

ENEE 303 Analog and Digital Electronics – Base Paper Choices

Name	Section/ email	First talk date	Second talk date	Commentator dates
Paper				
Alyahya, Ibrahim Abdullah		W 03/30/11 #13	M 04/25/11 #6	M 04/18/11 #3
Hamid Jabbar, Young S. Song, and Taikyeong T. Jeong, "RF Energy Harvesting System and Circuits for Charging of Mobile Devices," IEEE Transactions on Consumer Electronics, Vol. 56, No. 1, February 2010, pp. 247 - 253.				
Ballard, Randolph Lee		M 04/04/11 #15	M 04/25/11 #2	M 04/11/11 #6
M. Deen and E. Simoen, "Low-frequency noise in polysilicon-emitter bipolar transistors," IEE Proceedings - Circuits, Devices, Systems, Vol. 149, No. 1, February 2002, pp. 40 - 50.				
Benavidez, Robert A		M 03/28/11 #13	M 04/18/11 #1 (RWN)	W 04/27/11 #3
Kenneth O, Ted Tewksbury, Geoff Dawe, Curtis Tsai, Peter Garoe, Brad Scharf, Christian Kermarrec, and John Yasaitis, "A Low Cost and Low Power Silicon npn Bipolar Process with NMOS Transistors and Its Wireless Applications," Proceedings of the IEEE MTT-s, 1995, pp. 93 - 98. [received 03/28/11]				
Bernard, Michael Joseph		W 03/30/11 #6	W 05/04/11 #6	M 05/02/11 #2
Adam D. Downey and Gregory M. Wierzba, "A Class-G/FB Audio Amplifier," IEEE Transactions on Consumer Electronics, Vo. 53, No. 4, November 2007, pp. 1537 - 1545.				
Chaudhari, Ankit Kumar		W 03/30/11 #9	W 04/06/11 #6	W 04/20/11 #5
James Ayers, Karikeya Mayaram and Terri S. Fiez, "An Ultralow-Power Receiver for Wireless Sensor Networks," IEEE Journal of Solid-State Circuits, Vol. 45, No. 9, September 2010, pp. 1759 - 1769.				
Cheung, Wilkin W		W 04/04/11 #6	W 04/13/11 #1	W 05/04/11 #4
N. Nakamura, D. A. Landis and G. Rai, "Low Power Shaper amplifier for the EOS TPC Detector," IEEE Transactions on Nuclear Science, Vol. 38, No. 2, April 1991, pp. 50 -52. [changed to the above 04/13/11]Desheng Ma, Fa Foster Dai, Richard C. Jaeger, and J. David Irwin, "An X-and Ku-Band Wideband Recursive Receiver MMIC with Gain-Reuse," IEEE Journal of Solid-State Circuits, Vol. ?, No. ?, 2011, pp. 1 - 10.				
Cisse, Ramatou		W 03/30/11 #16	W 04/20/11 #5	M 05/02/11 #1
Adreas Demosthenous, Sean Smedley, and John Taylor, "A CMOS Analog Winner-Take-All Network fro Large-Scale Applications," IEEE Transactions on Circuits and Systems - I, Vol. 45, No. 3, March 1998, pp. 300 - 304.				
Dadfarnia, Mehdi		M 03/28/11 #6	W 04/27/11 #6	W 04/20/11 #3
Stanley K. Webster, "An All-Transistor Hearing Aid," Transactions of the IRE on Audio, (vol., date??) pp. 65 -70.				
Danna, Dominic Henry		M 03/28/11 #2	W 04/27/11 #2	W 04/27/11 #1
Yevgeny Perelman and Ran Ginosar, "A Low-Light-Level Sensor for Medical Diagnostic Applications," IEEE Journal of Solid-State Circuits, Vol. 96, No. 10, October 2001, pp. 1553 - 1558.				
Dietrich, Justin Alan		M 03/28/11 #12	W 04/20/11 #4	W 04/20/11 #2

Yuriy V. Pershin and Massimiliano DiVentra, "Practical Approach to Programmable Analog Circuits with Memristors," IEEE Transactions on Circuits and Systems - I, Vol. 57, No. 8 August 2010, pp. 1857 - 1864. [changed to another, 03/07/11] Ahmed M. A. Ali, Andrew Morgan, Christopher Dillonn, Greg Patterson, Scott Puckett, Paritosh Bhoraskar, Huseyin Dine, Mike Hensley, Russell Stop, Scott Bardsley, David Lattimore, Jeff Bray, Carroll Speir, and Robert Sneed, "A 16-bit 250-MS/s IF Sampling Pipelined ADC with Background Calibration," IEEE Journal of Solid-State Circuits, Vol. 45, No. 12, December 2010, pp. 2602 - 2612.				
