (I.F.1.44)

2012

8. P Chinnamuthu, J C Dhar, **A Mondal**, A Bhattacharyya and N K Singh ‘Ultraviolet Detection using TiO₂ Nanowire Array with Ag Schottky Contacts’ **J. Phys. D: Appl. Phys.** **45**, 135102 (5pp), (2012). (I.F. 2.37)
9. P Chinnamuthu, **A Mondal**, N K Singh, J C Dhar, S K Das, K K Chattopadhyay ‘Structural and optical properties of glancing angle deposited TiO₂ nanowires array’ **J. Nanoscience and Nanotechnology.** **12**, 6445 (2012). (I.F. 1.35)
10. P Chinnamuthu, **A Mondal**, N K Singh, J C Dhar, K K Chattopadhyay, Sekhar Bhattacharya, ‘Band gap enhancement of glancing angle deposited TiO₂ nanowire array’ **J. Appl. Phys.**, **112**, 054315 (2012). (I.F. 2.17)
11. **A Mondal**, N K Singh, P Chinnamuthu, J C Dhar, and A Bhattacharyya , ‘Enlarged photodetection using SiOx nanowire array’ , **IEEE Photonics Technology Letters**, **24**, 2020-23 (2012). (I.F. 2.44)

2013

12. **A Mondal**, N K Singh, P Chinnamuthu, J C Dhar, T D Das and P K Bose, ‘Ordered SiOx nanowire array and its optical properties’ **Applied Physics A**, **110**, 479-485 (2013). (I.F. 1.69)
13. **A Mondal**, J C Dhar, P Chinnamuthu, N K Singh, K K Chattopadhyay, S K Das, S Ch Das, A Bhattacharyya and P K Bose, ‘Electrical properties of vertically oriented TiO₂ nanowire arrays synthesized by Glancing Angle Deposition Technique’ **Electronics Materials Letter**, **9**, 213-217 (2013). (I.F. 2.9)
14. A Ganguly, **A Mondal**, J C Dhar, P Chinnamuthu, N K Singh, S Choudhury and K K Chattopadhyay, ‘Enhanced visible light absorption by TiO₂ film patterned with glancing angle deposited Ag nanoparticles arrays’, **Physica E** **54**, 326-330 (2013). (I.F. 2.39)
15. J C Dhar, **A Mondal**, N K Singh and K K Chattopadhyay, “Enhanced photoemission from glancing angle deposited SiOx-TiO₂ axial heterostructure nanowire arrays” **J. Appl. Phys.**,**113**, 174304 (2013). (I.F. 2.17)
16. **A Mondal**, B Shougaijam, T Goswami, J C Dhar, N K Singh, S Choudhury and K K Chattopadhyay, “Structural and optical properties of glancing angle deposited In₂O₃ columnar arrays and Si/In₂O₃ photodetector”, **Applied Physics A** **115** (1) 353-358 (July 2013). (I.F. 1.69)
17. B. Choudhuri, **A. Mondal**, J. C. Dhar, N. K. Singh, T. Goswami, and K. K. Chattopadhyay, “Enhanced photocurrent from generated photothermal heat in Indium nanoparticles embedded TiO₂ film”, **Applied Physics Letters**, **102**, 233108 (2013). (I.F. 3.49)
18. Jay Chandra Dhar, **Aniruddha Mondal**, Naorem Khelchand Singh, P Chinnamuthu “Low Leakage TiO₂ Nanowire dielectric MOS device Using Ag Schottky Gate Contact” **IEEE Transactions on Nanotechnology (TNANO)**, **12**, issue6, pp. 948-950 (2013). (I.F. 2.49)
19. J C Dhar, **A Mondal**, N K Singh, S. Chakrabarty, K K Chattopadhyay, and A Bhattacharyya “Effect of annealing on SiOx-TiO₂ axial heterostructure nanowires and improved photodetection”, **Journal of Applied Physics**, **114**, 244310 (2013). (I.F. 2.17)

2014

20. N. K. Singh, **A. Mondal**, J. C. Dhar, Shubhro, K. K. Chattopadhyay, and A. Bhattacharyya “Improved photo detection from the annealed SiO_x-In₂O₃ axial heterostructure nanocolumns” **J. Phys. D: Appl. Phys.**, Volume **47** pp. 105106, 2014. (I.F. 2.37)
21. Naorem Khelchand Singh, Bijit Choudhuri, **Aniruddha Mondal**, Jay Chandra Dhar, Tamal Goswami, Saptadip Saha, Chitralekha Ngangbam, “2D Like Photonic Crystal Using In₂O₃-SiOx Heterostructure Nanocolumn Arrays and Humidity Sensing” **Electronic Materials Letters**, **10** (5), 975-980, 2014. (I.F. 2.9)
22. **A Mondal**, K bhowmik J. C. Dhar, N. K. Singh, T. Goswami, “TiO₂ embedded Si nanowire (NW) network based Schottky detector for enlarged light detection”, **J. Nanoscience and Nanotechnology**, Vol. **14** Number **7**, 5390-5394, 2014. (I.F. 1.35)
23. A Ganguly, **A Mondal**, B Choudhuri, T Goswami and K. K. Chattopadhyay, “Ag nanoparticles patterned TiO₂ thin film plasmonic detector for enlarged light detection” **Advanced Science, Engineering and Medicine**, **6**, 797-801, 2014.
24. Shubhro Chakrabarty, **Aniruddha Mondal**, MitraBarun Sarkar, Bijit Choudhuri, Apu Kumar Saha and Anirban Bhattacharyya, “TiO₂ nanoparticles arrays ultraviolet-A detector with Au Schottky contact” **IEEE Photonics Technology Letters**, **26** , Issue: 11 1065 – 1068, 2014. (I.F. 2.44)

