INTERNATIONAL
RELIABILITY PHYSICS SYMPOSIUM

2002 TUTORIAL NOTES
Advanced Reliability Topics

Tom M. Moore, CHAIR

HYATT REGENCY DALLAS

DALLAS, TEXAS

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ADVANCED RELIABILITY TOPICS

Topic 211. RELIABILITY ISSUES FOR ADVANCED SILICON TECHNOLOGIES
Anthony S. Oates, Agere

Topic 212. MICROSTRUCTURE, PROCESSING AND RELIABILITY OF CU-BASED INTERCONNECT STRUCTURES
John Sanchez, AMD

Topic 213. ESD PROTECTION AND FAILURE MECHANISMS IN RF TECHNOLOGY
Steven Voldman, IBM

Topic 221. GATE OXIDE RELIABILITY
Paul Nicolian, Texas Instruments

Topic 222. ANTENNA CHARGING (PID)
Srikanth Krishnan and Anand Krishnan, Texas Instruments

Topic 223. ATOMIC SCALE DEFECTS INVOLVED IN MOS RELIABILITY PROBLEMS
Pat Lenahan, Penn State

Topic 224. TRAP GENERATION PHENOMENA IN THIN DIELECTRICS UNDER ELECTRICAL STRESS
Gennadi Bersuker, SEMATECH

Topic 231. RAMAN SPECTROSCOPY
Ingrid DeWolf, IMEC

Topic 232 NEXT GENERATION IMAGING
Gay Samuelson, Intel

Topic 233. DESIGNING MEMS/MOEMS FOR RELIABILITY
Susanne Arney et al., Lucent

Topic 241 SILICON ANALOG/MIXED SIGNAL TECHNOLOGY RELIABILITY
Jae-Sung Rieh & Fernando Guarin, IBM

Topic 242 FERROELECTRIC MATERIAL AND DEVICE RELIABILITY
Domokos Hadnagy, Ramtron

Topic 243. 3.DETERMINATION OF GaAs MMIC RELIABILITY
Ken Decker, Triquint Semiconductor

Topic 244 HBT
Tim Henderson, Triquint Semiconductor