Dinke, Bitew A		W 03/30/11 #17	W 04/27/11 #3	M 05/02/11 #3
C. H. Stephan and M. Zanini, "A Micromachined, Silicon Mass-Air-Flow Sensor for Automotive Applications," Proceedings of the IEEE conference on ???, 1991, pp. 30 - 33. [changed to another 03/27/11]Folker Renken and Jeurgen Wolf, "Power Electronics for Hybrid-Drive Systems," (reference information???)				
Fagbola, David Afolabi		W 03/30/11 #15	W 04/20/11 #1	M 04/25/11 #4
Goran Krilic, "An Optically Biased, Single-Ended, Three-Transistor; Fully Static RAM Cell," IEEE Circuits & Systems Magazine, September/October 2004, pp. 18 - 24.				
Floyd, Stephen Andrew		M 03/28/11 #9	M 04/18/11 #2 (RWN)	W 04/13/11 #4
C. T. Chuang, K. Chin, P. F. Lu, and H. J. Shin, "High-Speed Low-Power Darlington ECL Circuit," IEEE Journal of Solid-State Circuits, Vol. 28, No. 12, December 1993, pp. 1374 - 1376. [changed to the above 04/13/11]Young-Jin Woo, Hanh-Phuc Le, Gyu-Ha Cho, Gyu-Hyeong Cho, and Seong-Il Kim, "Load-Independent Control of Switching DC-DC Converters with Freewheeling Current Feedback," IEEE Journal of Solid-State Circuits, Vol. 43, No. 12, December 2008, pp. 2798 - 2808.				
Garmestani, Cyrus N		M 04/04/11 #14	W 05/04/11 #2	W 05/04/11 #5
I, Haritantis, "General method for designing RC harmonic oscillators," International Journal of Electronics, Vol. 58, No. 2, 1985, pp. 295 - 305.				
Gugger, Sean Anthony		M 03/28/11 #8	W 04/06/11 #5	W 04/13/11 #3
Thomas M. Frederiksen and James E. Soloman, "A High-Performance 3-Watt Monolithic Class-B Power Amplifier," IEEE Journal of Solid-State Circuits, Vol. SC-3, No. 2, June 1968, pp. 152 - 160. [changed from the following 03/23/11] Edoardo Botti, Tiziana Mandrini, and Fabrizio Stefani, "A High-Efficiency 4x20 W Monolithic Audio Amplifier for Automobile Radios Using a Complementary D-MOS BCD Technology," IEEE Journal of Solid-State Circuits, Vol. 31, No. 12, December 1996, pp. 1895 - 1901.				
Hadaway, Kevin Warren		M 03/28/11 #17	M 04/18/11 #3 (RWN)	W 04/27/11 #6 (RWN)
Montree Kumngern and Kobxhai Dejhan, "High Frequency, High Precision CMOS Half-Wave Rectifier," Proceedings of the 2007 ECTI International Conference, 2007, pp. 1 - 4.				
Han, Ji H		M 04/04/11 #8	W 05/04/11 #4	W 04/13/11 #1
Yun-Ti Wand and sad A. Abidi, "CMOS Active Filter Design at Very High Frequencies," IEEE Journal of Solid-State Circuits, Vol. 25, No. 6, December 1990, pp. 1562 - 1574.				
Hatfield, Joshua Mark		W 03/30/11 #2	W 04/13/11 #6	M 04/11/11 #4
Hugo Marques, Beatriz Borges and Carlos Ferreira, "New Modular Two Stage Switching Converter for High Power Stereo Audio Amplifier," Proceedings of the IEEE Conference on ???, 2008, pp. 845 - 849.				

Hinnenkamp, Andrew Paul [dropped]		M 03/28/11 #3 (RWN)	W 04/18/11 #4	M 04/25/11 #1
Wilf Rigter, "The dual slope-sampling solar engine," (journal reference data???)				
Holub, David J		W 04/04/11 #7	M 04/11/11 #4	M 04/18/11 #6 (RWN)
Montri Somdunyanok, Thanate Pattanathadapong and Pipat Prommee, "Accurate Tunable Current-mirror and its Applications," Proceedings of the 2008 International Symposium on Communications and Information Technologies (SCIT 2008), 2008, pp. 56 - 58 {repeats paper of Tekle so choosing different circuits within the paper}				
Johnson, Rashad H.		W 03/30/11 #4	W 04/20/11 #3	W 04/20/11 #1
T. Noulis, S. Siskos and G. Sarraayrouse, "Noise optimized Charge-sensitive CMOS amplifier for capacitive radiation detectors," IET Circuits, Devices, and Systems, Vol. 2, No. 3, 2008, pp. 324 - 334.				
