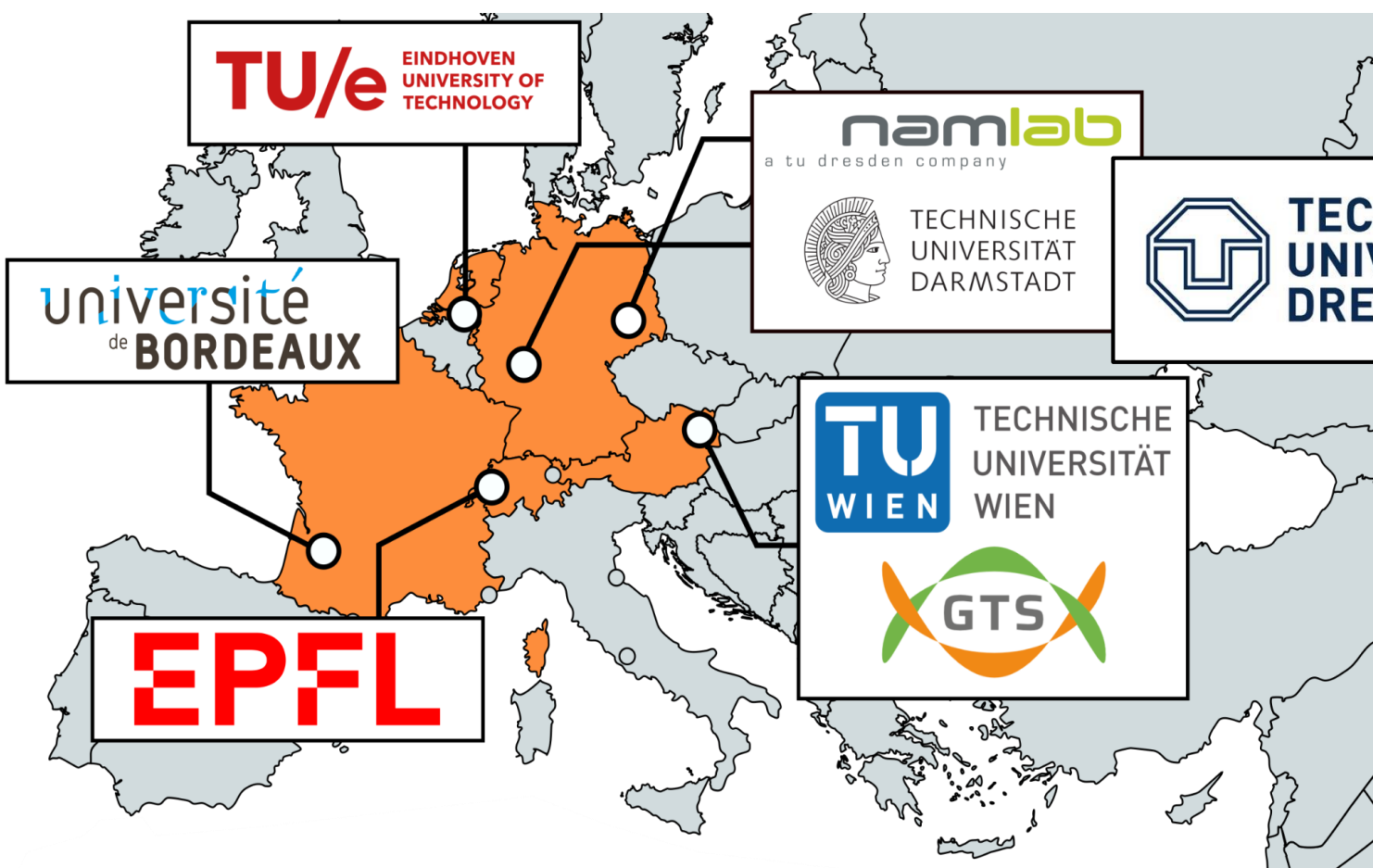


G. Galderisi¹, A. Kramer², A. Fuchsberger³, J.M. Gonzalez-Medina⁴, Y. He¹, L.-C. Hung⁴, M. J.