

## 2A.1 The Physics of NBTI: What Do We Really Know?, Jim Stathis, IBM (invited)

Forty years after initially being identified, Negative Bias Temperature Instability in PMOS transistors remains a hotly debated topic, with an ever increasing number of publications treating the topic. Several competing theories have emerged, with varying degrees of success predicting actual behavior. This invited paper will help summarize the key features of each leading theory to help the community integrate the conclusions from the vast number of publications on the topic.

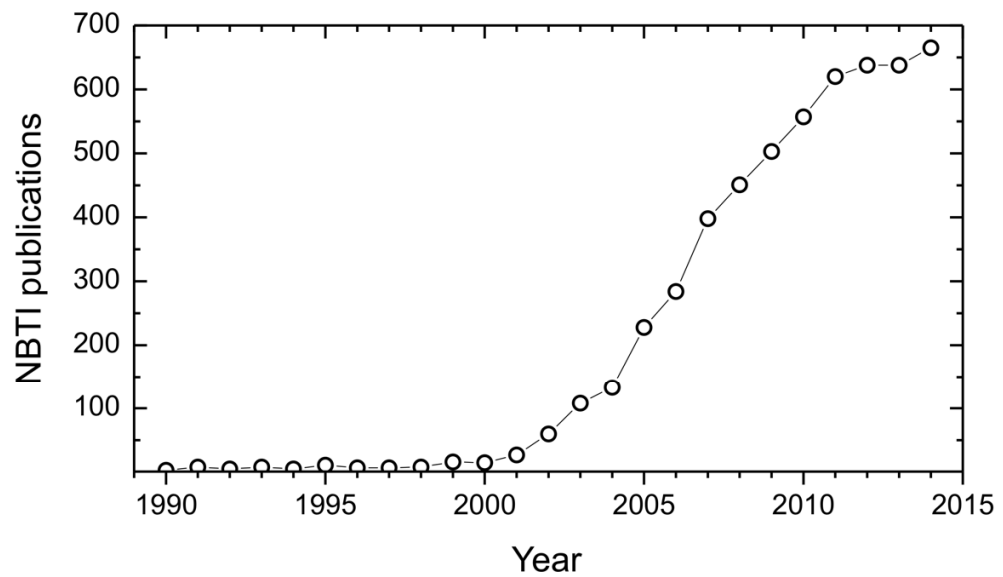


Figure 1. Number of publications annually on NBTI. From Google Scholar (<https://scholar.google.com>) searches on the phrase “negative bias temperature instability”.