Kenel, Justin F		M 03/28/11 #15	W 04/20/11 #2	W 04/20/11 #4
R. A. Kudlich, "A Set of Transistor Circuits for Asynchronous, Direct-Coupled Computers," Proceedings of the 1955 Western Joint Computer Conference, pp. 124 - 129.				
Kikola, Kevin Francis		W 03/30/11 #8	W 05/05/11 #3	W 05/04/11 #1
M. Kumngern and K. Dejhan, "High frequency and high precision CMOS full-wave rectifier," International Journal of Electronics, Vol. 93, No. 3, March 2006, pp. 185 - 199.				
Kong, Xiangxiang		M 04/04/11 #5	M 04/11/11 #5	W 04/27/11 #4
Sripriya R. Bandi and P. R. Mukund, "A Compensation Technique for Transistor Mismatch in Current Mirrors," Proceedings of the IEEE Conference on ???, 2004, pp. 320 - 323. [changed to above 03/31/11]Tielo-Cuautle E. and Sarmiento-Reyes L. A., "Biasing Analog Circuits using the Nullor Concept," Proceedings of the IEEE conference on ???, 2000, pp. 27 - 30.				
Kreyhsig, Ricardo Stockman		M 03/28/11 #16	W 04/27/11 #5	M 05/02/11 #4
D. Chalabi, A. Saidane, M. Idrissi-Benzohra and M. Benzohra, "Thermal behavior Spice study of 6H-SiC NMOS transistors," Microelectronics Journal, Vol. 40 , 2009, pp. 891 - 896.				
Kukreja, Prateek		W 03/30/11 #10	W 04/13/11 #2	W 04/06/11 #4
Kozo Sakamoto, Nobutaka Fuchigami, Kyoichi Takagawa, and Shigeo Ohtaka, "A Three-Terminal Intelligent Power MOSFET with Built-In Reverse Battery Protection for Automotive Applications," IEEE Transactions on Electron Devices, Vol. 46, No. 11, November 1999, pp. 2228 - 2234.				
Ky, Kevin		W 03/30/11 #11	W 04/20/11 #5	W 04/06/11 #6
A. Atalia, F. Carrara, A. Scuderi, E. Ragonese, C. D. Presti, G. Sapone, and G. Palmisano, "Radio-frequency front-end for 5 GHz wireless local area network transceivers," The Institute of Engineering and Technology, Circuits, Devices & Systems, Vol. 2, No. 5, 2008, pp. 439 - 450.				
Liao, Rachel		M 04/04/11 #12	M 05/02/11 #5	M 04/25/11 #5
J. F. Krzy and F. T. Duben, "Integrated CONDITIONED OR and INHIBITED OR Logic Circuits," IEEE Journal of Solid-State Circuits, Vol. SC-1, No. 2, December 1966, pp. 81 - 85.				