-H. Li⁵, J. Kulenkampff², M. Reuter², L. Wind³, M. Sistani³, T. Mikolajick^{1,6}, B. Neckel-Wesling⁷, M. Deng⁷, C. Maneux⁷, P. Harpe⁵, S. Prado Lopez³, O. Baumgartner⁴, C. Mukherjee⁷, E. Cantatore⁵, S. Carrara⁸, K. Hofmann², W.M. Weber³, and J. Trommer¹

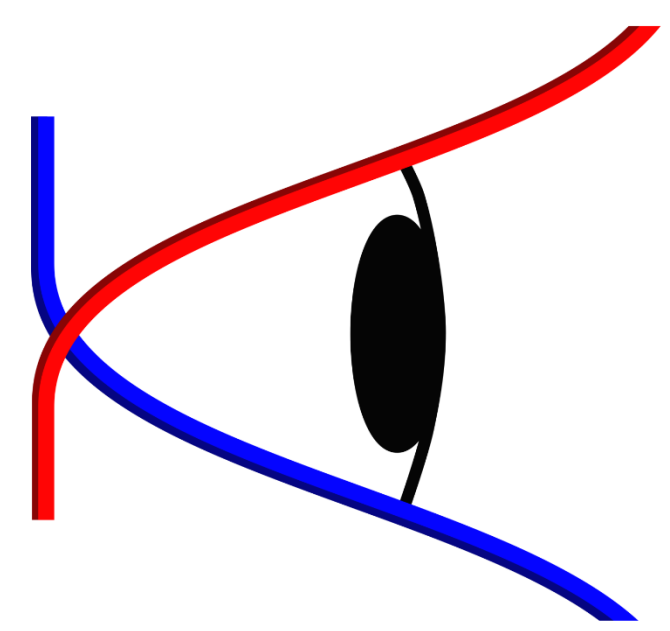
