

International Journal of Inventive Engineering and Sciences

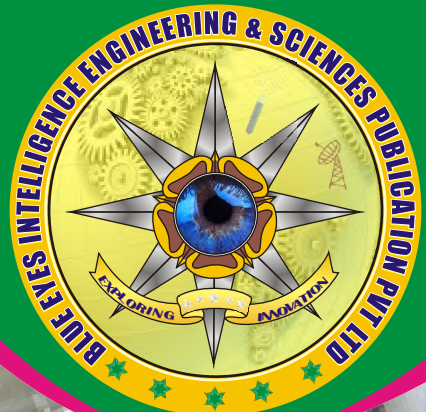
ISSN : 2319- 9598

Website: www.ijies.org

Volume-1 Issue-5, April 2013

Published by:

Blue Eyes Intelligence Engineering and Sciences Publication Pvt.



Editor In Chief

Dr. Shiv K Sahu

Ph.D. (CSE), M.Tech. (IT, Honors), B.Tech. (IT)

Director, Blue Eyes Intelligence Engineering & Sciences Publication Pvt. Ltd., Bhopal(M.P.), India

Dr. Shachi Sahu

Ph.D. (Chemistry), M.Sc. (Organic Chemistry)

Additional Director, Blue Eyes Intelligence Engineering & Sciences Publication Pvt. Ltd., Bhopal(M.P.), India

Vice Editor In Chief

Dr. Himani Sharma

Professor & Dean, Department of Electronics & Communication Engineering, MLR Institute of Technology, Laxman Reddy Avenue, Dundigal, Hyderabad, India

Prof.(Dr.) Anuranjan Misra

Professor & Head, Computer Science & Engineering and Information Technology & Engineering, Noida International University, Noida (U.P.), India

Chief Advisory Board

Prof. (Dr.) Hamid Saremi

Vice Chancellor of Islamic Azad University of Iran, Quchan Branch, Quchan-Iran

Dr. Uma Shanker

Professor & Head, Department of Mathematics, CEC, Bilaspur(C.G.), India

Dr. Rama Shanker

Professor & Head, Department of Statistics, Eritrea Institute of Technology, Asmara, Eritrea

Dr. Vinita Kumari

Blue Eyes Intelligence Engineering & Sciences Publication Pvt. Ltd., India

Dr. Kapil Kumar Bansal

Head (Research and Publication), SRM University, Gaziabad (U.P.), India

Dr. Deepak Garg

Professor, Department of Computer Science and Engineering, Thapar University, Patiala (Punjab), India, Senior Member of IEEE, Secretary of IEEE Computer Society (Delhi Section), Life Member of Computer Society of India (CSI), Indian Society of Technical Education (ISTE), Indian Science Congress Association Kolkata.

Dr. Vijay Anant Athavale

Director of SVS Group of Institutions, Mawana, Meerut (U.P.) India/ U.P. Technical University, India

Dr. T.C. Manjunath

Principal & Professor, HKBK College of Engg, Nagawara, Arabic College Road, Bengaluru-560045, Karnataka, India

Dr. Kosta Yogeshwar Prasad

Director, Technical Campus, Marwadi Education Foundation's Group of Institutions, Rajkot-Morbi Highway, Gauridad, Rajkot, Gujarat, India

Dr. Dinesh Varshney

Director of College Development Counseling, Devi Ahilya University, Indore (M.P.), Professor, School of Physics, Devi Ahilya University, Indore (M.P.), and Regional Director, Madhya Pradesh Bhoj (Open) University, Indore (M.P.), India

Dr. P. Dananjayan

Professor, Department of Department of ECE, Pondicherry Engineering College, Pondicherry, India

Dr. Sadhana Vishwakarma

Associate Professor, Department of Engineering Chemistry, Technocrat Institute of Technology, Bhopal(M.P.), India

Dr. Kamal Mehta

Associate Professor, Deptment of Computer Engineering, Institute of Technology, NIRMA University, Ahmedabad (Gujarat), India

Dr. CheeFai Tan

Faculty of Mechanical Engineering, University Technical, Malaysia Melaka, Malaysia

Dr. Suresh Babu Perli

Professor & Head, Department of Electrical and Electronic Engineering, Narasaraopeta Engineering College, Guntur, A.P., INDIA

Dr. Binod Kumar

Associate Professor, School of Engineering and Computer Technology, Faculty of Integrative Sciences and Technology, Quest International University, Ipoh, Perak, Malaysia

Dr. Chiladze George

Professor, Faculty of Law, Akhaltsikhe State University, Tbilisi University, Georgia

Dr. Kavita Khare

Professor, Department of Electronics & Communication Engineering., MANIT, Bhopal (M.P.), INDIA

Dr. C. Saravanan

Associate Professor (System Manager) & Head, Computer Center, NIT, Durgapur, W.B. India

Dr. S. Saravanan

Professor, Department of Electrical and Electronics Engineering, Muthayamal Engineering College, Resipuram, Tamilnadu, India

Dr. Amit Kumar Garg

Professor & Head, Department of Electronics and Communication Engineering, Maharishi Markandeshwar University, Mullana, Ambala (Haryana), India

Dr. T.C.Manjunath

Principal & Professor, HKBK College of Engg, Nagawara, Arabic College Road, Bengaluru-560045, Karnataka, India

Dr. P. Dananjayan

Professor, Department of Department of ECE, Pondicherry Engineering College, Pondicherry, India

Dr. Kamal K Mehta

Associate Professor, Department of Computer Engineering, Institute of Technology, NIRMA University, Ahmedabad (Gujarat), India

Dr. Rajiv Srivastava

Director, Department of Computer Science & Engineering, Sagar Institute of Research & Technology, Bhopal (M.P.), India

Dr. Chakunta Venkata Guru Rao

Professor, Department of Computer Science & Engineering, SR Engineering College, Ananthasagar, Warangal, Andhra Pradesh, India

Dr. Anuranjan Misra

Professor, Department of Computer Science & Engineering, Bhagwant Institute of Technology, NH-24, Jindal Nagar, Ghaziabad, India

Dr. Robert Brian Smith

International Development Assistance Consultant, Department of AEC Consultants Pty Ltd, AEC Consultants Pty Ltd, Macquarie Centre, North Ryde, New South Wales, Australia

Dr. Saber Mohamed Abd-Allah

Associate Professor, Department of Biochemistry, Shanghai Institute of Biochemistry and Cell Biology, Yue Yang Road, Shanghai, China

Dr. Himani Sharma

Professor & Dean, Department of Electronics & Communication Engineering, MLR Institute of Technology, Laxman Reddy Avenue, Dundigal, Hyderabad, India

Dr. Sahab Singh

Associate Professor, Department of Management Studies, Dronacharya Group of Institutions, Knowledge Park-III, Greater Noida, India

Dr. Umesh Kumar

Principal: Govt Women Poly, Ranchi, India

Dr. Syed Zaheer Hasan

Scientist-G Petroleum Research Wing, Gujarat Energy Research and Management Institute, Energy Building, Pandit Deendayal Petroleum University Campus, Raisan, Gandhinagar-382007, Gujarat, India.