Lin, Han		W 03/30/11 #!	M 04/25/11 #3	M 04/18/11 #5 (RWN)

<p>Reza G. Roozbahani, "BJT-BJT, FET-BJT, and FET-FET, On Improving the Gain-Bandwidth Product of Cascode Configurations," IEEE Circuits & Devices Magazine, November/December 2004, pp. 17 - 22. [changed to above, 03/30/11] Anna N. Rudiakova, Julia V. Rassokhima, Marian K. Kazimierczuk and Vladimir G. Krizhanovski, "High-Efficiency Microwave BJT Power Amplifier Simulation," Proceedings of the IEEE Conference on ???, 2002, pp. V-33 - V-36.</p>				
Litvak, Aleksandr Vladimir		M 03/28/11 #11	W 04/06/11 #4	W 04/13/11 #2
<p>Hiroaki Yoshida, Makoto Ikeda, and Kunigiyo Asada, "A Structural Approach for Transistor Circuit Synthesis," IEICE Transactions, Fundamentals, Vol.E89A, No. 12, December 2006, pp. 3529 - 3537.</p>				
McCormack, Thomas Sean		M 04/04/11 #11	M 05/02/11 #2	M 05/02/11 #6
<p>Thomas Nirmaier, Critina A. Diez, and Josef F. Bille, "High-Speed CMOS Wavefront Sensor with Resistive-ring Networks of Winner-Take-All Circuits," IEEE Journal of Solid-State Circuits, Vol. 40, No. 11, November 2005, pp. 2315 - 2317.</p>				
Mihm, Karl Joseph		W 03/30/11 #5	W 04/13/11 #3	W 04/06/11 #5
<p>Gerhard Weil, Walter L. Engl, and Albrecht Renz, "Integrated Pacemakers," IEEE Journal of Solid-State Circuits, Vol. SC-5, No. 2, April 1970, pp. 67 - 73. [changed to above 03/28/11]Seulki Lee, Kiseok Song, Jerald Yoo, and Hoi-Jun Yoo, "A Low-Energy Inductive Coupling Transceiver with Cm-Range 50-Mbps Data Communication in Mobile Device Applications," IEEE Journal of Solid-State Circuits, Vol. 48, No. 11, November 2010, pp. 2366 - 2374.</p>				
Mitchell, Gregory Johnatha		W 03/30/11 #3	M 04/18/11 #5 (RWN)	W 04/20/11 #6 (RWN)
<p>Yuna Shim, Chang-Wan Kim, Jeongseon Lee, and Sang-Gug Lee, "Design of Full Band UWB Common-Gate LNA," IEEE Microwave and Wireless Components Letters, Vol. 17, No. 10, October 2007, pp. 721 - 723.</p>				
Mokrzan, Zbigniew Tomasz		M 04/04/11 #17	M 05/02/11 #3	M 04/18/11 #4 M 04/25/11 #1 (RWN)
<p>Bill Roehr, "A Simple Direct-coupled Power MOSFET Audio amplifier Topology Featuring Bias Stabilization," IEEE Transactions on Consumer electronics, Vol. CE-28, No. 4, November 1982, pp. 546 - 552.[received 03/28/11]</p>				
Najafi, Aria		W 04/04/11 #4	W 05/04/11 #5	W 05/04/11 #2
<p>... "Multi-purpose controllable function generator," International Journal of Electronics, Vol. 58, No. 2, pp. 307 - 314. [received 04/04/11]</p>				
Newton, Patrick M		M 03/28/11 #7	M 05/02/11 #6	W 05/04/11 #6
<p>Jin-Fa Lin, Ming-Hwa Sheu and Yin-Tsung Hwang, "Low-Power and Low-Complexity Full Adder Design for Wireless Base Band Application," Proceedings of the IEEE Conference on ???, 2006, pp. 2337 - 2341.</p>				
Prince, Avi Samuel		M 03/28/11 #5	W 04/06/11 #3	W 04/06/11 #2
<p>D. Xie, M. Parameswaran and I. Filanovsky, "A Simple CMOS Power Stabilizer for Integrated Sensor Applications," Proceedings of the IEEE CCECE/CCGEI'93, 1993, pp. 1178 - 1179.</p>				
Radack, Michael Lawrence		M 03/28/11 #10	W 04/06/11 #2	W 04/06/11 #3
<p>R. R. Mehrotra, Habans Lal & B. K. Tyagi, "Transistor Pulse Generator," IERE, ???, pp. 22 - 26.</p>				
Ringling, Russell Andrew		M 03/28/01 #1	W 04/27/11 #1	W 04/27/11 #2

Seok-Bae Park, James E. Wilson and Mohammed Ismail, "Peak Detectors for Multistandard Wireless Receivers," IEEE Circuits & Devices Magazine, November/December 2006, pp. 6 - 9.				
Sharma, Aroon		M 04/04/11 #2	M 04/11/11 #2	M 04/11/11 #3
David T. Yeh, Janathan S. Abel and Julius O. Smith, "Simplified, Physically-Informed Models of Distortion and Overdrive Guitar Effects Pedals," Proceedings of the 10 th International Conference on Digital Audio Effects (DAFx-07), Bordeauz, France, September 10-15, 2007, pp. DAFX-1 - DAFX-8.				
Sikorski, Aaron P		M 03/28/11 #4	W 04/13/11 #5	W 04/13/11 #6
I. Blaser and H. Franco, "Push-Pull Class AB Transformerless Power Amplifiers," IEEE Transactions on Audio, Vol. 11, No. 1, January-February, 1963, , pp. 6 - 14.				
