

Curriculum Vitae



1. **Name in full** : Prof. Raj Kumar
2. **Father's name** : Late Jai Jai Ram Tiwari
3. **Date of birth** : 22. 07. 1960
4. **Nationality** : Indian
5. **Category** : General
6. **Marital status / sex** : Married / Male
7. **Present status** : Professor in Physics, Dean Faculty of Science, President sport Council.
8. **Official address** : Prof. Raj Kumar
Professor
Department of Physics & Electronics
Dr. R. L. Avadh University,
Ayodhya (Faizabad) – 224001, U.P., India
Mob. No.: 9415188766
Email-ID: rktiwari2323@gmail.com
9. **Permanent address** : Shiv Nagar Coloney, 3rd Row
Near Bal Vidhya Mandir School
Ayodhya (Faizabad) -224001 U.P. India
10. **Educational qualification** :

Exam. passed	Board/Univ.	Year	Division/Position	% of Marks	Subjects
High school	U.P.Board, Allahabad	1976	First	63.2	Hindi, Maths, Sci, Biology, English
Intermediate	U.P.Board, Allahabad	1978	First	67.8	Gen. Hin. Phy. Eng. Chem., Maths.
B.Sc.	Allahabad University	1980	First	64.7	Physics, Maths. Chemistry
M.Sc.	Allahabad University	1982	First (First Position)	72.4	Physics(Electronics)
N.E.T	CSIR, New Delhi	1983	JRF		Physics
		1986	SRF		
Ph.D.	Dr. R.M.L. Avadh University, Faizabad	1994	--		Studies in Matrix Spectra due to Polar Impurities in Alkali Halide Crystal

11. **Specilization:** Electronics, Condensed Matter Physics

- **Field of Interest:-** Electronic circuit simulation, Reversible logic technology.

12. **Teaching Experience:** More than 32years (Four year U.G. and more than twenty eight year P.G.), *more than Ten year as a Professor.*

1. Lal Bahadur Shastri P.G. College, Gonda, Lecturer selected from Higher Education Commission, Allahabad, January 16, 1987 to April 30,1991
2. Dr. Rammanohar Lohia Avadh University, Faizabad, Lecturer in the department of Physics and Electronics,from may 01,1991 to January16,1995
3. Dr. Rammanohar Lohia Avadh University, Faizabad, Senior Lecturer in the department of Physics and Electronics, from January16, 1995 to January16, 2000.
4. Dr. Rammanohar Lohia Avadh University, Faizabad, Associate Professor in the department of Physics and Electronics, from January16, 2000 to 2008.
5. Dr. Rammanohar Lohia Avadh University, Faizabad, presently working as a Professor in the department of Physics and Electronics from January 01 Jan 2009 to till date.

13. **Professional and Academic Awards/Medals**

- (a) Integrated Scholarship from 1974 to 1976.
- (b) **Silver Medal** for obtaining First Position in M.Sc. Previous examination 1981, Allahabad University, Allahabad (U.P.), India.
- (c) **Ward Vidyant Memorial Gold Medal** for securing highest marks and First position in M.Sc. final examination 1982, Allahabad University, Allahabad (U.P.), India.
- (d) Qualified **National Entrance Test** 1983 held by Council of Scientific and Industrial Research (C.S.I.R.), New Delhi.
- (e) “**Junior Research Fellowship**” by C.S.I.R. New Delhi India from January 1984 to December 1985.

(f) “**Senior Research Fellowship**” by C.S.I.R. New Delhi India from January 1986 to December 1986.

14. Member of academic bodies:

- (1). Founder member of International Academy of Physical Sciences, Allahabad.
- (2). Life member of Vigyan Parisad Prayag, Allahabad.

15. Research project :

- (1) One major research project obtained on 22 January, 2015 from UGC, the project amount Rs.1063000 and project entitled “**Design and Development of High Speed Low Power CMOS Circuit and their Application**”
- (2) Two minor research project provided by the Dr. R. M. L. Avadh University of Rs.2000 and 5500 under U.G.C., scheme.