Dr. Jaswant Singh Bhomrah

Director, Department of Profit Oriented Technique, 1 – B Crystal Gold, Vijalpore Road, Navsari 396445, Gujarat. India

Technical Advisory Board

Dr. Mohd. Husain

Director, MG Institute of Management & Technology, Banthara, Lucknow (U.P.), India

Dr. T. Jayanthi

Principal, Panimalar Institute of Technology, Chennai (TN), India

Dr. Umesh A.S.

Director, Technocrats Institute of Technology & Science, Bhopal(M.P.), India

Dr. B. Kanagasabapathi

Infosys Labs, Infosys Limited, Center for Advance Modeling and Simulation, Infosys Labs, Infosys Limited, Electronics City, Bangalore, India

Dr. C.B. Gupta

Professor, Department of Mathematics, Birla Institute of Technology & Sciences, Pilani (Rajasthan), India

Dr. Sunandan Bhunia

Associate Professor & Head,, Dept. of Electronics & Communication Engineering, Haldia Institute of Technology, Haldia, West Bengal, India

Dr. Jaydeb Bhaumik

Associate Professor, Dept. of Electronics & Communication Engineering, Haldia Institute of Technology, Haldia, West Bengal, India

Dr. Rajesh Das

Associate Professor, School of Applied Sciences, Haldia Institute of Technology, Haldia, West Bengal, India

Dr. Mrutyunjaya Panda

Professor & Head, Department of EEE, Gandhi Institute for Technological Development, Bhubaneswar, Odisha, India

Dr. Mohd. Nazri Ismail

Associate Professor, Department of System and Networking, University of Kuala (UniKL), Kuala Lumpur, Malaysia

Dr. Haw Su Cheng

Faculty of Information Technology, Multimedia University (MMU), Jalan Multimedia, 63100 Cyberjaya

Dr. Hossein Rajabalipour Cheshmehgaz

Industrial Modeling and Computing Department, Faculty of Computer Science and Information Systems, Universiti Teknologi Malaysia (UTM) 81310, Skudai, Malaysia

Dr. Sudhinder Singh Chowhan

Associate Professor, Institute of Management and Computer Science, NIMS University, Jaipur (Rajasthan), India

Dr. Neeta Sharma

Professor & Head, Department of Communication Skills, Technocrat Institute of Technology, Bhopal(M.P.), India

Dr. Ashish Rastogi

Associate Professor, Department of CSIT, Guru Ghansi Das University, Bilaspur (C.G.), India

Dr. Santosh Kumar Nanda

Professor, Department of Computer Science and Engineering, Eastern Academy of Science and Technology (EAST), Khurda (Orisa), India

Dr. Hai Shanker Hota

Associate Professor, Department of CSIT, Guru Ghansi Das University, Bilaspur (C.G.), India

Dr. Sunil Kumar Singla

Professor, Department of Electrical and Instrumentation Engineering, Thapar University, Patiala (Punjab), India

Dr. A. K. Verma

Professor, Department of Computer Science and Engineering, Thapar University, Patiala (Punjab), India

Dr. Durgesh Mishra

Chairman, IEEE Computer Society Chapter Bombay Section, Chairman IEEE MP Subsection, Professor & Dean (R&D), Acropolis Institute of Technology, Indore (M.P.), India

Dr. Xiaoguang Yue

Associate Professor, College of Computer and Information, Southwest Forestry University, Kunming (Yunnan), China

Dr. Veronica Mc Gowan

Associate Professor, Department of Computer and Business Information Systems, Delaware Valley College, Doylestown, PA, Allman China

Dr. Mohd. Ali Hussain

Professor, Department of Computer Science and Engineering, Sri Sai Madhavi Institute of Science & Technology, Rajahmundry (A.P.), India

Dr. Mohd. Nazri Ismail

Professor, System and Networking Department, Jalan Sultan Ismail, Kaula Lumpur, MALAYSIA

Dr. Sunil Mishra

Associate Professor, Department of Communication Skills (English), Dronacharya College of Engineering, Farrukhnagar, Gurgaon (Haryana), India

Dr. Labib Francis Gergis Rofaiel

Associate Professor, Department of Digital Communications and Electronics, Misr Academy for Engineering and Technology, Mansoura City, Egypt

Dr. Pavol Tanuska

Associate Professor, Department of Applied Informatics, Automation, and Mathematics, Trnava, Slovakia

Dr. VS Giridhar Akula

Professor, Avanthi's Research & Technological Academy, Gunthapally, Hyderabad, Andhra Pradesh, India

Dr. S. Satyanarayana

Associate Professor, Department of Computer Science and Engineering, KL University, Guntur, Andhra Pradesh, India

Dr. Bhupendra Kumar Sharma

Associate Professor, Department of Mathematics, KL University, BITS, Pilani, India

Dr. Praveen Agarwal

Associate Professor & Head, Department of Mathematics, Anand International College of Engineering, Jaipur (Rajasthan), India

Dr. Manoj Kumar

Professor, Department of Mathematics, Rashtriya Kishan Post Graduate Degree, College, Shamli, Prabudh Nagar, (U.P.), India

Dr. Shaikh Abdul Hannan

Associate Professor, Department of Computer Science, Vivekanand Arts Sardar Dalipsing Arts and Science College, Aurangabad (Maharashtra), India

Dr. K.M. Pandey

Professor, Department of Mechanical Engineering, National Institute of Technology, Silchar, India

Prof. Pranav Parashar

Technical Advisor, International Journal of Soft Computing and Engineering (IJSCE), Bhopal (M.P.), India

Dr. Biswajit Chakraborty

MECON Limited, Research and Development Division (A Govt. of India Enterprise), Ranchi-834002, Jharkhand, India