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MPP



SENSOTERIC

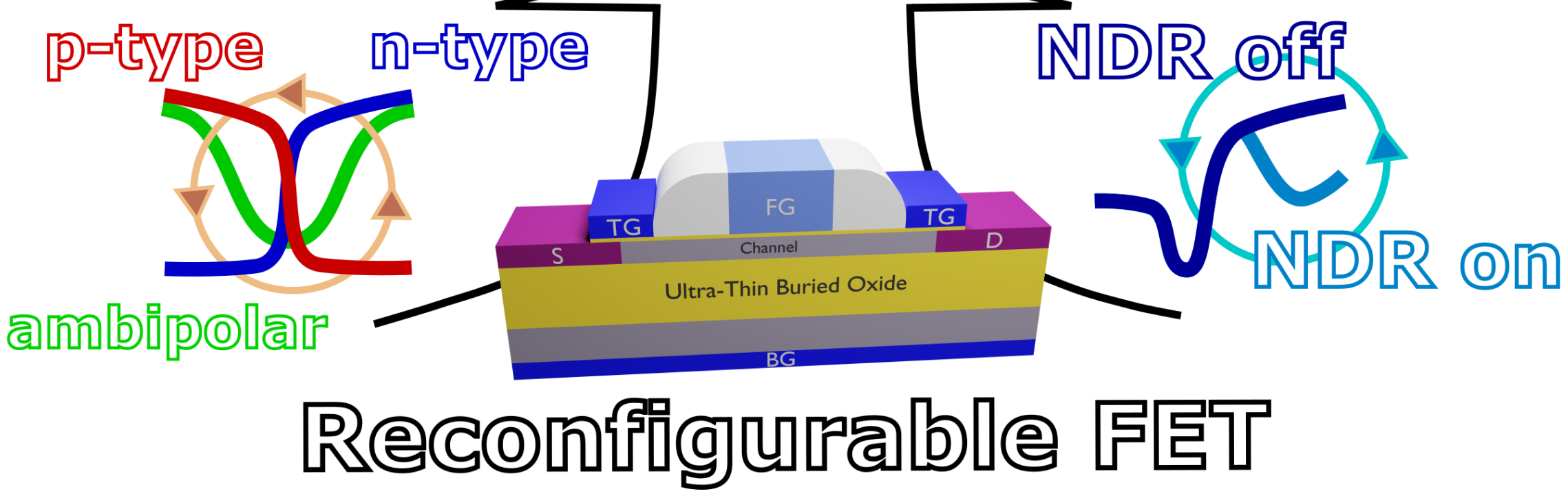
smart SENSOR analog front-end powered by Emerging Reconfigurable devICes



