

## Publications

1. *Automatic Full-Custom Design of High Performance DSP Chips*, H. S. Moscovitz, W. R. Bullman, J. A. Carelli, L. A. Davieau, J. Fadavi-Ardekani, K. Mondal, G. D. O'Donnell, and S. G. Bajekal, Proceedings of IEEE Global Telecommunications Conference, Hollywood, FL., Nov 28, 1988.
2. *Automatic Full-Custom Design of Application Specific DSP VLSI*, H. S. Moscovitz, W. R. Bullman, J. A. Carelli, L. A. Davieau, J. Fadavi-Ardekani, K. Mondal and G. D. O'Donnell, Proceedings of 1988 International Symposium on Circuits and Systems, Espoo, Finland, Jun. 7 1988.
3. *A 200 Mbps 60x16 CMOS Crosspoint Switch*, J. A. Carelli, R. A. Johns and P. C. Metz, Proceedings of the IEEE 1988 Custom Integrated Circuits Conference, May 16-19, 1988, Rochester, N.Y., pp. 17.3.1.
4. *Dynamical Analysis of Low-Energy Electron Intensities from GaAs(110)-P(1\*1)-Sb(1ML)*, C. B. Duke, A. Paton, A. Ford, A. Kahn, J. A. Carelli, Phys. Rev. B., Vol 26, No. 2, pp. 803- 14, July 1982.
5. *Comparative LEED Studies of Al(x)Ga(1-x)As(110) and GaAs(110)-Al( $\theta$ )*, A. Kahn, J. A. Carelli, D. L. Miller, S. P. Kowalczyk, Proceedings of the Ninth Annual Conference on the Physics and Chemistry of Semiconductor Interfaces, Jan. 27-29, 1982, Pacific Grove Calif., J. Vac. Sci. and Technol., Vol. 21 No. 2, pp. 380-3, July-Aug. 1982.
6. *LEED-AES-TDS Characterization of Sb Overlayers on GaAs(110)*, J. A. Carelli, A. Kahn, Surf. Sci. Vol. 116 No. 2, pp. 380-90, April 1982.
7. *Elastic Low-Energy Electron Diffraction from GaAs(110)- $\rho(1 * 1)$ -Sb(1ML)*, A. Kahn, J. A. Carelli, C. B. Duke, A. Paton, A. Ford, Proceedings of the 28th National Symposium of the American Vacuum Society, Nov. 2-6 1981, Anaheim, Calif., J. Vac. Sci. and Technol., Vol. 20, No. 3, pp. 775-7, March 1982.
8. *Dynamical Analysis of Low-Energy Electron Diffraction Intensities from GaP(110)*, C. B. Duke, A. Paton, A. Ford, A. Kahn, J. A. Carelli, Phys. Rev. B., Vol 24, No. 2, pp. 662-73, July 1981.
9. *Atomic Geometry of Al-GaAs Interfaces: GaAs(110)-P(1\*1)-Al( $\theta$ ),  $0 > \theta > 8.5$  Monolayers*, A. Kahn, J. A. Carelli, D. Kanani, C. B. Duke, A. Paton, L. Brillson, Proceedings of the Eight Annual Conference on the Physics and Chemistry of Semiconductor Interfaces, Jan. 27-29, 1981, Williamsburg, Va., J. Vac. Sci. and Technol., Vol. 19, No.3, pp. 331-4 Sept.-Oct. 1981.
10. *Analysis of Low-Energy Electron Diffraction Intensities from ZnS(110)*, C. B. Duke, R. J. Meyer, A. Paton, A. Kahn, J. A. Carelli and J. L. Yeh, Proceedings of the 27th National Symposium of the American Vacuum Society, Oct. 13-17, 1980, Detroit, Mich., J. Vac. Sci. and Technol., Vol. 18, No. 3, pp. 866-70, April 1981.
11. *LEED Intensity Analysis of the Structure of Al on GaAs(110)*, A. Kahn, D. Kanani, J. A. Carelli, J. L. Yeh, C. B. Duke, R. J. Meyer, A. Paton, and L. Brillson, Proceedings of the 27th National Symposium of the American Vacuum Society, Oct. 13-17, 1980, Detroit, Mich., J. Vac. Sci. and Technol., Vol. 18, No. 3, pp. 792-96, April 1981.
12. *Atomic Geometry of GaAs(110)-P(1\*1)-Al*, C. B. Duke, A. Paton, R. J. Meyer, L. Brillson, A. Kahn, D. Kanani, J. A. Carelli, J. L. Yeh, G. Margaritondo, A. D. Katnani, Phys. Rev. Lett., Vol. 46, No. 6, pp. 440-3, Feb. 9, 1981.

## Patents

1. Cell Modeling for Integrated Circuit Design with Characterization of Upstream Driver Strength (no. 7854439, issued 10/1/2009)
2. Multi-variable Polynomial Modeling Techniques for use in Integrated Circuit Design (no. 7444275, issued 10/28/2008)
3. Apparatus and Method for Determining Process Width Variations in Integrated Circuits (two patents: no. 6373266, issued 5/27/2004 and no. 6728940, issued 5/16/2002)
4. Integrated Circuit Width Channel Length Detector, U. S. Patent (no. 4789825, issued 12/6/1988)