Dr. D.V. Ashoka

Professor & Head, Department of Information Science & Engineering, SJB Institute of Technology, Kengeri, Bangalore, India

Dr. Sasidhar Babu Suvanam

Professor & Academic Coordinator, Department of Computer Science & Engineering, Sree Narayana Gurukulam College of Engineering, Kadayiuruppu, Kolenchery, Kerala, India

Dr. C. Venkatesh

Professor & Dean, Faculty of Engineering, EBET Group of Institutions, Kangayam, Erode, Caimbatore (Tamil Nadu), India

Dr. Nilay Khare

Assoc. Professor & Head, Department of Computer Science, MANIT, Bhopal (M.P.), India

Dr. Sandra De Iaco

Professor, Dip.to Di Scienze Dell'Economia-Sez. Matematico-Statistica, Italy

Dr. Yaduvir Singh

Associate Professor, Department of Computer Science & Engineering, Ideal Institute of Technology, Govindpuram Ghaziabad, Lucknow (U.P.), India

Dr. Angela Amphawan

Head of Optical Technology, School of Computing, School Of Computing, Universiti Utara Malaysia, 06010 Sintok, Kedah, Malaysia

Dr. Ashwini Kumar Arya

Associate Professor, Department of Electronics & Communication Engineering, Faculty of Engineering and Technology, Graphic Era University, Dehradun (U.K.), India

Dr. Yash Pal Singh

Professor, Department of Electronics & Communication Engg, Director, KLS Institute Of Engg.& Technology, Director, KLSIET, Chandok, Bijnor, (U.P.), India

Dr. Ashish Jain

Associate Professor, Department of Computer Science & Engineering, Accurate Institute of Management & Technology, Gr. Noida (U.P.), India

Dr. Abhay Saxena

Associate Professor&Head, Department. of Computer Science, Dev Sanskriti University, Haridwar, Uttarakhand, India

Dr. Judy. M.V

Associate Professor, Head of the Department CS &IT, Amrita School of Arts and Sciences, Amrita Vishwa Vidyapeetham, Brahmadhanam, Edappally, Cochin, Kerala, India

Dr. Sangkyun Kim

Professor, Department of Industrial Engineering, Kangwon National University, Hyoja 2 dong, Chuncheon, Gangwon-do, Korea

Dr. Sanjay M. Gulhane

Professor, Department of Electronics & Telecommunication Engineering, Jawaharlal Darda Institute of Engineering & Technology, Yavatmal, Maharashtra, India

Dr. K.K. Thyagarajan

Principal & Professor, Department of Information Technology, RMK College of Engineering & Technology, RSM Nagar, Thiruvallur, Tamil Nadu, India

Dr. P. Subashini

Assoc. Professor, Department of Computer Science, Coimbatore, India

Dr. G. Srinivasrao

Professor, Department of Mechanical Engineering, RVR & JC, College of Engineering, Chowdavaram, Guntur, India

Dr. Rajesh Verma

Professor, Department of Computer Science & Engg. and Deptt. of Information Technology, Kurukshetra Institute of Technology & Management, Bhor Sadian, Pehowa, Kurukshetra (Haryana), India

Dr. Pawan Kumar Shukla

Associate Professor, Satya College of Engineering & Technology, Haryana, India

Dr. U C Srivastava

Associate Professor, Department of Applied Physics, Amity Institute of Applied Sciences, Amity University, Noida, India

Dr. Reena Dadhich

Prof. & Head, Department of Computer Science and Informatics, MBS MArg, Near Kabir Circle, University of Kota, Rajasthan, India

Dr. Aashis. S. Roy

Department of Materials Engineering, Indian Institute of Science, Bangalore Karnataka, India

Dr. Sudhir Nigam

Professor Department of Civil Engineering, Principal, Lakshmi Narain College of Technology and Science, Raisen, Road, Bhopal, (M.P.), India

Dr. S. Senthil Kumar

Doctorate, Department of Center for Advanced Image and Information Technology, Division of Computer Science and Engineering, Graduate School of Electronics and Information Engineering, Chon Buk National University Deok Jin-Dong, Jeonju, Chon Buk, 561-756, South Korea Tamilnadu, India

Dr. Gufran Ahmad Ansari

Associate Professor, Department of Information Technology, College of Computer, Qassim University, Al-Qassim, Kingdom of Saudi Arabia (KSA)

Dr. R. Navaneetha krishnan

Associate Professor, Department of MCA, Bharathiyar College of Engg & Tech, Karaikal Puducherry, India

Dr. Hossein Rajabalipour Cheshmejjaz

Industrial Modeling and Computing Department, Faculty of Computer Science and Information Systems, Universiti Teknologi Skudai, Malaysia

Dr. Veronica McGowan

Associate Professor, Department of Computer and Business Information Systems, Delaware Valley College, Doylestown, PA, Allman China

Dr. Sanjay Sharma

Associate Professor, Department of Mathematics, Bhilai Institute of Technology, Durg, Chhattisgarh, India

Dr. Taghreed Hashim Al-Noor

Professor, Department of Chemistry, Ibn-Al-Haitham Education for pure Science College, University of Baghdad, Iraq

Dr. Madhumita Dash

Professor, Department of Electronics & Telecommunication, Orissa Engineering College, Bhubaneswar, Odisha, India

Dr. Anita Sagadevan Ethiraj

Associate Professor, Department of Centre for Nanotechnology Research (CNR), School of Electronics Engineering (Sense), Vellore Institute of Technology (VIT) University, Tamilnadu, India

Dr. Sibasis Acharya

Project Consultant, Department of Metallurgy & Mineral Processing, Midas Tech International, 30 Mukin Street, Jindalee-4074, Queensland, Australia

Dr. Neelam Ruhil

Professor, Department of Electronics & Computer Engineering, Dronacharya College of Engineering, Gurgaon, Haryana, India

Dr. Faizullah Mahar

Professor, Department of Electrical Engineering, Balochistan University of Engineering and Technology, Pakistan

Dr. K. Selvaraju

Head, PG & Research, Department of Physics, Kandaswami Kandars College (Govt. Aided), Velur (PO), Namakkal DT. Tamil Nadu, India

Dr. M. K. Bhanarkar

Associate Professor, Department of Electronics, Shivaji University, Kolhapur, Maharashtra, India

Dr. Sanjay Hari Sawant

Professor, Department of Mechanical Engineering, Dr. J. J. Magdum College of Engineering, Jaysingpur, India

Dr. Arindam Ghosal

Professor, Department of Mechanical Engineering, Dronacharya Group of Institutions, B-27, Part-III, Knowledge Park, Greater Noida, India

Dr. M. Chithirai Pon Selvan

Associate Professor, Department of Mechanical Engineering, School of Engineering & Information Technology Manipal University, Dubai, UAE

Dr. S. Sambhu Prasad

Professor & Principal, Department of Mechanical Engineering, Pragati College of Engineering, Andhra Pradesh, India.