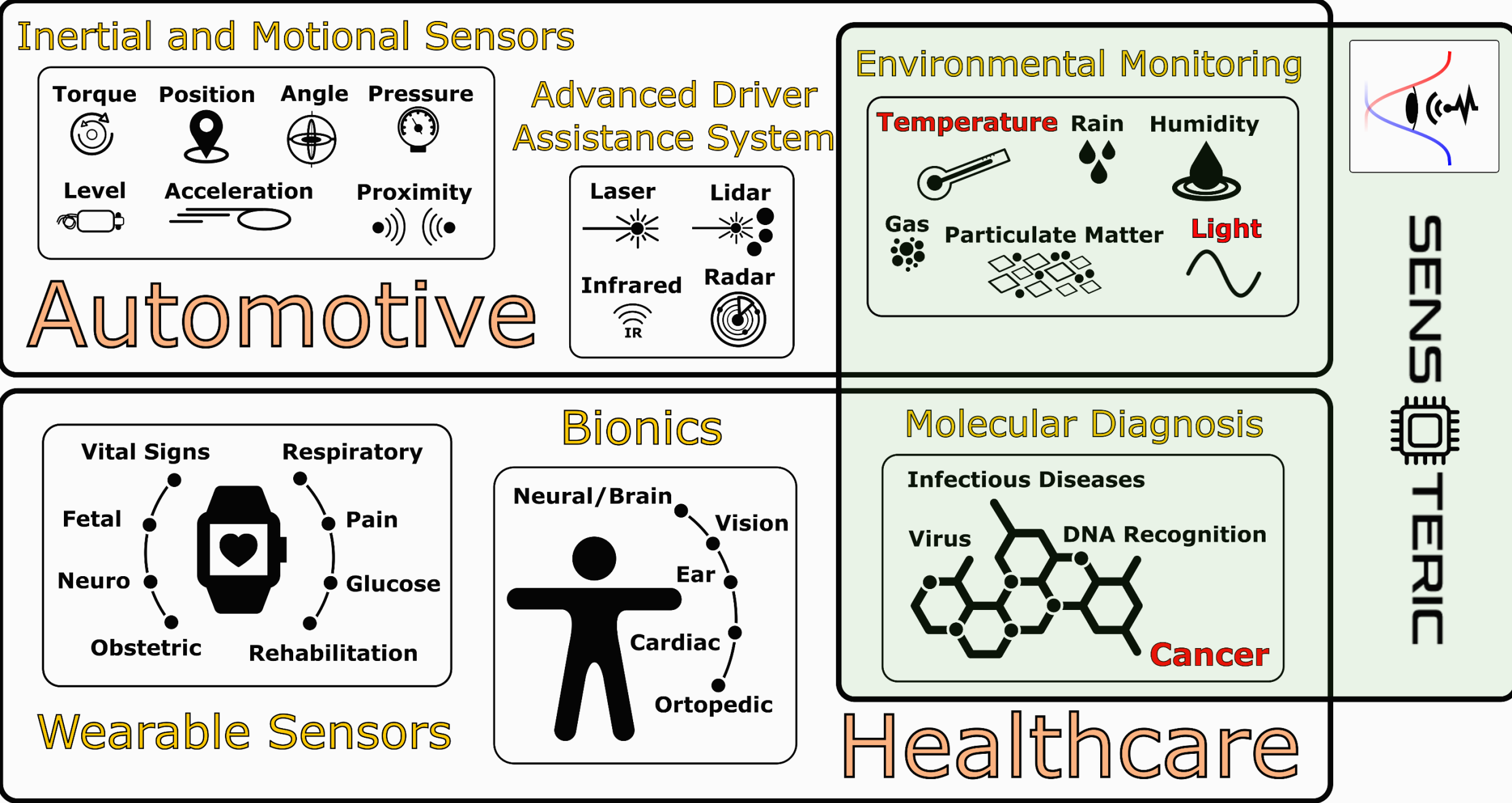
Vision

Analog Front End

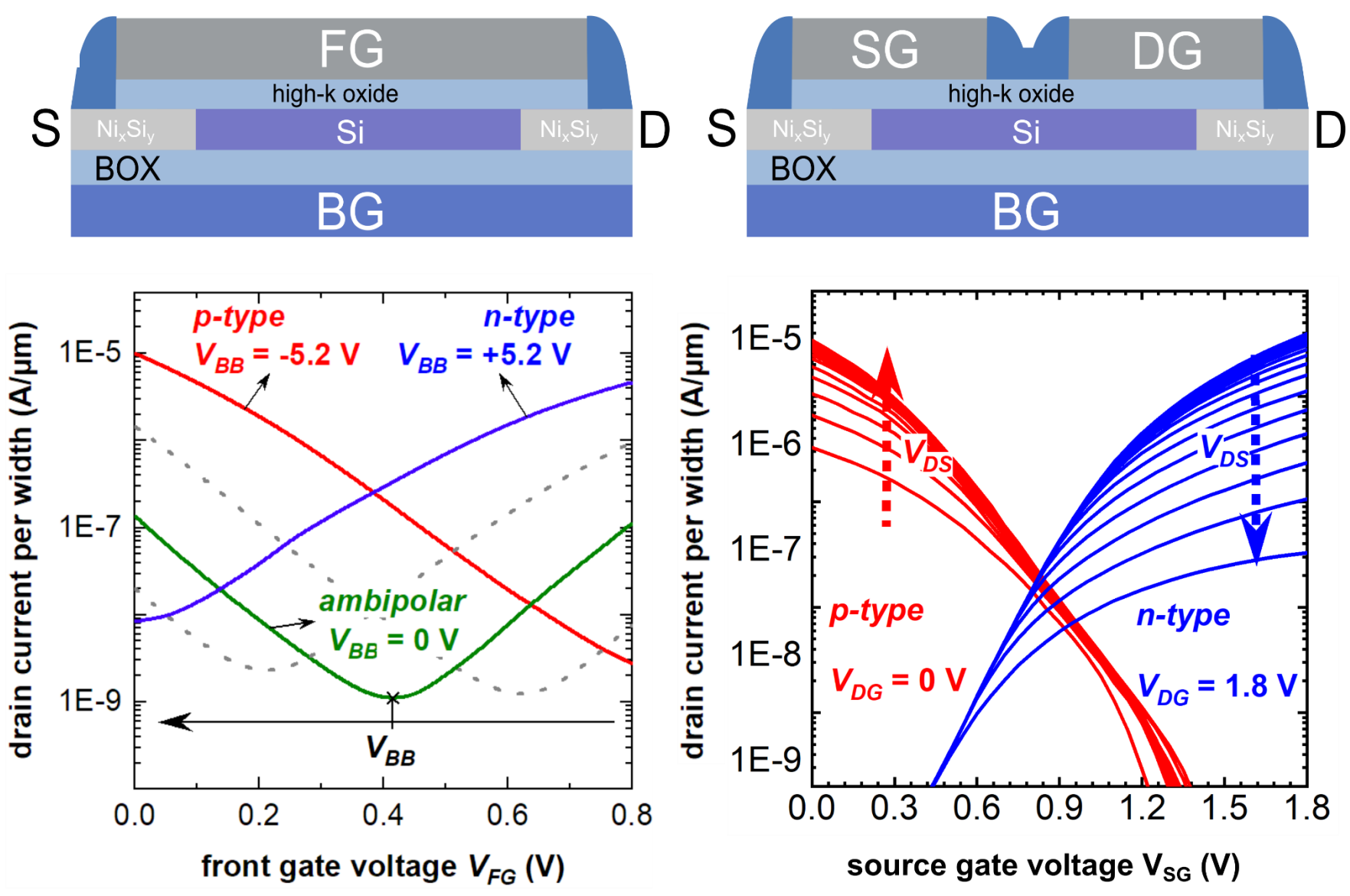
Neural Network