25. Mitra Barun Sarkar, **Aniruddha Mondal**, Bijit Choudhuri, Bikram Kishore Mahajan, Shubhro Chakrabarty and Chitralakha Ngangbam, "Enlarged broad band photodetection using Indium doped TiO₂ alloy thin film" **Journal of Alloys and Compounds**, Vol. 615, 440–445, 2014. (I.F. 3.77)
26. B. Choudhuri, **A. Mondal**, A. Ganguly, A. K. Saha, K. K. Chattopadhyay, "Glancing angle synthesized Indium nanoparticles covered TiO₂ thin film and its structural, optoelectronic properties," **Applied Physics A** 118 (1), 373-379, 2015. (I.F. 1.69)

After Joining NIT Durgapur:

27. **A. Mondal**, B. Mahajan, Bijit Choudhuri, A. K. Tiwari, S. Chakraborty, K. K. Chattopadhyay, "SiO_x Nanodots as "green gap" solution". (Accepted for publication in **Journal of Nanophotonics**, 8(1), 083069, 2014. (I.F. 1.44)
28. **Aniruddha Mondal**, Aparna Ganguly, Amal Das, Bijit Choudhuri, Rajesh Kumar Yadav, "The Ag Nanoparticles/TiO₂ thin film device for enhanced photoconduction and role of traps" **Plasmonics** 10 (3), 667-673 2015. (I.F. 2.36)

2015

29. Naorem Khelchand Singh and **Aniruddha Mondal**, "High internal gain axial SiO_x-In_{2-x}O_{3-y}/Au heterostructure nanocolumnar array based schottky detector for broad band recognition" **J. Nanoscience and Nanotechnology** 15 (8), 6098-6102. (I.F. 1.35)
30. Chitralakha Ngangbam, **Aniruddha Mondal**, Bijit Choudhuri, "Efficient photon management with Ag nanoparticles coated TiO₂ nanowire clusters for photodetector application" **Electronic Materials Letter**, September 2015, Volume 11, Issue 5, pp 758-763. (I.F. 2.9)
31. A.K. Tiwari, **A. Mondal**, B.K. Mahajan, B. Choudhuri, T. Goswami, M.B. Sarkar, S. Chakrabarty, C. Ngangbam and S. Saha, "Improved photo detection using Zigzag TiO₂ nanostructure as an active medium" **J. Nanoscience and Nanotechnology** 15 (7), 5099-5104. (I.F. 1.35)
32. J C Dhar, **A Mondal**, S Bhattacharya, N K Singh, C Ngangbam and K K Chattopadhyay "Band Gap Tailoring of GLAD Synthesized TiO₂ Nanowires by Nitrogen Doping under N₂/Ar Plasma Environment" **Journal of Nanoscience and Nanotechnology** Vol. 15 (5), 3951-3955, 2014. (I.F. 1.35)
33. K Bhowmik, **A Mondal**, "Si NW network by Ag nanoparticle assisted etching and TiO₂/Si NWs as photodetector" **Electron. Mater. Lett** 11 (2), 187-193, 2015. (I.F. 2.9)
34. P Chinnamuthu, **A Mondal**, JC Dhar, NK Singh, "Visible light detection using glancing angle deposited TiO₂ nanowire arrays," **Japanese Journal of Applied Physics** 54 (6S1), 06FJ01. (I.F. 1.12)
35. Tamal Goswami, **Aniruddha Mondal**, Pankaj Singh and Bijit Choudhuri, "In_{2-x}O_{3-y} 1D Perpendicular Nanostructure Arrays as Ultraviolet Detector" **Solid State Science** 48, 56-60 (2015). (I.F. 1.9)

2016

36. Saptadip Saha, **Aniruddha Mondal**, Tamal Goswami, Bijit Choudhuri, Mitra Barun Sarkar, Ajitabh Kumar Tiwari, Kalyan Kumar Chattopadhyay, "TiO₂ nanowires/ PMMA based hybrid photodetector: improved light detection" **Nanotechnology Journal of Nanoscience and Nanotechnology** 16 (3), 2737-2741. (I.F. 1.35)
37. S. Chakrabarty, **A. Mondal**, P.Chakrabarti, S.K. Singh, A. K.Saha and P. Singh, "Synthesis of biocompatible TiO₂ nanodots: Glancing angle deposition technique" **Journal of Nanoscience and Nanotechnology** 16 (8), 8705-8710, 2016. (I.F. 1.35)
38. Bijit Choudhuri, **Aniruddha Mondal**, Ardhendu Saha, "Enhanced photodetection from TiO₂-SiO_x-TiO₂ N-I-N Schottky device" **Journal of Electronic Material** 45 (8), 4208-4214. (I.F. 1.6)
39. Mitra Barun Sarkar, **Aniruddha Mondal**, Bijit Choudhuri, "Presence of capacitive memory in Indium doped TiO₂ alloy thin film" **Journal of Alloys and Compounds**, Volume 654, 5 January 2016, Pages 529–533. (I.F. 4.17)
40. S. Chakrabarty, **A. Mondal**, and A.K.Saha, "Effect of Annealing on Optical, Electrical and Charge Trapping Properties of TiO₂ Nanoparticles Arrays" **Journal of Nanoscience and Nanotechnology** 17 (2), 1300-1306, 2017. (I.F. 1.35)
41. S. Chakrabarty, **A. Mondal**, and A.K.Saha, "Retention of charge in TiO₂ NPs/ SiO_x TF system" **Advanced Science Letters** 22(1):141-144(4). 2016.
42. J.C Dhar, **A. Mondal**, "Nitrogen Doped TiO₂ Nanowires Based Schottky Detector: High Internal Gain" **Advanced Science Letters** 22(1):226-228(3). 2016