16. Participation in conferences, seminars, workshops, Orientation and refresher courses

1. **Seventeenth orientation** program held at Allahabad University, Allahabad, 1992.
2. Computer operation and software development held at Dr. R.M.L. Avadh University Faizabad, 12-13 October, 1995.
3. **Sixth refresher course** in Physics held at B.H.U. Varanasi, December 18, 1995 To January 6, 1996.
4. Theoretical development of $\langle n10 \rangle$ tunneling model, IAPS conference held at MGKV Varanasi, Octo.14-15, 1996.
5. Simultaneous occurrence of potential minima and expression for polarization for $\langle 111 \rangle + \langle 100 \rangle$ model, 2nd conference of IAPS, Dec.13-14, 1997.
6. Diploma in computer application Teachers Training Program Modules (1), 1998.
7. Electric field effect in KI:OH⁻ system, national seminar on emerging trends in Electronics and computer, Dr. R. M. L. Avadh University, Faizabad, March 11-12, 1999
8. $\langle n10 \rangle$ tunneling model and paraelectric resonance in KBr:Li⁺ system, 3rd conference of international academy of physical sciences, Allahabad, December 17-19, 1999
9. **Refresher course in Physics** held at Sardar Patel University, Vallabh Vidhya Nagar

Gujrat December 27, 1999 to January 15, 2000.

10. Energy eigen value and specific heat for $\langle 111 \rangle + \langle 100 \rangle$ tunneling model, Mahatma Gandhi Chitrakoot Vishwavidhyalaya, CONIAPS IV, Feb.25-27, 2001
11. Expression for entropy for $\langle 111 \rangle$ tunneling model, National conference on Technology and Management in rural area, Ambikapur (C.G.), 2002
12. Simulation of Push-Pull amplifier using PSPICE, National conference on Technology and Management in rural area, Ambikapur (C.G.), 2002
13. National seminar on materials and its applications held by the department of Physics and Electronics, Dr. R. M. L. Avadh University, Faizabad, Feb.27-28, 2003
14. Short course for spice models for advanced VLSI circuit simulation, South Campus, New Delhi, Nov.11-12, 2005
15. Assessment of pollution of Saryu river at Ayodhya through dielectric constant measurement and their effect on human health in nearby urban and rural areas, National Conference on impact of Electronics and Communication on Rural Development, Chouksey Engg. College, Bilaspur, Dec. 17-18., 2005.
16. The theoretical study of the effect of parasitic elements to increase the bandwidth of ring micro-strip antenna, 9th conference of International academy of Physical sciences, Feb.3-5, 2007.
17. Simulation of CMOS current mirror circuit, national conference held at IET Mathura, March 23-25, 2007.
18. Study of variation of concentration of nano-particle with sintering time, national conference held at IET Mathura, March 23-25, 2007.
19. National conference on current trends on Mathematics with special focus on operation research on computer held by department of mathematics and statistics, Dr. R.M.L. Avadh University Faizabad, March 28-29, 2010.
20. Highly linear transconductor structure for nano-scale CMOS technology, 2nd National Conference on Nanomaterials and Nanotechnology, Dec.21-23, 2009
21. A VHDL based simulation of reversible logic gate property, National seminar on emerging applications on next generation networks, Jan.23-24, 2010.

22. Study of polarization and specific heat for $\langle n|0\rangle$ tunneling model, 12th International Conference of International Academy of Physical Sciences Held at Jaipur, Dec. 22-24, 2010.
23. National conference on climate change and its impact on biological community, organized by Department of Environmental Science, Dr. R. M. L. Avadh University, Faizabad, Feb. 12-13, 2011
24. Seminar on Earth Day, organized by Department of Environmental Science, Dr. R. M. L. Avadh University, Faizabad, April 22, 2011.
25. 22nd International conference of International Academy of Physical Sciences CONIAPS XXII on Emerging Trend in Physical Sciences organized by Faculty of Science, Dr. R. L. Avadh University, Faizabad April 13-15, 2018,
26. 23rd International conference of International Academy of Physical Sciences CONIAPS XXIII on Advances in Physical Sciences to Achieve sustainable Development Goals organized by Nepal Academy of Science and Technology, Kathmandu, Nepal, November 16-18, 2018.

