

2007 Symposium on Nano Device Technology

The Symposium on Nano Device Technology 2007 organized by National Nano Device NARL, will provide an open forum for the discussion of recent developments on nano-technology and advanced devices, materials and processes. Scientists, scholars and experts in the fields

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NDL National Nano Device Laboratories
國家奈米元件實驗室



時間: 中華民國96年5月9-15日
地點: 新竹市科學工業園區展業一路26號 奈米電子研究大樓 國際會議廳

奈米元件技術研討會 2007

主題

- 》後矽奈米電子元件技術
- 》奈米生物技術
- 》功能性奈米材料技術
- 》奈米檢測技術
- 》高頻技術及應用
- 》奈米光晶元件技術

Semiconductor Device Noise Characterization, New Tricks to Old Science

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ABSTRACT

The art and practice of measuring and characterizing semiconductor devices for their noise properties continues to evolve some 40 years after the techniques were first introduced to practice. The challenges of today, measuring an increasingly small additive noise component on devices with unfriendly terminal impedances has challenged the measurement art. However, the increasing failure of models to scale as we move to ever smaller process nodes, particularly those nodes below 130nm are rekindling the need to return to the lab to verify device noise parameters and noise figure. We present here some of the theoretical measurement challenges and how we have addressed them in our lab.

Prior to forming Auriga Measurement Systems, David Menzer held the position of Director of Business Development for ACCO USA. There, he oversaw the development and execution of sales programs, corporate and product marketing, and identified and developed new business opportunities. In support of international sales, he cultivated and supported three sales representative organizations in Europe and Asia. During his tenure, two major products were introduced, and over ten major proposals were written resulting in three contracts, and five proposals in negotiation. A number of brochures and datasheets were also published under his direction.

Mr. Menzer received his Master of Science, Electrical Engineering and Bachelor of Science, Physics degrees from Rensselaer Polytechnic Institute in 1976 and 1975, respectively.