2017

43. Noor alhuda Al Saqri, **Aniruddha Mondal**, Jorlandio Francisco Felix, Yara Galvão Gobato, Vanessa Orsi Gordo, Hind Albalawi, Dler Jameel, Haifa Alghamdi, Faisal Al Mashary, David Taylor, Mohamed Henini "Investigation of deep level defects in indium doped TiO₂ thin films using electrical and optical techniques" **Journal of Alloys and Compounds** 698, 883-891, 2017. (I.F. 4.17)

44. Anupam Ghosh, **Aniruddha Mondal**, Avishek Das, Sanatan Chattopadhyay, Kalyan Kumar Chattopadhyay “Removal of oxygen related defects from chemically synthesized In₂O₃ thin film doped with Er by spin-on technique “ **Journal of Alloys and Compounds**, 695, 1260-1265, **2017**. (I.F. 4.17)
45. R. Lahiri, A. Ghosh, S.M.M. Dhar Dwivedi, S. Chakrabartty, P. Chinnamuthu, **A. Mondal**, 'Performance of Erbium doped TiO₂ thin film grown by physical vapour deposition technique', **Applied Physics A** 123 (9), 573, (2017) (I.F. 1.8)
46. B. Choudhuri, **A. Mondal**, S. M. M. D. Dwivedi, M. Henini, Fabrication of novel transparent Co₃O₄-TiO₂ nanowires p-n heterojunction diodes for multiband photodetection applications, **Journal of Alloys and Compounds** 712, 7-14, (2017). (I.F. 4.17)
47. Shyam Murli Manohar Dhar Dwivedi Shubhro Chakrabartty, Satyaban Bhunia, Subhananda Chakrabarti, Hemant Ghadi, Punam Murkute, Vinayak Chavan, **Aniruddha Mondal**, “Pine shaped InN nanostructure growth via vapour transport method by own shadowing and infrared detection”, **Journal of Alloys and Compounds**, 722, 872-877, (2017). (I.F. 4.17)

2018

48. Anupam Ghosh, Shyam Murli Manohar Dhar Dwivedi, Shubhro Chakrabartty, Mohamed Henini and **Aniruddha Mondal**, “Detailed investigation of defect states in Erbium doped In₂O₃ thin film”; **Materials Research Bulletin** 99, 211-218, (2018). (I.F. 4.09)
49. Anupam Ghosh, Shyam Murli Manohar Dhar Dwivedi, Hemant Ghadi, Paulsamy Chinnamuthu, Subhananda Chakrabarti and **Aniruddha Mondal**, “Boosted UV sensitivity of Er doped In₂O₃ thin films using plasmonic Ag nanoparticle based surface texturing”; **Plasmonics** 13 (3), 1105-1113, (2018). (I.F. 2.36)
50. Mitra Barun Sarkar, Bijit Choudhuri, P Bhattacharya, RN Barman, A Ghosh, SMM Dwivedi, S Chakrabartty and **Aniruddha Mondal**, “Improved UV Photodetection By Indium Doped TiO₂ Thin Film Based Photodetector”; **J. Nanoscience and Nanotechnology**, 18 (7), 4898-4903, (2018). (I.F. 1.35)
51. Chitralakha Ngangbam, Naorem Khelchand Singh, **Aniruddha Mondal**, “Effect of Ag Doping on the Glancing Angle Deposition Synthesized TiO₂ Nanowire for Enlarged Photodetection”; **J. Nanoscience and Nanotechnology**, 18 (7), 5059-5062, (2018). (I.F. 1.35)
52. Rini Lahiri, Anupam Ghosh, Bijit Choudhuri and **Aniruddha Mondal**, “Investigation on improved performance of Erbium doped TiO₂ nanowire based UV detector”; **Mater. Res. Bull.**, 103, 259-267, (2018). (I.F. 4.09)
53. Hemant Ghadi, Punam Murkute, Anupam Ghosh, Shyam Murli Manohar Dhar Dwivedi, **Aniruddha Mondal**, Subhananda Chakrabarti, “Ultrasensitive zinc magnesium oxide nanorods based micro-sensor platform for UV detection and light trapping”; **Sens. and Actuators A: Physical**, 278, 127-139, (2018). (I.F. 2.53)
54. Shyam Murli Manohar Dhar Dwivedi, Anupam Ghosh, Hemant Ghadi, Punam Murkute, Chinnamuthu Paulsamy, Shubhro Chakrabartty, Subhananda Chakrabarti, Satyaban Bhunia, **Aniruddha Mondal**, “Self shadowing InN quantum dots array on Si substrate as infrared detector”; **J. Alloys and Compounds** 766, 297-304 (2018). (I.F. 3.77)
55. Rini Lahiri and **Aniruddha Mondal**, “Superior Memory of Er doped TiO₂ Nanowire MOS Capacitor” **IEEE Electronic Device Letters** 39 (12), 1856-1859 (2018). (I.F. 3.44)
56. Rini Lahiri, Anupam Ghosh, Bijit Choudhuri, **Aniruddha Mondal**, “Investigation on improved performance of Erbium doped TiO₂ nanowire based UV detector”, **Materials Research Bulletin**, 103, 259-267, 2018. I.F. 4.09
57. Sanjib Mondal, Anupam Ghosh, M Rizzo Piton, Joaquim P Gomes, Jorlandio F Felix, Y Galvão Gobato, HV Avanço Galeti, B Choudhuri, SMM Dhar Dwivedi, M Henini, **Aniruddha Mondal**, “Investigation of optical and electrical properties of erbium-doped TiO₂ thin films for photodetector applications”, **Journal of Materials Science: Materials in Electronics**, 29, 19588-19600, 2018. I.F. 2.19