17. Administrative Assignments:

- Member of Executive Committee, Department of Physics Allahabad University, Allahabad 1982-83.
- Member of Management Committee, L.B.S. Post Graduate College Gonda, 1987-88.
- Member of *Vidhya Parisad*, Dr. R. M. L. Avadh University, Faizabad, 1992-93.
- Member of *Executive Council* Dr. R. M. L. Avadh University, Faizabad from November 01 1992 to October 31, 1993.
- *Assistant Dean Student Welfare* (A.D.S.W.) Dr. R. M. L. Avadh University, Faizabad from 26 August 1996 to September 1998.
- Acting Dean Student Welfare from July 27 to August 1997.
- Assistant Coordinator Central Evaluation, Dr. R. M. L. Avadh University, Faizabad 1995.
- Coordinator Coding & Decoding Cell, Dr. R. M. L. Avadh University, Faizabad 1996.
- Coordinator Coding & Decoding Cell, Dr. R. M. L. Avadh University, Faizabad 1997.
- Center Superintendent, K. P.S. Degree College, Sultanpur 1998.
- Center Superintendent of Entrance and annual examination, Dr. R. M. L. Avadh University, Faizabad 2000.
- Center Superintendent of M. B. A. Examination, Dr. R. M. L. Avadh University, Faizabad 2000-2001.
- Member of Executive Committee central school, Faizabad 2001.
- Member of Enquiry Committee, Dr. R. M. L. Avadh University, Faizabad 2001.
- Member of Departmental Purchase Committee, Department of Physics & Electronics, Dr. R. M. L. Avadh University, Faizabad 2001.

- **Dean Student's Welfare**, Dr. R. M. L. Avadh University, Faizabad, July 10, 2002 to 17 July 2005.
- Member of Executive Council, Dr. R. M. L. Avadh University, Faizabad, 2005-06.
- Center Superintendent examination (Private/ Regular), Dr. R.M. L. Avadh University, Faizabad, 2006- 2007.
- Coordinator, Department of M.Ed, Dr. R.M.L. Avadh University, Faizabad, 2006 to 2017.
- Coordinator Coding and Decoding cell, Dr. R.M.L. Avadh University, Faizabad, 2008-09
- Center Superintendent of examination (Private & Regular), Dr.R.M.L. Avadh University, Faizabad, 2009.
- Coordinator Central Evaluation LLB, BBA, BCA, Dr. R.M. L. Avadh University, Faizabad, 2009-10
- Coordinator of LLB Entrance Examination, Dr. R.M.L. Avadh University, Faizabad, 2007, 2008, 2009
- Coordinator Coding and Decoding Cell, Dr. R.M.L. Avadh University, Faizabad, 2009-10
- Member of *Vidhya Parisad*, Dr. R.M.L. Avadh University, Faizabad, 2009-11
- Coordinator of B.P.Ed. entrance examination, Dr. R.M.L. Avadh University, Faizabad, 2006-07
- Observer in various Medical and Dental Colleges affiliated to Dr. R.M.L. Avadh University, Faizabad, 2006, 2007, 2008, 2009 and 2010.
- Coordinator, Center of excellence, Department of Physics & Electronics, Dr. R.M.L. Avadh University, Faizabad, from 2010 to 2017.
- Observer in Raja Mohan Girls P.G. College affiliated to Dr. R.M.L. Avadh University Faizabad -2011.
- Observer in Kumari Chandrawati Degree College affiliated to Dr. R.M.L. Avadh University, Faizabad, 2011.
- Coordinator, M. Ed. Entrance test 2012, Dr. R.M.L. Avadh University, Faizabad
- Convener, Research Development Committee, Department of Physics & Electronics, Dr. R.M.L. Avadh University, Faizabad. From 19th July 2011 to till date.
- Convener, Board of Study Department of Physics & Electronics, Dr. R.M.L. Avadh University, Faizabad. From 19th July 2011 to 19th July 2014.
- Head of Department, Department of Physics & Electronics, Dr. R.M.L. Avadh University, Faizabad. From 19th July 2011 to 19th July 2014.
- Coordinator, Residential campus Entrance Exam and Counseling 2014-15, Dr. R.M.L. Avadh University, Faizabad
- Center Superintendent of Nandini Nagar P.G. College Nawabganj Gonda, 2015.
- Center Superintendent of U.P. B.Ed Entrance examination, 2015.
- Center Superintendent of U.P. C.P.M.T. Entrance examination, 2015.
- Chairman of the session in an International conference on Science and Technology- 2015, organized by SRMS College of Engineering and technology Bareilly, 27-28 February 2015.