Dr. Muhammad Attique Khan Shahid

Professor of Physics & Chairman, Department of Physics, Advisor (SAAP) at Government Post Graduate College of Science, Faisalabad.

Dr. Kuldeep Pareta

Professor & Head, Department of Remote Sensing/GIS & NRM, B-30 Kailash Colony, New Delhi 110 048, India

Dr. Th. Kiranbala Devi

Associate Professor, Department of Civil Engineering, Manipur Institute of Technology, Takyelpat, Imphal, Manipur, India

Dr. Nirmala Mungamuru

Associate Professor, Department of Computing, School of Engineering, Adama Science and Technology University, Ethiopia

Dr. Srilalitha Girija Kumari Sagi

Associate Professor, Department of Management, Gandhi Institute of Technology and Management, India

Dr. Vishnu Narayan Mishra

Associate Professor, Department of Mathematics, Sardar Vallabhbhai National Institute of Technology, Ichchhanath Mahadev Dumas Road, Surat (Gujarat), India

Dr. Yash Pal Singh

Director/Principal, Somany (P.G.) Institute of Technology & Management, Garhi Bolni Road, Rewari Haryana, India.

Dr. Sripada Rama Sree

Vice Principal, Associate Professor, Department of Computer Science and Engineering, Aditya Engineering College, Surampalem, Andhra Pradesh. India.

Dr. Rustom Mamlook

Associate Professor, Department of Electrical and Computer Engineering, Dhofar University, Salalah, Oman. Middle East.

Managing Editor

Mr. Jitendra Kumar Sen

International Journal of Advanced Engineering and Nano Technology (IJAENT)

Editorial Board

Dr. Vikas Maheshwari

Associate Professor, Department of Electrical Communication Engineering, Amity University Madhya-Pradesh Gwalior, M.P., India

Dr. Sudhakara A

Associate Professor, Department of Chemistry, Jain Institute of Technology Davanagere, Karnataka, India

Dr. Jammi Ashok

Associate Professor, Department of Electrical and Computer Engineering, Hawassa University, Hawassa.(East Africa)

Dr. Mohamed Ashabrawy

Associate Professor, Department of Computer Science, Salman bin Abdulaziz University Kingdom, Saudi Arabia

Dr. Omer Muhammad Ayoub

Associate Professor, Department of Computer Science, Punjab University Affected Center Abdullah Sulayman Road, Al-Fayyaz, Jeddah, KSA Saudi Arabia

Dr. M. Seenivasan

Associate Professor, Department of Mathematics, Annamalai University Annamalai Nagar, Tamil Nadu, India

Dr. S.V.G.V.A. Prasad

Associate Professor, Department of Physics, Ideal College of Arts & Sciences, Kakinada, A.P, India.

Dr. S. Omkumar

Associate Professor, Department of Electronics and Communication Engineering, SCSVMV University, Enathur, Kanchipuram – 631 561. Tamilnadu, India.

Dr. Yousef FARHAOU

Associate Professor, Department of Computer Science, Faculty of Sciences and Technic, Moulay Ismail University, B.P 509, Boutalamine, Errachidia, Morocco.

Dr. Gutta Sridevi

Associate Professor, Department of Computer Science & Engineering, K L University, Vaddeswaram, Guntur (DT) Andhra Pradesh. India.

Dr. Debmalaya Bhattacharya

Associate Professor, Department of Electronics & Communication Engineering, University of Technology & Management, Bawri Mansion, Dhankheti, Shillong-793003, Meghalaya, India.

Dr. K. Harinadha Reddy

Associate Professor, Department of Electrical and Electronics Engineering, L B R College of Engineering, Mylavaram, Krishna District, Andhra Pradesh State - 5 21 230, India.

Dr. C. Gajendran

Associate Professor, Department of Civil Engineering, School of Civil Engineering, Karunya Nagar, Karunya University, Coimbatore – 641114, Tamil Nadu, India.

Dr. Dibya Prakash Rai

Assistant Professor, Department of Physics, College of Aizawl, Pachhunga University, Mizoram, India.

Dr. Sreenivasa Reddy

Associate Professor, Department of Chemistry, Sri Krishnadevaraya University, Anantapur-515003, A.P., India.

Dr. P. K. Dhal

Associate Professor, Department of Electrical and Electronics Engineering, Vel Tech, Dr. RR & Dr. SR Technical University, Chennai, India.

Dr. M. A. Ashabrawy

Associate Professor, Department of Computer Science, Atomic Energy Authority, Salman bin Abdulaziz University, Al Kharj Saudi Arabia.

Dr. K. Meenakshi Sundaram

Professor & Head, Department of Computer Science, Agnel Institute of Technology and Design, Assagao - Bardez, Goa. India.

Dr. Persis Voola

Associate Professor, Department of Computer Science and Engineering, Adikavi Nannaya University, Rajah Narendra Nagar, Rajahmundry-533296 Andhra Pradesh, India.

Dr. Abhijit Banerjee

Associate Professor, Department of Electronics and Instrumentation Engineering, Academy of Technology, Hooghly, Grand Trunk Rd, Adisaptagram, Aedconagar, West Bengal, India.

Dr. D. Amaranatha Reddy

Associate Professor, Department of Chemistry, Pusan National University, Busan, South Korea.

Dr. A. Heidari

Associate Professor, Department of Chemistry, Postdoctoral Research Fellow, California South University (CSU), Irvine, California, USA

Dr. Ashwani Kumar Aggarwal

Assistant Professor, Department of Electrical and Instrumentation Engineering, Sant Longowal Institute of Engineering and Technology, Longowal, Punjab, India.

Dr. P. Srinivas

Assistant Professor, Department of Electrical Engineering, University College of Engineering Osmania University, Hyderabad-500007, Telangana, India.

Dr. Sandeep Chettri

DST-SERB, Young Scientist, Department of Physics, Mizoram University, Tanhril, Aizawl, Mizoram 796004, India.