2019

58. Rini Lahiri, **Aniruddha Mondal**, “Improved capacitive memory of Er:TiO₂ TF based MOS device”, **Journal of Alloys and Compounds**, 792, 679-683, 2019. I.F. 4.17
59. Anupam Ghosh, Prakhar Kannoje, **Aniruddha Mondal**, “Ultraviolet detection by Cr doped In₂O₃ TF”, **IET Optoelectronics**, doi: 10.1049/iet-opt.2018.5018, 2019.
60. Anupam Ghosh, Kundan Kumar, Shyam Murli Manohar Dhar Dwivedi, Chiranjib Ghosh, Sushama Sushama, Punam Murkute, Hemant Ghadi, Subhananda Chakrabarti and **Aniruddha Mondal**, “Bipolar analog memristive switching of In₂O₃ using Al nanoparticles”, **Journal of nanoscience and nanotechnology** 19 (12), 8126-8134, (2019).
61. Md Jawaid Alam, Punam Murkute, Hemant Ghadi, Sushama Sushama, Shyam Murli Manohar Dhar Dwivedi, Anupam Ghosh, Chiranjib Ghosh, **Aniruddha Mondal**, Subhananda Chakrabarti “Enhancement of photocurrent and responsivity of

Zn_{1-x}Mg_xO (x= 15%)-based ultraviolet detector by UV-ozone treatment” 10919, 109192L, **International Society for Optics and Photonics, 2019**

62. Shyam Murli Manohar Dhar Dwivedi, Avijit Dalal, Anupam Ghosh, Punam Murkute, Hemant Ghadi, Chiranjib Ghosh, Subhananda Chakrabarti, Satyaban Bhunia and **Aniruddha Mondal** “InN nanowires based Near-Infrared broadband optical detector” **IEEE Photonics Technology Letters**, Vol. 31 , Issue: 18 , 2019 . **I.F. 2.6**
63. Chiranjib Ghosh, Shyam Murli Manohar Dhar Dwivedi, Anupam Ghosh, Avijit Dalal and **Aniruddha Mondal**, “A novel Ag nanoparticles/TiO₂ nanowires-based photodetector and glucose concentration detection”, **Applied Physics A** , 125 (12), 810, 2019. **I.F. 1.8**

2020

64. Bikram Kishore Mahajan, Bijit Choudhuri, Debkalpa Goswami, Ajitabh Kumar Tiwari, Mitra Barun Sarkar, **Aniruddha Mondal** “Enhanced Photodetection with Crystalline Si Nanoclusters” *Journal of nanoscience and nanotechnology*, Vol. 20 , Issue: 04 , 2020.
65. B Choudhuri, **A Mondal**, Group III—Nitrides and Other Semiconductors for Terahertz Detector, “Emerging Trends in Terahertz Solid-State Physics and Devices”, 189-203, **DOI:** https://doi.org/10.1007/978-981-15-3235-1_12.
66. Md Jawaid Alam, Punam Murkute, Hemant Ghadi, Sushama Sushama, Shyam Murli Manohar Dhar Dwivedi, Anupam Ghosh, Chiranjib Ghosh, **Aniruddha Mondal**, Sritoma Paul, Shubham Mondal, Subhananda Chakrabarti, “Enhancing responsivity and detectivity in broadband UV–VIS photodetector by ex-situ UV–ozone annealing technique”, **Superlattices and Microstructures**, 137, 106333, 2020., **I.F. 2.1**
67. Shyam Murli Manohar Dhar Dwivedi, Anupam Ghosh, Sagarika Deepthy, Moumita Maji, Rini lahiri, Sanjib Mondal, Chiranjib Ghosh, Avijit Dalal, **Aniruddha Mondal** and Monidipa Ghosh, “Detection technique for vitamin D₃ using Er-doped TiO₂ nanowire-based UV photodetector”, 14(4), 046001, **Journal of Nanophotonics, 2020. DOI:** 10.1117/1.JNP.14.046001. **I.F. 1.415**
68. Anupam Ghosh, Rini Lahiri, Shyam Murli Manohar Dhar Dwivedi, and **Aniruddha Mondal**, “Experimental and theoretical study of capacitive memory of metal-oxide-semiconductor devices based on Er-doped In₂O₃ nano-column arrays”, 128 (9), 095704, **J. Appl. Phys., 2020. DOI:** 10.1063/5.0013904, I.F. 2.328.