- Director, Institute of Engineering and Technology, Dr. R.M.L.Avadh University, Faizabad 06 April 2015 to 05 April 2017 and July 2017 to 15 June 2018.
- Coordinator, central evaluation 2015, Dr. R.M.L.Avadh University, Faizabad
- Coordinator, L.L.B., M.Ed., B. P. Ed. and Residential campus Entrance Exam and counselling 2015- 2016, 2016-2017 and 2017-2018 Dr. R.M.L.Avadh University, Faizabad.
- Dean, Faculty of Science, Dr. R.M.L. Avadh University, Faizabad, Since 06 April 2017 to till date.
- Member of executive council, Dr. R.M.L. Avadh University, Faizabad Since 06 April 2017 to 05 April 2019.
- Coordinator, central evaluation of Science 2017, Dr. R.M.L.Avadh University, Faizabad
- Coordinator, TEQIP-III project of world Bank MHRD, IET Dr. R.M.L. Avadh University, Faizabad, April 2017 to August 2018.
- Member of Board of Governance TEQIP-III, IET, Dr. R.M.L. Avadh University, Faizabad 2017-18.
- Member of Board of Governance RUSA Dr. R.M.L. Avadh University, Faizabad 2017.
- Member of Examination reform committee, Dr. R.M.L. Avadh University, Faizabad 2017.
- Induction program and various other activities to enhance the Quality of Technical Education under TEQIP-III in IET campus, Dr. R.M.L. Avadh University, Faizabad 2017-18.
- Member of College development council, Dr. R.M.L. Avadh University, Faizabad 2018 till date.
- Coordinator, Anveshan: Student Research Convention-2018 organized by Association of Indian Universities (AIU) & IET, Dr. R.M.L. Avadh University, Faizabad East Zone-2018.
- Convener, Workshop on “Signal Processing Tools and Techniques” Organized by IET, Dr. R.M.L. Avadh University, Faizabad, 05-06 Jan, 2018.
- Convener, Workshop on “National Board of Accreditation apply Process”, Organized by I. E.T., Dr. R.M.L. Avadh University, Faizabad, 10 Feb., 2018.
- Convener, Workshop on “Outcome Based Accreditation for Under Graduate Engineering Program” Organized by Dr. A. I. T. Bangalore, Karnataka & IET, Dr. R.M.L. Avadh University, Faizabad, 09-10 March, 2018.
- Coordinator, digital evaluation-2018, IET, Dr. R. L. Avadh University, Faizabad.
- Member of Research development committee, APS University Rewa, Madya Pradesh 2018.
- President sport council Dr. R. L. Avadh University, Faizabad, 04 July 2018 to till date.
- Member of various committee assigned by the university time to time.

18.(a)**Curriculum Development:** Actively engaged to develop new courses at M.Sc. level as a member of board of studies and in other capacities. Developed various laboratories like

Integrated analog Electronics and Digital Electronics lab, Electronic circuit, Devices lab, communication and Microprocessor lab. Many students at M.Sc. level completed their project work on various topic of Physics and Electronics.