Dr. Elsanosy M. Elamin

Assistant Professor, Department of Electrical and Electronic Engineering, Faculty of Engineering, University of Kordofan B.O.Box: 160 Elobeid, (Sudan). North Africa.

Dr. Porag Kalita

Professor & Head, Department of Automobile Engineering, Jorhat, Assam, India.

Dr. T. A. Ashok Kumar

Associate Professor, Department of Computer Science, Christ University, Bengaluru, Karnataka, India.

Dr. Malini M Patil

Associate Professor, Department of Information Science and Engineering, JSS Academy of Technical Education, JSS Campus, Bangalore-560060, Karnataka, India.

Dr. V. Selvan

Associate Professor, Department of Civil Engineering, Sri Ramakrishna Engineering College, Vattamalaipalayam, Coimbatore, Tamil Nadu, India.

Dr. Syed Umar

Associate Professor, Department of Computer Science and Engineering, Koneru Lakshmaiah University, Vaddeswaram, Guntur, Andhra Pradesh, India.

S. No		Volume-1 Issue-5, April 2013, ISSN: 2319-9598 (Online) Published By: Blue Eyes Intelligence Engineering & Sciences Publication Pvt. Ltd.		Page No.
1.	Authors:	Nagesh M. Kulkarni, D. G. Gaidhankar		
	Paper Title:	Analysis and Design of Ferrocement Panels an Experimental Study		
	<p>Abstract: Ferrocement is a form of reinforced concrete that differs from conventional reinforced or prestressed concrete primarily by the manner in which the reinforcing elements are dispersed and arranged. It consists of closely spaced, multiple layers of mesh or fine rods completely embedded in cement mortar. This paper describes the various experiments conducted on ferrocement panels in literature review and the conclusions and remarks drawn by the authors. The results obtained are going to help in the project work to investigate the behavior of ferrocement panels for various parameters and loading. This is useful to find solutions by searching new design techniques and method of constructions.</p> <p>Keywords: Cement mortar, Ferrocement, Mesh, Panels.</p> <p>References:</p> <ol style="list-style-type: none">1. Ferrocement floor and roof system for buildings By Dr.T.S.Thandavamoorthy Adhiparasakti Engineering college Melmaaruvathur2. Flexural Behavior of Flat and Folded Ferrocement Panels by Mohamad Mahmood Civil Engineering department Mosul University Iraq3. Structural behavior of ferrocement system for roofing By Wail N. Al-Rifaie University of Nottingham4. Research Needs in Ferrocement Technology by Dr.P.N.Divekar, President, Ferrocement society, Pune5. Effect Of Wire Mesh Orientation On Ferrocement element by Dr. S.K. Kaushik Professor and Head, Department of Civil Engineering, Indian Institute of Technology, Roorkee6. Performance of Precast Ferrocement Panel for Composite Masonry Slab System by Y. Yardim, Universiti Putra Malaysia7. Applications of Ferrocement in Strengthening of Unreinforced Masonry Columns By Abid A. Shah8. Utilization of Ferrocement as Flexural Building Member (Applied as a Hollow Box Joist)By R Abasolo, C Bandivs, Civil Engineering department College of Engineering Xavier University-Philippines9. Design of College Building with Ferrocement Element By Arun Purandare, Structural Consultant, Pune10. ACI Committee 549, "State-of-the-art report on ferrocement", ACI549-R97, in Manual of Concrete Practice, ACI, Detroit, 1997, 26 pp11. ACI committee 549-1R-88, "Guide for design construction and repair of ferrocement," ACI 549-1R-88 and 1R-93, in Manual of Concrete Practice, ACI, Detroit, 1993, 27 pp.12. Association of Structural Engineers of the Philippines,Inc. (2001). National structural code of the Philippines (NSCP) 2001, Volume I.Structural Concrete. Philippines.			1-8
2.	Authors:	S. Harippriya, T. Kalaikumaran, S. Karthik		
	Paper Title:	Secure Clustering in a Distributed Network		
	<p>Abstract: Data Mining plays a major role in storage of vast quantities of data. It extracts valuable knowledge, which helps organizations to obtain better results by pooling their data together. Distributed data mining is concerned about data that are shared among multiple organizations. A complementary approach to privacy-preserving data mining uses randomization techniques. Privacy-preserving data mining solutions have been presented both with respect to horizontally and vertically partitioned databases, in which earlier data objects with the same attributes for the same data objects are owned by each party, respectively. The quality of a set of clusters can be measured using the value of an objective function which is taken to be the sum of the squares of the distances of each point from the centre of the cluster to which it is assigned.</p> <p>Keywords: Arbitrarily partitioned Data, Data Mining.</p> <p>References:</p> <ol style="list-style-type: none">1. Agrawal.R and Srikant.R(2000)'Privacy preserving data mining',In Proc.ACM SIGMID Conf. on Management of Data,pages 439-450.ACM Press2. Ali Inan, Yucel Saygin, Erkey Savas, Ayca Azgin Hintoglu, Albert Levi,2006. 'Privacy Preserving Clustering on Horizontally Partitioned Data', Proceedings of the 22nd International Conference on Data Engineering Workshops (ICDEW'06)3. Chris Clifton,(2001)'Privacy Preserving Distributed Data Mining'4. Geetha Jagannathan, Krishnan Pillaipakkammatt and Rebecca N. Wright,'A New Privacy-Preserving Distributed k-Clustering Algorithm'5. Goethals.B,Laur.S,Lipmaa.H, and Mielikainen.T,(2004)'On Secure scalar product computation for privacy-preserving data mining'.In The 7th Annual International Conf. in Information Security and Cryptology6. Golreich.O(2004)'Foundations of Cryptography',Vol II Cambridge University Press7. Krishna Prasad.P and Pandu Rangan.C(2007) 'Privacy Preserving BIRCH Algorithm for Clustering over Arbitrarily Partitioned Databases' R. Alhajj et al. (Eds.): ADMA 2007, LNAI 4632, pp. 146-157, 2007. © Springer-Verlag Berlin Heidelberg8. Lindell.Y and Pinkas.B(2000)'Privacy preserving data mining',Lecture Notes in Computer Science,18809. Lloyd.S.P(1982)'Least squares quantization in PCM',IEEE Transactions on Information Theory,28:129-13710. MacQueen.J.(1967)'Some methods for classification and analysis of multivariate observations'.In Proc.Fifth Berkeley Symposium on Mathematical Statistics and probability,volume 1,pages 281-29611. Maneesh Upmanyu, Anoop M. Namboodiri, Kannan Srinathan, and C.V. Jawahar(2010)'Efficient Privacy Preserving K-Means Clustering', H. Chen et al. (Eds.): PAISI 2010, LNCS 6122, pp. 154-166. © Springer-Verlag Berlin Heidelberg12. Oliveria.S and Zaiane.O.R(2003)'Privacy preserving clustering by data transformation' In Proc.18th Brazilian Symposium on Databases, pages 304-31813. Prakash.V.S,Shanmugam.A,Murugesan.P (2012) 'Efficient Cluster Based Privacy Preservation Data Perturbation Technique in Multi-Partitioned Datasets',European Journal of Scientific Research, ISSN 1450-216X Vol. 86 No 2 September, 2012, pp.254-26314. Shuguo HAN, and Wee Keong NG(2007)'Multi-Party Privacy-Preserving Decision Trees for Arbitrarily Partitioned Data' International Journal Of Intelligent Control And Systems Vol. 12, No. 4, 351-35815. Vaidya.J and Clifton.C(2003)'Privacy preserving k-means clustering over vertically partitioned data' In Proc. 9th ACM SIGKDD International Conf. on Knowledge Discovery and Data Mining.ACM Press.			9-13
	Authors:	Mukesh Kumar Thakur, Ravi Shankar Kumar, Mohit Kumar, Raju Kumar		
	Paper Title:	Wireless Fingerprint Based Security System Using Zigbee Technology		