2021

69. Sanjib Mondal, Chiranjib Ghosh, S. M. M. Dhar Dwivedi, Anupam Ghosh, Sushama Sushama, Subhananda Chakrabarti, and **Aniruddha Mondal**, “An experimental and theoretical understanding of a UV Photodetector based on Ag nanoparticles decorated Er-doped TiO₂ thin film”, 47(10), 14879-91, **Ceramics International**, 2021, DOI: 10.1016/j.ceramint.2020.07.311, **I.F. 3.83**.
70. Avijit Dalal, Shyam Murli Manohar Dhar Dwivedi, Chiranjib Ghosh, Rini Lahiri, Mohamed Henini, Aniruddha Mondal, “Mg: TiO₂ alloy thin films based MOS capacitors grown on GaAs substrates”, 868, 159178, 2021, **Journal of Alloy and Compounds**, I.F 4.65
71. AD Paul, S Biswas, P Das, HJ Edwards, A Dalal, S Maji, VR Dhanak, A Mondal, R Mahapatra, “Improved resistive switching characteristics of Ag/Al: HfO_x/ITO/PET ReRAM for flexible electronics application”, 36(6), 065006, 2021, **Semiconductor Science and Technology**, I.F. 2.654
72. Adyasha Samal, Annu Kumar Lakshya, Shyam Murli Manohar Dhar Dwivedi, Avijit Dalal, Anupam Ghosh, Argha Deep Paul, Rajat Mahapatra, Rajeev Kumar Gupta, Mohammed Adnan Hasan, Arjun Dey, Aniruddha Mondal, “Stable and reversible phase change performance of TiO₂ coated VO₂ nano-columns: Experiments and theoretical analysis”, 47(10), 14741-14749, 2021, **Ceramics International**, **I.F. 3.83**.
73. Sanjib Mondal, Anupam Ghosh, Shyam Murli Manohar Dhar Dwivedi, Avijit Dalal, Aniruddha Mondal, “Detailed experimental and theoretical analysis of the high-temperature current conduction properties of Er-doped TiO₂ thin film based diodes”, 130, 105834, 2021, **Materials Science in Semiconductor Processing**, I.F. 2.82.
74. Ankita Choudhury, Avijit Dalal, Shyam Murli Manohar Dhar Dwivedi, Anupam Ghosh, Nilanjan Halder, Soumik Das, Aniruddha Mondal, “Vapour transport grown photosensitive GeO₂ thin film”, 111397, 2021, **Materials Research Bulletin**, I.F 4.019
75. Mohammed Adnan Hasan, Shubham Chavan, Sangram Keshari Sahoo, B. Yougandar, N. Sridhara, A. Rajendra, Avijit Dalal, Aniruddha Mondal and Arjun Dey, “Studies of structural, thermo-optical and reversible phase transition in V₂O₅ (major phase) amorphous thin films: thorough argument in the perspective of nature of its crystal structures”, *Surface and Interface Analysis*, 2021 (**Communicated**)

76. Ankita Bebartha, Sadhna Singh , Avijit Dalal, Dip Prakash Samajdar, Aniruddha Mondal, “Improved Performance of TiO₂/InN NWs Solar Cells with Combine Anti-reflection Coating of Nanowires and Plasmonic Nanoparticles” Optical Materials, 2021 (**Communicated**).

Conference Presentations

1. S. Dhar, N. Halder, **A. Mondal**, ‘Nitrogen – related deep levels in dilute III-V Nitrides grown by Liquid Phase Epitaxy’, **Seventh International Conference on Optoelectronics, Fiber Optics and Photonics (PHOTONICS-2004)**, Kochin University, Kochi, India (2004).
 2. S. Dhar, **A. Mondal**, N. Halder, ‘Er gettering of impurities in GaSb layers grown by Liquid Phase Epitaxy’, **Seventh International Conference on Optoelectronics, Fiber Optics and Photonics (PHOTONICS-2004)**, Kochin University, Kochi, India (2004).
 3. S. Dhar, N. Halder and **A. Mondal**, ‘Investigation of deep level traps in dilute GaAsN layers grown by Liquid Phase Epitaxy’, **3rd International Conference on Materials for Advanced Technologies (ICMAT-2005)**, Singapore (3-8 July, 2005).
 4. **A. Modal**, N. Halder, and S. Dhar, ‘Growth and characterization of dilute GaSbN and InGaAsSbN layers’, **International Conference on Electronic and Photonic Materials, Devices and Systems (EPMDS-2006)**, Kolkata (2006)
 5. N. Halder, **A. Mondal**, and S. Dhar, ‘Characteristics of dilute GaAsN layers grown by liquid phase epitaxy’, **International Conference on Electronic and Photonic Materials, Devices and Systems (EPMDS-2006)**, Kolkata (2006).
 6. **A. Mondal**, T. D. Das, and S. Dhar, ‘Band gap reduction in dilute GaSbN layers, grown by liquid phase epitaxy’, **8th International Conference on Optoelectronics, Fiber Optics and Photonics (PHOTONICS-2006)**, Hyderabad, India (2006).
 7. **A. Mondal**, T. D. Das, and S. Dhar, ‘Characteristics of dilute GaSbN layers, grown by liquid phase epitaxy’, **International conference on computers and Devices and communication (CODEC-06)**, Kolkata, India (2006).
 8. S.Dhar, **A. Mondal** and T.D.Das, ‘Characteristics of dilute GaSbN and InGaAsSbN layers grown by liquid phase epitaxy’, **International Conference on Materials for Advanced Technologies, ICMAT 2007, SINGAPORE** (2007).
 9. S. Dhar, **A. Mondal** and T. D. Das, ‘Transport properties of GaAsN layers grown by liquid phase epitaxy’, **International Conference on Materials for Advanced Technologies ICMAT 2007, SINGAPORE** (2007).
 10. T. D. Das, **A. Mondal** and S. Dhar, ‘Physical and electrical properties of of dilute GaAsN and InAsN layers grown by liquid phase epitaxy’ **IWPDS- 2007, IITB, India.**
 11. S. Dhar, T. D. Das, **A. Mondal** and N. Halder ‘Novel LPE technology for the Growth of Dilute III-V-nitride materials’ **Proceedings of the national workshop on Advanced Optoelectronic Materials and Devices (AOMD-2007)**.
 12. **A. Mondal**, Nilesh Jadav, and Utpal Das “Formation of SiC nanostructures on Si surface using C60 by spinning technique.” **Proceedings of the national workshop on Advanced Optoelectronic Materials and Devices (AOMD-2008) (Oral presentation)**.
- 2010
13. **Aniruddha Mondal**, Aparna Ganguly, Manik Bhowmik, ‘Growth of Vertical Indium Nanorods and Whisker on Si by Template Free Oblique Angle Deposition’, **Nano Thailand 2010, Thailand Nov. 18th, 2010.**
- 2011
14. P Chinnamuthu, **Aniruddha Mondal**, Naorem Khelchand Singh and Jay Chandra Dhar, ‘Band gap tailoring of TiO₂ nanowires’, **International Conference on Nanotechnology and Biosensors (ICNB)-2, A.P, India, Dec. 28th 2011.**
- 2012

