9 VLSI Memo Series

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2007	07-2015	L.Y. Chen	**Double-gated Isolated Vertically Aligned Carbon Nanofiber Field Emission and Field Ionization Arrays**
	07-2016	X. Xie	**Physical Understanding and Modeling of Chemical Mechanical Planarization in Dielectric Materials**
	07-2017	V. Anant	**Engineering the optical properties of subwavelength devices and materials**
	07-2018	B. Adeoti	**Field Ionization from Carbon NanoFibers**
	07-2019	F. Edalat	**Real-time Sub-carrier Adaptive Modulation and Coding in Wideband Orthogonal Frequency Division Multiplexing Wireless Systems**
2008	08-2020	R.E. Barreto	**Fabrication of Optical-Mode Converters for Efficient Fiber-to-Silicon-Waveguide Couplers**
	08-2021	C.R Forest, A.M. Rosenbaum, G.M. Church	**DNA Sequencing by Ligation on Surface-Bound Beads in a Microchannel Environment**
	08-2022	H. Miller, J. Collins	**High Resolution DRIE Resist for High Density Through Silicon Vias**
	08-2023	J.M. Perkins	**Low Threshold Vertical Cavity Surface Emitting Lasers Integrated onto Si-CMOS ICs Using Novel Hybrid Assembly Techniques**
	08-2024	M.G. O'Halloran	**A Wide-Dynamic-Range Time-Based CMOS Imager**
	08-2025	A. Khakifirooz	**Transport Enhancement Techniques for Nanoscale MOSFETs**
	08-2026	S. Jongthammanurak	**Germanium-rich Silicon-Germanium Materials for Field-Effect Modulator Applications**
	08-2027	R. Amatya	**Optimization of Tunable Silicon Compatible Microring Filters**
	08-2028	Y. Wu	**Null Power Reallocation for Data Rate Improvement in a Wireless Multicarrier System**
2008 *cont'd*	08-2029	H.S. Tsai	**Absorbance Modulation Optical Lithography**
	08-2030	N.A. DiLello	**Fabrication and Simulation of CMOS-compatible Photodiodes**
	08-2031	L. Zeng	**High Efficiency Thin Film Silicon Solar Cells with Novel Light Trapping: Principle, Design and Processing**
	08-2032	R. Sredojević	**Bridging the gap: An Optimization-based Framework for Fast, Simultaneous Circuit & System Design Space Exploration**
	08-2033	M. Straayer	**Noise Shaping Techniques for Analog and Time to Digital Converters Using Voltage Controlled Oscillators**
	08-2034	N. Jovanović	**Microstructured Tungsten Thermophotovoltaic Selective Emitters**
	08-2035	H. Zhou	**Micromechanical Actuators for Insect Flight Mechanics**
	08-2036	R.C. Cooper	**Hardware and Software for Hand-held Electrical Impedance Myography Measurement Prototype System**
	08-2037	W. Arora	**Nanostructured Origami™: Stress-Engineering of Nanopatterned Membranes to Produce Three-Dimensional Structures**
	08-2038	H. Ma	**Electrochemical Impedance Spectroscopy using Adjustable Nanometer-Gap Electrodes**
	08-2039	Y.J. Chu	**A High Performance Zero-Crossing Based Pipelined Analog-to-Digital Converters**
	08-2040	F. Hurley	**Advanced Nanofabrication of Thermal Emission Devices**
	08-2041	Y. Gu	**Femtosecond Laser Fabrication of Directional Couplers and Mach-Zehnder Interferometers**
	08-2042	B.M. Taff	**Microsystems Platforms for Array-based Single-cell Biological Assays**