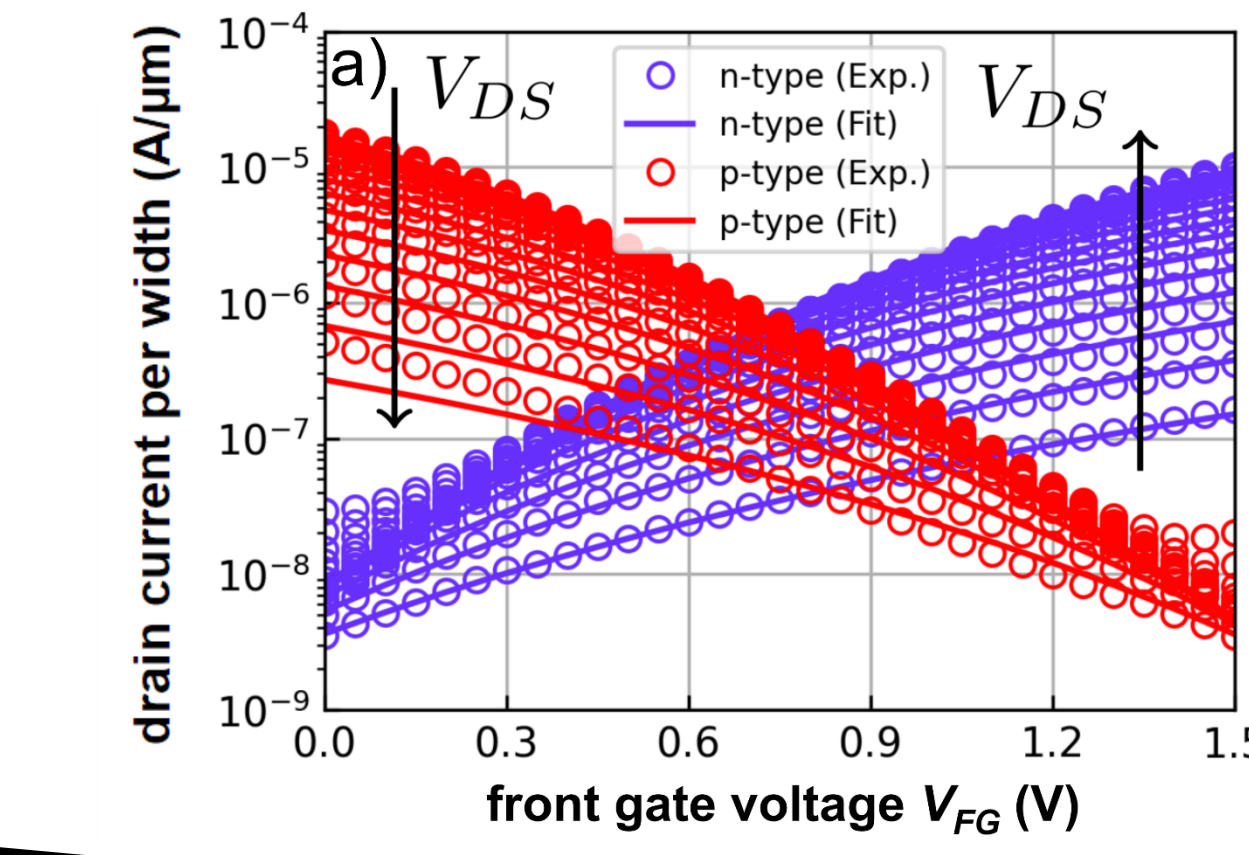
Target Applications



Work Plan / Early Results



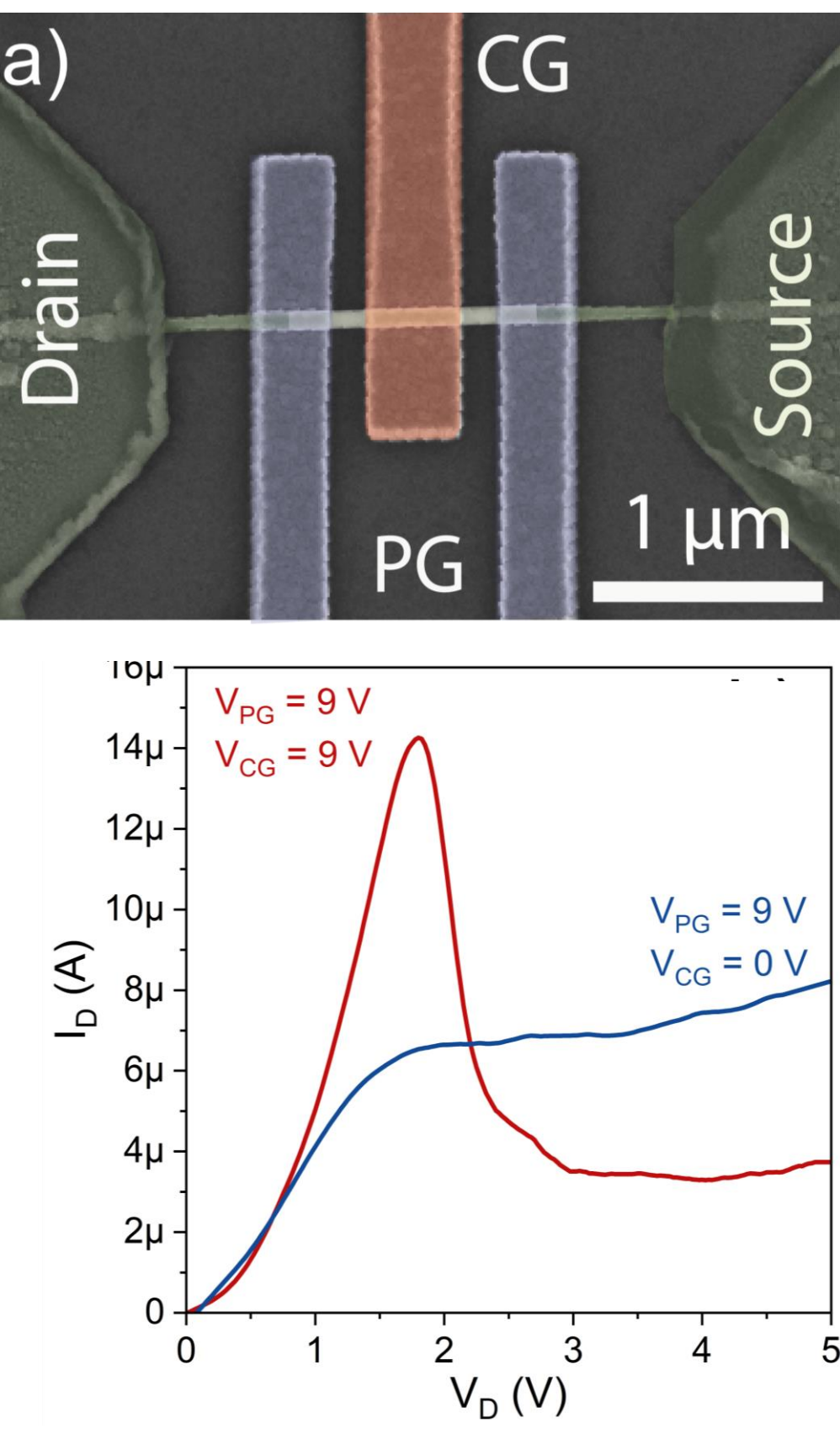