3.	<p>Abstract: Among the huge requirements, the one and only one requirement which has a vital importance in our daily life is “Security”. It may be for application, information, data, network, home, financial, and national security like parliament etc. In this present day we have already several type of security system like CCTV, barcode, identity card etc. which is based on the various type of technology and has tedious processing, which is long time taking, highly expensive, less percentage of securing, not widely used, chance of hacking and destroy or altered easily. Due to this dearth the present security system is unable to fulfil our best security. In this paper we propose a wireless fingerprint security system based on Zigbee technology to overcome above dearth. This system is based on the taking fingerprint of a user with the help of a fingerprint sensor module and matching it with the database details corresponding to the user fingerprint and displays it on the computer screen. This security system has a better percentage of security with respect to other security system available. Apart from this it is fast processing, less expensive, better portability and a little bit chance of hacking, alter and copy of information between source and database.</p> <p>Keywords: Database, Fingerprints Sensor Module, Fingerprints Verification, Zigbee Technology.</p> <p>References:</p> <ol style="list-style-type: none">1. M. Lourde R, D. Khosla, “Fingerprint Identification in Biometric Security Systems” International Journal of Computer and Electrical Engineering, Vol. 2, No. 5, October, 2010.2. G.Sambasiva Rao, C. NagaRaju, L. S. S. Reddy and E. V. Prasad, “A Novel Fingerprints Identification System Based on the Edge Detection”, International Journal of Computer Science and Network Security.3. International Journal of Engineering and Advanced Technology (IJEAT). ISSN: 2249 – 8958, Volume-2, Issue 3, February 2013. 201. “Wireless Fingerprint Based College Attendance System using Zigbee Technology”4. www.ijecse.org/wp-content/.../08/Volume-1Number-3PP-872-878.pdf5. www.iiste.org/Journals/index.php/CEIS/article/download/580/4696. A. K. Jain, U. Uludag and A. Ross, "Biometric Template Selection: A Case Study in Fingerprints", Proc. 4th Int'l Conf. on Audio- and Video-Based Biometric Person Authentication (AVBPA), pp. 335-342, Guildford, UK, June 9-11, 2003.7. L. Hong and A. K. Jain, "Classification of Fingerprint Images", Proc. 11th Scandinavian Conference on Image Analysis, June 7-11, Kangerlussuaq, Greenland, 19998. “Design of Zigbee Transceiver for IEEE 802.15.4 Using MATLAB/SIMULINK” Prof. Sarat Kumar Patra (Supervisor) Head of Department, Dept. of Electronics & Communication Engg. National Institute of Technology Rourkela-769008.9. ethesis.nitrkl.ac.in/995/1/neeta.pdf10. R. Cappelli, D. Maio, and D. Maltoni, “Synthetic Fingerprint-Database Generation,” in Proc. 16th International Conf. on Pattern Recognition, August 2002, pp. 744–747.11. https://en.wikipedia.org/wiki/IEEE_802.15.412. Nandakumar K, Jain AK, Pankanti S. Fingerprint-base Fuzzy Vault: Implementation and Performance, IEEE Transactions on Informatics Forensics and Security, vol. 2, no. 4, pp. 744-757, December 2007.	14-17				
4.	<table><tr><td>Authors:</td><td>Ajay Singh Yadav, Anupam Swami</td></tr><tr><td>Paper Title:</td><td>A Two-Warehouse Inventory Model for Decaying Items with Exponential Demand and Variable Holding Cost</td></tr></table> <p>Abstract: This chapter presents a two warehouses inventory model for deteriorating items. It is assumed that the inventory costs (including holding cost and deterioration cost) in RW are higher than those in OW. Demand is taken exponentially increasing with time. Holding cost is taken as variable and it is linear increasing function of time. Shortages are allowed in the owned warehouse and the backlogging rate of unsatisfied demand is assumed to be a decreasing function of the waiting time. Profit maximization technique is used in this study.</p> <p>Keywords: OW. RW.</p> <p>References:</p> <ol style="list-style-type: none">1. Aggarwal, S.P. and Jaggi, C.K. (1995): “Ordering policies of deteriorating items under permissible delay in payments”, Journal of Operational Research Society (J.O.R.S.), 46, 658-662.2. Balkhi, Z.T. and Benkherouf, L. (2004): “On an inventory model for deteriorating items with stock dependent and time varying demand rates”, Computers & Operations Research, 31, 223- 240.3. Dave, U. (1989): “On a heuristic inventory-replenishment rule for items with a linearly increasing demand incorporating shortages. Journal of the Operational Research Society, 38(5), 459-463.4. Donaldson W.A. (1977): “Inventory replenishment policy for a linear trend in demand-an analytical solution”. Operational Research Quarterly, 28, 663-670.5. Goswami, A. and Chaudhuri, K.S. (1991): “An EOQ model for deteriorating items with a linear trend in demand”, J.O.R.S., 42(12), 1105-1110.6. Hariga, M.A. (1995): “Effects of inflation and time-value of money on an inventory model on an inventory model with time-dependent demand rate and shortages”, E.J.O.R., 81 (3), 512-520.7. Mandal, M. and Maiti, M. (1999): “Inventory of damageable items with variable replenishment rate, stock-dependent demand and some units in hand”, Applied Mathematical Modeling 23 (1999), pp. 799–807.8. Mahapatra, N.K. and Maiti, M. (2005): “Multi objective inventory models of multi items with quality and stock dependent demand and stochastic deterioration”, Advanced Modeling and optimization, 7, 1, 69-84.9. Panda, S., Saha, S. and Basu, M. (2007): “An EOQ model with generalized ramp-type demand and Weibull distribution deterioration”, Asia Pacific Journal of Operational Research, 24(1), 1-17.10. Sana, S., and Chaudhuri, K.S. (2008): “A deterministic EOQ model with delays in payments and price-discounts offer”, E.J.O.R., 184, 509-533.11. Wu, K.S., Ouyang, L.Y. and Yang, C.T. (2006): “An optimal replenishment policy for non-instantaneous deteriorating items with stock dependent demand and partial backlogging”, I.J.P.E., 101, 369-384.	Authors:	Ajay Singh Yadav, Anupam Swami	Paper Title:	A Two-Warehouse Inventory Model for Decaying Items with Exponential Demand and Variable Holding Cost	18-22
Authors:	Ajay Singh Yadav, Anupam Swami					
Paper Title:	A Two-Warehouse Inventory Model for Decaying Items with Exponential Demand and Variable Holding Cost					
	<table><tr><td>Authors:</td><td>Shivani Chauhan</td></tr><tr><td>Paper Title:</td><td>A Study Single Electron Transistor In Neural Network, Nanotechnology and Memory Design</td></tr></table>	Authors:	Shivani Chauhan	Paper Title:	A Study Single Electron Transistor In Neural Network, Nanotechnology and Memory Design	
Authors:	Shivani Chauhan					
Paper Title:	A Study Single Electron Transistor In Neural Network, Nanotechnology and Memory Design					