(b)**Cultural/Extra curricular activities:** During period of ADSW, DSW and as a member of NSS committee organized various games and cultural programme at University level. During this period student of residential Department and its affiliated colleges obtained Silver, Gold and Other medals in national and International youth Festival held at Gorakhpur and Jaipur respectively. It is first time in the history this University that the same team of the student are able to get Gold medal in the University level, National and International youth festival due to impartial and fine judgement of our team.

(c)**Sports/community and extension service:** Promoted and organized various sport activities in the university campus during period of Dean Student Welfare, 2002-2005, and organized north Zone Kho-Kho men's and women's and all India mahila Kho-Kho 2018-19. State level summer sport fest, 13-15 May, 2019.

19. Ph. D. produced/ enrolled for Ph. D. :

Ph.D. produced: Thirteen

1. Dr. P.N. Singh
Topic: Theoretical studies of polar impurities doped in alkali halide crystals
2. Dr. Mukesh Upadhyaya
Topic: Theoretical studies of alkali halide crystals doped with polar impurities.
3. Dr. Ambikesh Tripathi
Topic: Theoretical studies of few properties of Ring Microstrip antenna.
4. Dr. Dev Narayan Pandey
Topic: Study of electrical and optical properties of impurity doped and undoped alkali halide crystals.
5. Dr. Siya Ram Shukla
Topic: Study of theoretical, electrical magnetic behavior of alkali halides crystals doped with impurities
6. Dr. Ganga Ram Mishra
Topic: Simulation and Modeling of some characteristics of CMOS circuits using PSPICE
7. Dr. Jyotsna Mishra
Topic: Simulation of analog electronic circuits through PSPICE.
8. Dr. H.P. Shukla
Topic: Designing of high speed low power arithmetic logic unit using reversible logic technique

9. Dr. Anil Kumar Shukla
Topic: Design and Development of Low Power CMOS Circuits using SPICE
10. Dr. Sachin Kumar
Topic: Modeling and simulation of MOSFET characteristics
11. Dr. Santosh Kumar Agrahari
Topic: Design and development of world wide web (Internet) controlled embedded system.
12. Dr. Gaya Prasad
Topic: Modeling and simulation of high speed low power CMOS circuits and its applications
13. Dr. Vandana Shukla, as Co-Guide, Amity University, Lucknow.
Topic: Design and implementation of reversible logic circuits.

Enrolled for Ph.D:

1. Er. Shiksha Jain, Dr. R.M.L. Avadh University, Faizabad
Topic: Circuit Design and simulation of low power low noise high speed amplifier using CMOS technology.

20. Research paper published/ communicated/presented in national/international journals/conferences/seminars/ Book Chapter

Research Papers published between year -1986-1999

1. Simultaneous occurrence of potential minima along two crystallographic directions in octahedral potential, G.K.Pandey, K.L.Pandey, M.Massey And Raj Kumar, Physical, Rev.B, ISSN: 1098-0121 (Print),1550-235X (Online), 1538-4489 (CD Rom)Vol.34, P1277-1286,1986. Impact Factor: 3.664.
2. Stress induced splitting of vibrational absorption of CN^- ions in alkali halide crystals, M.Massey, K.L.Pandey, G.K.Pandey And Raj Kumar, Physical Rev.B, ISSN: 1098-0121 (Print),1550-235X (Online), 1538-4489 (CD Rom)Vol. 39, P10300-10309,1989. Impact Factor: 3.664.
3. $\langle \text{N10} \rangle$ tunneling model and paraelectric resonance in KBr: Li^+ system, proceeding of third conference of International Academy of Physical Sciences, Allahabad, P113-117, 1999.