15. P Chinnamuthu, **Aniruddha Mondal**, K. K. Chattopadhyay ‘Band gap engineering of TiO₂ nanowire using GLAD’, **International Conference and workshop on Nanostructured Ceramics and other nanomaterials (ICWNCN), Delhi, India, March 13-16 , 2012.**
 16. **Aniruddha Mondal**, Jay Chandra Dhar, P Chinnamuthu, Naorem Khelchand Singh, ‘Advantage of Schottky-gate, TiO₂ Nanowire Dielectric for MOS Device’, **International Conference for young Researchers and advanced Materials (ICYRAM) 12, Singapore, 1-6 July,2012 (Oral presentation).**
 17. Naorem Khlechand Singh, **Aniruddha Mondal**, Jay Chandra Dhar, P Chinnamuthu, Swarup Paul, ‘Enhanced Light Absorption Using GLAD Synthesized Si/SiO_x Core-Shell Nanowires’, **International Conference for young Researchers and advanced Materials (ICYRAM) 12, Singapore, 1-6 July,2012 (Poster presentation).**
 18. P Chinnamuthu, Jay Chandra Dhar, Naorem Khelchand Singh and **Aniruddha Mondal**, ‘TiO₂ nanowire array based detector using GLAD,’ **International Conference on Nanotechnology (NANOCON) -2012, Pune, India on 18 – 19 October 2012. (oral presentation).**
 19. Jay Chandra Dhar, P Chinnamuthu, Naorem Khelchand Singh and **Aniruddha Mondal** ‘Low Leakage TiO₂ Nanowire dielectric MOS device Using Ag Schottky Gate Contact’, **International Conference on Nanotechnology (NANOCON) - 2012, Pune, India on 18 – 19th October 2012. (Oral presentation).**
 20. Naorem Khelchand Singh, Jay Chandra Dhar, P Chinnamuthu and **Aniruddha Mondal**, ‘SiO_x nanowire (NW) based Photodetector’, **International Conference on Nanotechnology (NANOCON)-2012, Pune, India on 18 – 19th October 2012. (Oral presentation).**
 21. P Chinnamuthu, J C Dhar, N K Sing, **A Mondal** and S Choudhury, ‘Synthesis of Wide Band Gap TiO₂ Nanowire Arrays using GLAD’, **International Conference on Radar, Communication and Computing (ICRCC)-12, Thriuvanamali, Tamil Nadu, India on 21-22nd December (2012).**
 22. A Ganguly, **A Mondal**, J C Dhar, N K Singh and P Chinnamuthu, ‘GLAD Synthesized Ag Nanoparticles Array on TiO₂ Thin Film and Plasmonic Light Absorption’, **The 8th International Conference on Microwaves, Antenna Propagation and Remote Sensing ‘ICMARS-2012, Jodhpur, India on 11 – 15th December (2012).**
 23. Naorem Khelchand Singh, Jay Chandra Dhar, P Chinnamuthu, **Aniruddha Mondal** “GLAD Synthesized SiO_x Nanowires Array for Visible Light Absorption”, **International Conference on Material Science (ICMS) 2013, Tripura University, India during 14 – 16th February, 2013.**
- 2013
24. Jay Chandra Dhar, Naorem Khelchand Singh, P Chinnamuthu, **Aniruddha Mondal** “Interface Trap, Series Resistance and Conductance Study of High-k TiO₂ Nanowire MOS Device” **International Conference on Material Science (ICMS) 2013, Tripura University, India during 14–16th February, 2013.**
 25. P Chinnamuthu, Jay Chandra Dhar, Naorem Khelchand Singh, **Aniruddha Mondal** “TiO₂ Nanowire Arrays Based Photodetector”, **International Conference on Material Science (ICMS) 2013, Tripura University, India during 14–16th February, 2013.**
 26. Aparna Ganguly, **Aniruddha Mondal**, Jay Chandra Dhar, Naorem Khelchand Singh And P Cinnamuthu “Synthesis of silver Nanoparticles Array on TiO₂ Thin Film using GLAD and Plasmonic Light Absorption”, **International Conference on Material Science (ICMS) 2013, Tripura University, India during 14–16th February, 2013.**
 27. **Aniruddha Mondal**, “Glancing angle deposited oxide semiconductor nanowires and efficient photodetection”, **3rd International Conference on Advanced Nanomaterials and Nanotechnology (2013), IIT Guwahati during 1st -3rd December.**
 28. Bijit Choudhuri, Biraj Shougaijam, Kishan Bhowmik, Bikram Kishore Mahajan, Ajitabh Kumar Tiwari and **Aniruddha Mondal**, “Fabrication and characterization of Indium nanoparticles based plasmonic photodetector,” **3rd International Conference on Advanced Nanomaterials and Nanotechnology (2013), IIT Guwahati during 1st -3rd December.**
 29. Kishan Bhowmik, Bijit Choudhuri, Biraj Shougaijam, Bikram Kishore Mahajan, Ajitabh Kumar Tiwari and **Aniruddha Mondal**, “Fabrication of Si nanowire network using wet chemical etching in assistance with Ag nanoparticle deposited by GLAD” **3rd International Conference on Advanced Nanomaterials and Nanotechnology (2013), IIT Guwahati during 1st -3rd December.**