5.	<p>Abstract: To avail the practical approach for low dimension designing of electronic chips, SET is being used on the highest concern to provide nanotechnology. Now in current days, artificial neural networks is playing important roll for the accuracy and less time response. A computer memory which is basically based on this property would be ability to retain information in case if processor it self powered off. SET is to be considered as elements for future low power , high density integrated circuits reason for this of their the potential to involving only few electrons for ultra low power . In this paper we express the study of single electron transistor being used in nanotechnology, artificial neural network & memory designing. The operation as single electron transistor with it's history is mentioned included with advantages and disadvantage of SET.</p> <p>Keywords: Operation of set, Nanotechnology, Neural Network & Current Standards.</p> <p>References:</p> <ol style="list-style-type: none">1. M.A. Kastner, "The single Electron Transistor", Reviews of Modern Physics, Vol. 64, No. 3, pp. 849-858, July 1992.2. M. A. Kastner, "The single electron transistor and artificial atoms", Ann. Phy. (Leipzig), vol. 9, pp. 885-895, 2000.3. S. Bednarek, B. Szafran, and J. Adamowski, "Solution of the Poisson-Schrodinger problem for a single-electron transistor", Phys. Rev. B, Vol. 61, pp. 4461-4464, 2000.4. Songphol Kanjanachuchai and Somsak Panyakeow, "Beyond CMOS: Single-Electron Transistors", IEEE International Conference on Industrial Technology, Bangkok, Thailand, 2002.5. Masumi Saitoh, Hidehiro Haratalion and Toshiro Hiramoto, "Room-Temperature Demonstration of Integrated Silicon Single-Electron Transistor Circuits for Current Switching and Analog Pattern Matching", IEEE International Electron Device Meeting, San Francisco, USA, 2004.6. K. Matsumoto, M. Ishii, K. Segawa, Y. Oka B. J. Vartanian and J. S. Harris, "Room temperature operation of a single electron transistor made by the scanning tunneling microscope nano oxidation process for the TiOx/Ti system", Appl. Phys. Lett. 68 (1), pp. 34-36, 1996.7. Xiaohui Wang and Wolfgang Porod, "Analytic I-V Modeling for Single-Electron Transistor", VLSI Design, Volume 13, pp. 189-192, 2001.8. J.M. Martinez-Duart, R.J. Martin-Palma, F. Agullo-Rueda, "Nanotechnology for Microelectronics and Optoelectronics", First Edition, pp.65-169, 2006.9. William a. Goddard, Donald W. Brenner, Sergey e. Lyshevski, Gerald J. Lafrate, "Handbook of Nanoscience Engineering and Technology", Second edition, pp.13-1 to 13-38, 2007.10. Uda Hashim and Amiza Rasmi "Single- Electron Transistor (SET) Process and Device Simulation Using SYNOPSIS TCAD Tools" American Journal of Applied Sciences 3 (7): 1933-1938, 200611. T.A. Fulton and G.D. Dolan, "Observation of single-electron charging effect in small tunneling junction," Phys. Rev. Lett., vol.59, pp. 109-112, July 1987.12. Dae Hwan Kim, Jong Duk Lee and Byung-Gook Park "Room Temperature Coulomb Oscillation of a Single Electron Switch with an Electrically Formed Quantum Dot and Its Modeling", Jpn. J. Appl. Phys. Vol. 39 (2000) pp. 2329-2333, April 2000.13. Dinh Sy Hien, Huynh Lam Thu Thao and Le Hoang Minh, "Modelling transport in single electron transistor", APCTP-ASEAN Workshop on Advanced Materials Science and Nanotechnology (AMSN08), Journal of Physics: Conference Series 187, pp. 1-5, 2009.14. David Berman, Nikolai B. Zhitenev, Raymond C. Ashoori, Henry I. Smitha and Michael R. Melloch, "Single-electron transistor as a charge sensor for semiconductor applications", J. Vac. Sci. Technol. B 15(6), pp. 2844-2847, Nov/Dec 1997.15. M. N. Kiselev, K. Kikoin, R. I. Shekhter and V. M. Vinokur, "Kondo shuttling in a nanoelectromechanical single-electron transistor", PHYSICAL REVIEW B 74, 233403, pp. 1-4, 2006.16. Lingjie Guo, Effendi Leobandung and Stephen Y. Chou, "A Silicon Single-Electron Transistor Memory Operating at Room Temperature", SCIENCE VOL. 275, pp. 649-651, 1997.17. Dong Seup Lee, Sangwoo Kang, Kwon-Chil Kang, Joung-Eob Lee, Jung Hoon Lee, Kwan-Jae Song, Dong Myong Kim, Jong Duk Lee and Byung-Gook Park, "Fabrication and Characteristics of Self-Aligned Dual-Gate Single-Electron Transistors", IEEE TRANSACTIONS ON NANOTECHNOLOGY, VOL. 8, NO. 4, pp. 492-497, JULY 2009.18. Changyun Zhu, Zhenyu (Peter) Gu, Li Shang, Robert P. Dick and Robert G. Knobel, "Towards An Ultra-Low-Power Architecture Using Single-Electron Tunneling Transistors", Annual ACM IEEE Design Automation Conference, pp. 312-317, 2007.19. Teruhisa Matsui, Jun Kawarabayashi, Kenichi Watanabe and Tetsuo Iguchi, "Evaluation of Single-Electron Transistor as Nanoscale Thermometer for a Cryogenic Radiation Detector", Journal of NUCLEAR SCIENCE and TECHNOLOGY, Supplement 6, pp. 73-77 September 2008.20. R. Knobel, C. S. Yung, and A. N. Clelanda, "Single-electron transistor as a radio-frequency mixer", APPLIED PHYSICS LETTERS, VOLUME 81, NUMBER 3, pp. 532-534, July 2002.21. A.N. Cleand, D. Estene, C. Urbina and M.H. Devoret, "An Exterimly Low Noise Photodetector22. Om kumar and Manjit kaur, "Single electron transistor: Applications & problems", International journal of VLSI design and communication system (VLSICS) Vol. 1, No. 4, Dec. 2010.	23-26				
	<table><tr><td>Authors:</td><td>Sheetal Dixit, Ramanand Harijan</td></tr><tr><td>Paper Title:</td><td>Design & Analysis of Low Power Low Voltage Regulated Cascode Current Mirror</td></tr></table> <p>Abstract: The current mirror is core structure of all most all analog and mixed mode circuits and the performance of analog structures largely depends on their characteristics. In this paper first we study the simple current mirror; cascode current mirror and different low voltage current mirror topology and study the literature survey advantage and disadvantage. Second we study, analysis and design of convention regulated cascode current mirror, regulated cascode current mirror, wide output swing regulated cascode current mirror and wide input output swing regulated cascode current mirror and simulate Tanner EDA tool T-SPICE 0.18µm CMOS technology. Presented analysis low voltage current mirror input characteristic, output characteristics high output swing capability and wide input and wide output swing capabilities, suitable for low voltage operation and minimum power dissipation.</p> <p>Keywords: Low voltage current mirror, level shifted current mirror, cascode current mirror, WIOS –RCCM.</p>	Authors:	Sheetal Dixit, Ramanand Harijan	Paper Title:	Design & Analysis of Low Power Low Voltage Regulated Cascode Current Mirror	
Authors:	Sheetal Dixit, Ramanand Harijan					
Paper Title:	Design & Analysis of Low Power Low Voltage Regulated Cascode Current Mirror					