Research Papers published between year -2000-2004

4. Energy eigen value and specific heat for $\langle 111 \rangle + \langle 100 \rangle$ tunneling model, Raj Kumar Tiwari and Prem N. Singh, journal of International Academy of Physical Science, Vol.4,P57-60, 2000
5. Possibility of simultaneous occurrence of potential minima for $\langle 111 \rangle + \langle 100 \rangle$ model, Raj Kumar Tiwari and Prem N. Singh Nat. Acad. of Science Allahabad, India,71(A), I , 2001.

6. Paraelectric Resonance In KI: OH⁻ System, Raj Kumar, L.K. Singh, and P.N.Singh, Physical Society of Japan, ISSN: 1347-4073(Online), 0031-9015(Print), Vol. 70, No.1, 2001.
7. Expression for energy and specific heat for <111>+<100> tunneling model, Raj Kumar P.N.Singh and Mukesh Upadhyaya, Journal of Ultra Sci., ISSN: 0970-9150, Vol.14 (3), P545-548, 2002.
8. Expression for entropy for <111> tunneling model, Raj Kumar, Mukesh Upadhyaya and Ramanuj, proceeding of national conference on Technology and Management in Rural area, Ambikapur (C.G.), Octo.2002
9. Simulation of Push-Pull amplifier using PSPICE, Raj Kumar Tiwari, Ramanuj and Mukesh Upadhyaya, abstract published in the proc. of National Conference On Technology And Management in Rural area, Ambikapur (C.G.), Octo.2002
10. Behaviour of dielectric constant with temperature of <110> and <110>+<111> tunneling model with applied uniaxial stress in <110> direction, Raj Kumar and Mukesh Upadhyaya, Bulletin of Pure and applied sciences, ISSN:0970-6569, Vol. 22(D), No.2, P115-119, 2003.

Research Papers published between year -2005-2009

11. The theoretical study of effective apertures and radiation of ring micro-strip antenna, Raj Kumar and Ambikesh Tripathi, Journal of Ultra Sci., ISSN: 0970-9150, Vol.17 (3), P 497-499, 2005.
12. Analysis of wall admittance for a ring micro-strip patch antenna and effect of surface waves, Raj Kumar and Ambikesh Tripathi, Bulletin of Pure and Applied Sci., ISSN:0970-6569, Vol. 24d, No.2, 2005.
13. Assessment of pollution of Saryu river at Ayodhya through dielectric constant measurement and their effect on human health in nearby urban and rural areas, Raj Kumar Tiwari, national conference on impact of electronics and communication on rural development, Chouksey Engg. College. Bilaspur, 17-18 Dec., 2005.
14. Dielectric constant for <100> tunneling model by applying electric field in <100>, <110> and <111> crystallographic directions, Raj Kumar, Mukesh Upadhyaya, S.R.Shukla and D.N. Pandey, Jour, of Ultra Sci. ISSN: 0970-9150, Vo.18, No.3, P401-404, 2006.
15. Theoretical analysis of antenna gain for a ring micro-strip patch antenna, Raj Kumar Tiwari and Ambikesh Tripathi, Journal of Ultra Sci., ISSN: 0970-9150, Vol.18, No.3, P409-411, 2006.
16. Study of electric and magnetic polarization for various tunneling model in presence of electric and magnetic field separately and their comparison, Raj Kumar Tiwari, Mukesh Upadhyaya, S.R.Shukla, D.N. Pandey and Ambikesh Tripathi, Bulletin of Pure and Applied Science, ISSN:0970-6569, Vol. 25d, No.1, P21-24, 2006.
17. Behaviour of dielectric constant and refractive index for <110> and <110>+<111> tunneling model, Raj Kumar, S.R.Shukla and Dev Narayan Pandey, Acta Ciencia Indica, ISSN: 0253-732X, Vol XXXIIIP, No.3, P415-418, 2007.