30. Ajitabh Kumar Tiwari, Bikram Kishore Mahajan, Shubhro Chakraborty and **Aniruddha Mondal**, “Oblique angle deposited 1D zigzag TiO₂ photonic crystal for broad band reflector”, **3rd International Conference on Advanced Nanomaterials and Nanotechnology (2013), IIT Guwahati during 1st -3rd December.**
31. Naorem Khelchand Singh and **Aniruddha Mondal**, “Structural and Optical properties of axial SiO_x-In₂O₃ heterostructure nanocolumn”, **3rd International Conference on Advanced Nanomaterials and Nanotechnology (2013), IIT Guwahati during 1st -3rd December.**
32. Jay Chandra Dhar and **Aniruddha Mondal**, “GLAD Synthesized SiO_x-TiO₂ Axial Heterostructure Nanowire Schottky Detector”, **3rd International Conference on Advanced Nanomaterials and Nanotechnology (2013), IIT Guwahati during 1st -3rd December.**
33. Aparna Ganguly, Bijit Choudhuri and **Aniruddha Mondal**, “Efficient photodetection by Ag NPs patterned TiO₂ thin film” **3rd International Conference on Advanced Nanomaterials and Nanotechnology (2013), IIT Guwahati during 1st -3rd December.**

2014

34. Ashik Some, Arnab Shome, Birojit Chakma, B S Thoma Debbarna, Diksha Barnwal, Lalaram Arya, **Aniruddha Mondal**, “A comparative study on TiO₂ and SiO_x dielectric based MOS capacitance”, **Innovative Trends in Applied Physical, Chemical, Mathematical Sciences and Emerging Energy Technology for Sustainable Development” (APCMET-2014), Jawaharlal Nehru University 19th -20th April, 2014.**
35. Jay Chandra Dhar, **Aniruddha Mondal**, "Axial SiO_x-TiO₂ Heterostructure Nanowire Schottky photodiodes for High Performance Detection," **International Conference on Nano Science & Engineering Application (ICONSEA-2014) in Jawaharlal Nehru Technical University, Hyderabad (2014)**
36. P. Chinnamuthu, **A. Mondal**, J.C. Dhar and N.K. Singh, “Visible Light Detection using Glad TiO₂ Nanowire Arrays,” **27th International Microprocesses and Nanotechnology Conference (MNC 2014) in Hilton Fukuoka Sea Hawk, Fukuoka, Japan (November 4 - November 7, 2014)**

After Joining NIT Durgapur

37. Naorem Khelchand Singh and **Aniruddha Mondal**, UV-Vis broad band photodetector using SiO_x-In_{2-x}O_{3-y} heterostructure nanocolumn, **3rd International Conference on Nanotechnology (NANOCON014), Bharati Vidyapeeth University College of Engineering, Pune during 14^h -15th October, 2014.**
38. B. Choudhuri, **A. Mondal**, and A. Saha, “Photocatalytic degradation of methylene blue using TiO₂ nanowire - SiO_x zigzag - TiO₂ nanowire composite nanostructure” **The First International Conference on “Emerging Materials: Characterization & Application in National Institute of Technology Durgapur and CSIR-Central Glass & Ceramic Research Institute, Jadavpur, Kolkata on 4-6th December, 2014**
39. S. Chakrabarty, **A. Mondal**, A.K. Saha, B.Choudhuri, M.B.Sarkar, P. Singh, and K.Goswami, “Retention of charge in TiO₂ NPs/ SiO_x TF System” **The First International Conference on “Emerging Materials: Characterization & Application in National Institute of Technology Durgapur and CSIR-Central Glass & Ceramic Research Institute, Jadavpur, Kolkata on 4-6th December, 2014**
40. M.B.Sarkar, **A.Mondal**, S.Chakrabarty, B.Choudhuri, M. Jena, A. Das, “Reduction of surface states of TiO₂ thin film by indium doping” **The First International Conference on “Emerging Materials: Characterization & Application in National Institute of Technology Durgapur and CSIR-Central Glass & Ceramic Research Institute, Jadavpur, Kolkata on 4-6th December, 2014**
41. J. C. Dhar and **A. Mondal**, “nitrogen doped TiO₂ nanowires based schottky detector: high internal gain” **The First International Conference on “Emerging Materials: Characterization & Application in National Institute of Technology Durgapur and CSIR-Central Glass & Ceramic Research Institute, Jadavpur, Kolkata on 4-6th December, 2014**