Silversmith, Daniel B		M 04/04/11 #13	M 04/25/11 #5	M 05/02/11 #5
A. Richadson and R. C. Foss, "New Binary Counter Circuit," Electronics Letters, Vol. 1, No. 10, December 1965, p. 273.				
Sivaraman, Janahan		M 04/04/11 #16	M 05/02/11 #1	M 04/25/11 #3
Yogesh K. Ramadass and Anantha P. Chandrakasan, "An Efficient Piezoelectric Energy Harvesting Interface Circuit Using a Bias-Flip Rectifier and Shared Inductor," IEEE Journal of Solid-State Circuits, Vol. 45, No. 1, January 2010, pp. 189 - 204. [received 04/04/11]				
Son, Joon S		W 03/30/11 #14	W 04/13/11 #4	M 04/18/11 #2
Terri S. Fiez and David J. Allstot, "CMOS Switched-Current Ladder Filters," IEEE Journal of Solid-State Circuits, Vol., No. 6, December 1990, pp. 1360 -1367. [changed to another 04/06/11]Wing-Yee Chu, Bertan Bakkaloglu, and Sayfe Kiaei, "A 10 MHz Bandwidth, 2mV Ripple PA Regulator for CDMA Transmitters," IEEE Journal of Solid-State Circuits, Vol. 43, No. 12, December 2008, pp. 2809 - 2819.				
Songong, Garigue Teguire		M 03/28/11 #14	M 04/11/11 #6	M 04/25/11 #2
William D. Roehr, "A Two-Watt Transistor Audio Amplifier," IRE Transactions on Audio, September/October 1959, pp. 125 - 128.				
Strauss, Benjamin J		M 04/04/11 #10	M 05/02/11 #4	W 04/27/11 #5
C. L. Wanlass, "Transistor Circuitry for Digital Computers," IRE Transactions on Electronic Computers, Vol.?, No. ?, March 1954, pp. 11 - 16. [changed to above 03/28/11]Mezyad Amourah, Haydar Bilyan, Feng Ying, Lieyi Fang, Gonggui Xu, Ramesh Chandrasekaran, and Randall Geiger, "A 9b 165MS/s 1.8V Pipelined ADC with All Digital Transistors Amplifier," Proceedings of the IEEE 2003 Custom Integrated Circuits Conference, 2003, pp. 421 - 424.				
Tekle, Senay Fassil		W 03/30/11 #12	M 04/25/11 #4	M 04/25/11 #6
Montri Somdunyanok, Thanate Pattanathadapong and Pipat Prommee, "Accurate Tunable Current-mirror and its Applications," Proceedings of the IEEE 2008 International Symposium on Communications and Information Technologies (ISCIT 2008), pp. 56 - 61. {repeats paper of Holub so choosing different circuits within the paper}				
Teng, Louis C		W 03/30/11 #7	W 04/27/11 #4	M 04/11/11 \$5
Mona Safi-Harb and Gordon W. Roberts, "A CMOS Circuit for Embedded GHz Measurement of Digital Signal Rise Time Degradation," Proceedings of IEEE ISCAS, 2006, (city??), pp. 3446 - 3449.				
Uddin, Ebsan		W 04/04/11 #9	W 05/04/11 #1	W 05/04/11 #3
K. V. Noren and A. Tarakji, "Macromodelling of positive IC voltage regulators," International Journal of Electronics, Vol. 86, No. 2, 2008, pp. 153 - 172.				
Yamamoto, Michael Leland		M 04/04/11 #1 (RWN)	M 04/18/11 #6 (RWN)	M 04/18/11 #1

Zhu, Bowei		M 04/04/11 #18 (RWN)	M 04/25/11 #1 (RWN)	W 04/13/11 #5 (RWN)
Xuguang Zhang and Ezz I. El-Masry, "A High-Performance, Low-Voltage, Body-Driven CMOS Current Mirror," Proceedings of the IEEE Conference on ???, 2002, pp. V-49 - V-52. [replaced 02/03/11 by above]J. D. Horgan and D. L. Lange, "Analog Computer Studies of Periodic Breathing," IRE Transactions on Bio-Medical Electronics, Vol. ?, No.?, October 1962, pp. 221 - 228.				
Zuberi, Zakiul Islam		M 04/04/11 #3	M 04/11/11 #3	M 04/11/11 #2
Jinn-Shyan Wang, Chung-Yu Wu and Ming-Kai Tsai, "CMOS Nonthreshold Logic (NTL) and Cascode Nonthreshold Logic (CNTL) for High-Speed Applications," IEEE Journal of Solid-State Circuits, Vol. 24, No. 3, June 1989, pp. 779 - 786.				

Number of students = 52 (02/07/11)