6.	<p>References:</p> <ol style="list-style-type: none"> 1. Lopez-Martin,A.J.; Ramirez-Angulo,j.; Carvajal,R.G.,“Low-voltage highly-linear class AB Current mirror with dynamic cascode biasing”IEEE Journal &Magazines, volume 48, Issue:21,pp.no.1336-1338 ,October 11 2012. 2. Minch,B.A.,“A simple low voltage cascade Current mirror with enhanced dynamic performance” IEEE conference, PP. no 1-3,9-10 Oct.2012 3. Garcia-Lozano,R.Z.;Hidalgo-Cortes,C.;Rocha-Perez,J.M.;Diaz-Sanchez,A.,“A very compact CMOS class AB current mirror for low voltage application” IEEE conference on Circuits and systems(CWCAS), pp.no.-1-4, Nov. 2012. 4. Behzad Razabi,, “Design of analog CMOS integrated circuits”, Tata McGraw Hills, fourth edition, 2001. 5. S.S Rajput, “Advanced Current Mirror for Low Voltage Analog Designs”, IEEE, ICSE, Proc. vol. 148, pp. 258-263, 2004. 6. Ying-Chuan Liu, Hung-Yu Wang, Yuan-Long Jeang and Yu-Wei Huang, “A CMOS Current Mirror with Enhanced Input Dynamic Range”, 3rd International Conference on Innovative Computing Information and Control (ICICIC'08). 7. S.S. Rajput, Prateek Vajpayee, G.K. Sharma, “1V High Performance Current Mirror for Low Voltage Analog and Mixed Signal Applications in Submicron Regime”, IEEE TENCON Conference , pp no.1-4,2009. 8. Jasdeep Kaur, Nupur Prakash and S.S.Rajput, “High-Linearity Low-Voltage Self- Cascode Class AB CMOS Current Output Stage”, World Academy of Science , Engineering and Technology 41 journal, Electron, pp. 600-6003, 2008. 9. Timir Datta, Pamela Abshire “Mismatch Compensation of CMOS Current Mirrors Using Floating-Gate Transistors”, solid –state circuits, IEEE Journal ,vol. 25no 3,pp. 1823-1826,2009. 10. Bruun E and Shah P, “Dynamic range of low-voltage cascode current mirrors”, Proc Circuit and system IEEE Journals, pp.1328-1331,1995. 11. E. Sackinger, W. Guggenbuhl, “A High-Swing, High-Impedance MOS Cascode Circuit”, IEEE Journal of Solid-state circuits, Vol.25, No.1, pp.289-298, Feb. 1990. 12. S.S.Rajput and S.S.Jamuar, “Low voltage, low power, high performance current mirror for portable analogue and mixed mode applications”, IEEE Proc-Circuits Device system,Vol. 148,No 5, pp.273-278,2001. 13. S.S. Rajput and S.S. Jamuar, “Low Voltage Analog Circuit Design Techniques,” IEEE Circuits and Systems Magazine, Vol. 2, Issue: 1, pp.24-42, Jan-Mar 2002. 14. Klass Bult and G.J.G.M. Geelen, “The CMOS Gain-Boosting Technique,” Analog Integrated Circuits and Signal Processing,Vol.1, Issue 2, pp. 119-135, Oct. 1991. 	27-37
----	--	-------