18. Study of variation of electrical pressure for system <100> with applied electric field in different crystallographic directions, Raj Kumar Tiwari, D.N.Pandey and S.R. Shukla, Accepted, Asian Journal of Physics, ISSN:0971-3093, 2007.
19. The theoretical study of the effect of parasitic elements to increase the bandwidth of ring micro-strip antenna, Raj Kumar and Ambikesh Tripathi, 9th Conference of International Academy of Physical Sciences, Feb. 03-05, 2007.
20. Study of transmittance and quantum efficiency of alkali halide crystals, Raj Kumar, D.N.Pandey and S.R.Shukla, Journal of Ultra Sci, ISSN: 0970-9150, Vol 19, No2, P247-250, 2007.
21. Simulation of CMOS current mirror circuit, Raj Kumar Tiwari and Ganga Ram Mishra, Proceeding of National Conference on "Nano, Bio and Information Technology Integration" held at Siemet Mathura 23-25 March, 2007.
22. Study of variation of concentration of nanoparticle with sintering time, national conference on "Nano, Bio And Information Technology Integration" Held at Siemet Mathura, March 23-25, 2007.
23. A comparative study of BJT and CMOS current mirror circuit, Raj Kumar Tiwari and Ganga Ram Mishra, Bulletin of Pure and applied Sciences, ISSN:0970-6569,Vol.27d(No.1), P47-53, 2008
24. Study of electrical properties of impurity added systems using <n10> tunneling model, Raj Kumar and S.R.Shukla, Jour. of Ultra Sci., ISSN: 0970-9150,Vol.20(1),P131-134,2008
25. A high performance low voltage level shifted cascode current mirror, R.K.Tiwari and Ganga Ram Mishra, Journal of Ultra Sci. of Phy. Sciences, ISSN: 0970-9150, Vol.21(1), P167-172 (2009)
26. A high performanace low voltage CMOS differential amplifier, R.K.Tiwari and Ganga Ram Mishra Journal of Ultra of Phy. Sci. ISSN: 0970-9150, Vol.21(3), P493-498, 2009
27. Energy efficient portable electronic devices using reversible logic gates, jour. of ultra Sci. of Phy. Sci., ISSN: 0970-9150, Vol.21(2),P 443-450, 2009
28. An introduction to emerging reversible logic technology and its applications, jour. of ultra sci. of Phy. Sci., ISSN: 0970-9150, Vol.21(3),P461-466, 2009
29. A new high performance CMOS differential amplifier, Ganga Ram Mishra and R.K.Tiwari, International Journal of Electronics Engineering Research (IJEER), ISSN:0975-6450, Vol.1, No.3, P177-184, 2009

Research Papers published between year-2010 To 2015

30. Highly linear transistor structure for nano-scale CMOS technology, Anil Kumar Shukla Ganga Ram Mishra, Raj Kumar Tiwari and N.K.Mishra, Proceeding of 2nd National Conference on Nanomaterials and Nanotechnology, P89-93, Dec.21-23, 2009
31. A new approach for design of cell-phone battery backup time using reversible logic technology, H.P.Shukla and R.K.Tiwari international jour. of emerging technology and application in ,(IJ-ETA-ETS), ISSN:0974-3588, Vol.3,P70-73, 2010