42. R. Lahiri and **A. Mondal**, "A review on TiO₂ nanowire based photodetector" **The First International Conference on "Emerging Materials: Characterization & Application in National Institute of Technology Durgapur and CSIR-Central Glass & Ceramic Research Institute, Jadavpur, Kolkata on 4-6th December, 2014**
 43. C Ngangbam, B Shougaijam, **A Mondal**, "Dispersed Ag nanoparticles on TiO₂ nanowire clusters for photodetection " **TENCON 2014-2014 IEEE Region 10 Conference, 1-4**
 44. **Aniruddha Mondal**, Anubhab Dey, Amit Kumar Das and Bijit Choudhuri, "Studies On Temperature Dependence Of Current-Voltage Characteristics Of Glancing Angle Deposited Indium Oxide Nanowire On Silicon substrate" **International Conference on Condensed Matter and Applied Physics, Govt Engineering College Bikaner, Rajasthan, India, on 30-31st October, 2015**
 45. Anupam Ghosh and **Aniruddha Mondal**, "Enhanced band gap of Erbium doped In₂O₃ thin film prepared by Spin-on technique", **International Conference On Nanotechnology for Better Living, organised by NIT Srinagar and IIT Kanpur, NBL-2016, May 2016**
- 2017
46. Shubhro Chakrabatty, S.M.M.D. Dwivedi, **A. Mondal**, M.I. Alam, "The in-vitro study of Silicon oxide (SiO_x) Nanoparticles in cell morphology", **National Conference on Advanced Functional Materials Processing and Manufacturing (NCAFMPM-2017), organised by CSIR-CMERI Durgapur, Feb. 2017**
 47. Prakhar Kannoje, Anupam Ghosh, **Aniruddha Mondal** "Studies on structural and optoelectronic properties of Cr doped In₂O₃ thin film prepared by spin coating" **International Symposium on Semiconductor Materials and Devices (ISSMD-4), 8-10th March 2017, Jadavpur University**
 48. Sameer Ranjan Biswal, Shubhro Chakrabarty , Anupam Ghosh, **Aniruddha Mondal**, "In₂O₃ /TiO₂ /In₂O₃ multilayered film and its characterization for UV detection" **International Symposium on Semiconductor Materials and Devices (ISSMD-4), 8-10th March 2017, Jadavpur University**
 49. B. Choudhuri, **A. Mondal**, and S. M. M. D. Dwivedi, Glancing Angle Deposition Synthesized Co₃O₄-TiO₂ Longitudinal Nanowire Heterostructure and its Properties, **The Second International Conference on Emerging Materials: Characterization & Application in National Institute of Technology Durgapur on 15-17th March, 2017**
 50. Shyam Murli Manohar Dhar Dwivedi, Anupam Ghosh, **Aniruddha Mondal**, Growth of InN nanowire using oblique angle deposition technique, **The Second International Conference on Emerging Materials: Characterization & Application in National Institute of Technology Durgapur on 15-17th March, 2017**
 51. Shyam Murli Manohar Dhar Dwivedi, Anupam Ghosh, Shubhro Chakrabarty, **Aniruddha Mondal**, Catalytic free technique for Synthesis of InN nanostructures, **International Conference on Electrical Electronics and Communication-2017, At Goa, India, Volume: ISBN: 9788192958061, October 2017**
 52. Shyam Murli Manohar Dhar Dwivedi, Anupam Ghosh, Shubhro Chakrabarty, Rabindra Nath Barman, **Aniruddha Mondal**, Growth of TiO₂ NWs by OAD technique, **International Conference on Electrical Electronics and Communication-2017, At Goa, India, Volume: ISBN: 9788192958061, October 2017**
 53. Priyanka Banerjee, Anupam Ghosh, **Aniruddha Mondal**, Resistive Switching Memory of Er₂O₃ Coated Silicon Nanowire Grown on Silicon Wafer by Double Step Metal Assisted Chemical Etching Processes, **5th International Conference on Advanced Nanomaterials & Nanotechnology, I.I.T. Guwahati, D.A.E., B.R.N.S., DOI:10.13140/RG.2.2.10068.50565, December 2017**
 54. Shyam Murli Manohar Dhar Dwivedi, Anupam Ghosh, **Aniruddha Mondal**, Temperature dependent optoelectronic properties of InN nanostructure grown by oblique angle deposition technique, **5th International Conference on Advanced Nanomaterials & Nanotechnology, I.I.T. Guwahati, D.A.E., B.R.N.S., DOI:10.13140/RG.2.2.16622.10567, December 2017.**

2018

- 55.** Anupam Ghosh, Shyam Murli Manohar Dhar Dwivedi, Shubhro Chakrabarty, **Aniruddha Mondal**, Improved diode performance of Ag nanoparticle dispersed Er doped In₂O₃ film, DAE SSPS 2017, **AIP Conference Proceedings** 1942 (1), 060022, doi: 10.1063/1.5028792 (2018).

2021

- 56.** Avijit Dalal, Shyam Murli Manohar Dhar Dwivedi, Madhuri Mishra, Subhananda Chakrabarti, Nilanjan Haldar and Aniruddha Mondal, "Synthesis and characterization of Mg_{0.4}Ti_{0.6}O₂ alloy thin film", 2021, **Materials Today: Proceedings**, DOI: 10.1016/j.matpr.2021.04.452.