32. An approach for designing of n:1 reversible multiplexer, R.K.Tiwari and H.P.Shukla, international jour. of emerging technology and application in (IJ-ETA-ETS), ISSN:0974-3588Vol.3,P92-95, 2010
33. A VHDL based simulation of reversible logic gate property, H.P Shukla and R.K.Tiwari, national seminar on emerging applications on next generation networks, Jan.23-24, 2010.
34. A new model for distortionless push-pull amplifier, Raj Kumar Tiwari and Joytsana Mishra, Bulletin of Pure and Applied Sciences, ISSN:0970-6569,Vol.29d (1),P53-61, 2010.
35. Study of polarization and specific heat for $<n10>$ tunneling model, Raj Kumar Tiwari,12th International Conference of International Academy of Physical Sciences Held at Jaipur,Dec.22-24, 2010.
36. Paraelectric behavior of $KI:OH^-$ system, Raj Kumar, Mukesh Upadhyaya and Suman, Jour. of Ultra Sci., ISSN: 0970-9150, Vol.22(2) P323-326, 2010.
37. Behavioural study of an opamp based square wave generator, Raj Kumar Tiwari and Joytsana Mishra, Jour. of Ultra Sci. ISSN: 0970-9150, Vol.22(2)P363-368, 2010.
38. Simulation studies of high frequency small signal amplifiers, Raj Kumar Tiwari and Joytsana Mishra , Jour. of Ultra Sci. ISSN: 0970-9150,Vol.22(2),P419-424, 2010.
39. A new design of opamp based regulator circuit, Raj Kumar Tiwari and Joytsana Mishra , Acta Ciencia Indica, ISSN:0253-732X, Vol.XXXVIP,No.4,P477-481, 2010.
40. A new reversible 'STG' gate and it's application for designing components of low power ALU, H.P.Shukla and R.K.Tiwari, accepted for Conatel 2011, San Pablo University, Arequipa, Peru
41. Raj Kumar Tiwari, Anil Shukla and Gaya Prasad paper entitled "Double differential pair CMOS Transconductor under nanoscale CMOS Techonology" in 3rd national conference on nanamaterials and nanotechnology, Amity university Lucknow, December 21-23, 2010.
42. Raj Kumar Tiwari and Santosh Kumar Agrahari, "Web-controlled Embedded System using Mobile" published in 'International Journal of Electronics and Communication Engineering' ISSN 0974-2166 Volume 4, Number 3 (2011), pp. 295-303.
43. Raj Kumar Tiwari, Santosh Kumar Agrahari, "Low power ARM processor based embedded system" published in 'International Journal Of Electronics And Communication Engineering & Technology (IJECET)', ISSN 0976 – 6464 (Print) ISSN 0976 – 6472 (Online), Volume 3, Issue 2, July- September (2012), pp. 369-374.
Journal Impact Factor (2012): 3.5930 (Calculated by GISI)
44. Raj Kumar Tiwari and Gaya Prasad, "A critical analysis of BJT, FET and nMOS parasitic capacitance circuit", Published in bulletin of pure and applied science, New Delhi, ISSN:0970-6569, Vol.31D (Physics) Issue (No.1), P. 59-63, 2012
45. Raj Kumar Tiwari, "Theoretical approach towards more generalized tunneling model", Published in bulletin of pure and applied science, New Delhi, ISSN:0970-6569, Vol.31D (Physics) Issue (No.2), P. 219-223, 2012.
46. Vandana Shukla, O. P. Singh, G. R. Mishra, R. K. Tiwari, "Design of a 4-bit 2's Complement Reversible Circuit for Arithmetic Logic Unit Applications", Special Issue of

- International Journal of Computer Applications The International Conference on Communication, Computing and Information Technology (ICCCMIT) pp. 1-5,2012.
47. Raj Kumar Tiwari, Sachin Kumar and G.R. Mishra, "A Study on Techniques of improvement in current mirrors using Wilson scheme" International Journal of Electronics and Communication Engineering & Technology (IJECET), ISSN 0976-6464 (Print), ISSN 0976-6472 (Online) Volume 3, Issue 2, July – September (2012), © IAEME, Impact Factor 3.5930.
 48. Raj Kumar Tiwari, Sachin Kumar and G.R. Mishra, "A High Performance Novel PMOS Wilson Current Mirror", International Journal of Electronics Engineering, 4(2), 2012, Pp. 173-176, Serials Publications, ISSN: 0973-7383, Impact Factor 0.45.
 49. Raj Kumar Tiwari, Sachin Kumar and G. R. Mishra, "A Class AB CCII Topology Based on Differential Pair with Modified Output Stage", International Journal of Electrical Engineering and Technology (IJEET), ISSN 0976-6545 (Print), ISSN 0976-6553 (online) Volume 4, Issue 1, January-February (2013), © IAEME, Impact Factor 3.2031.
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