Reconfigurable Transistors as 22nm FDSOI CMOS Add-On [1,2]



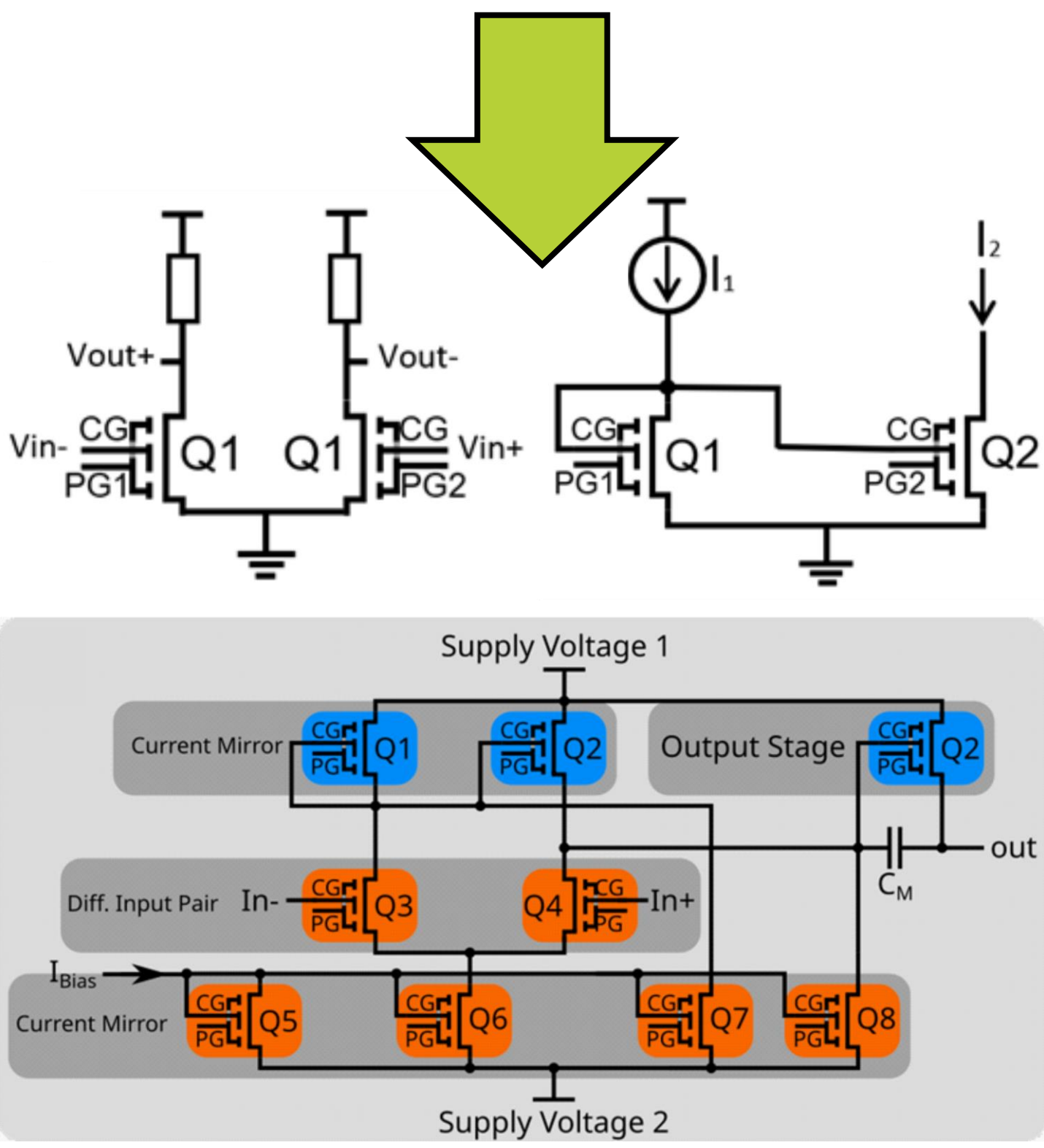
RF-Characterization [3]
TCAD, Verilog-A and Compact Models [4]



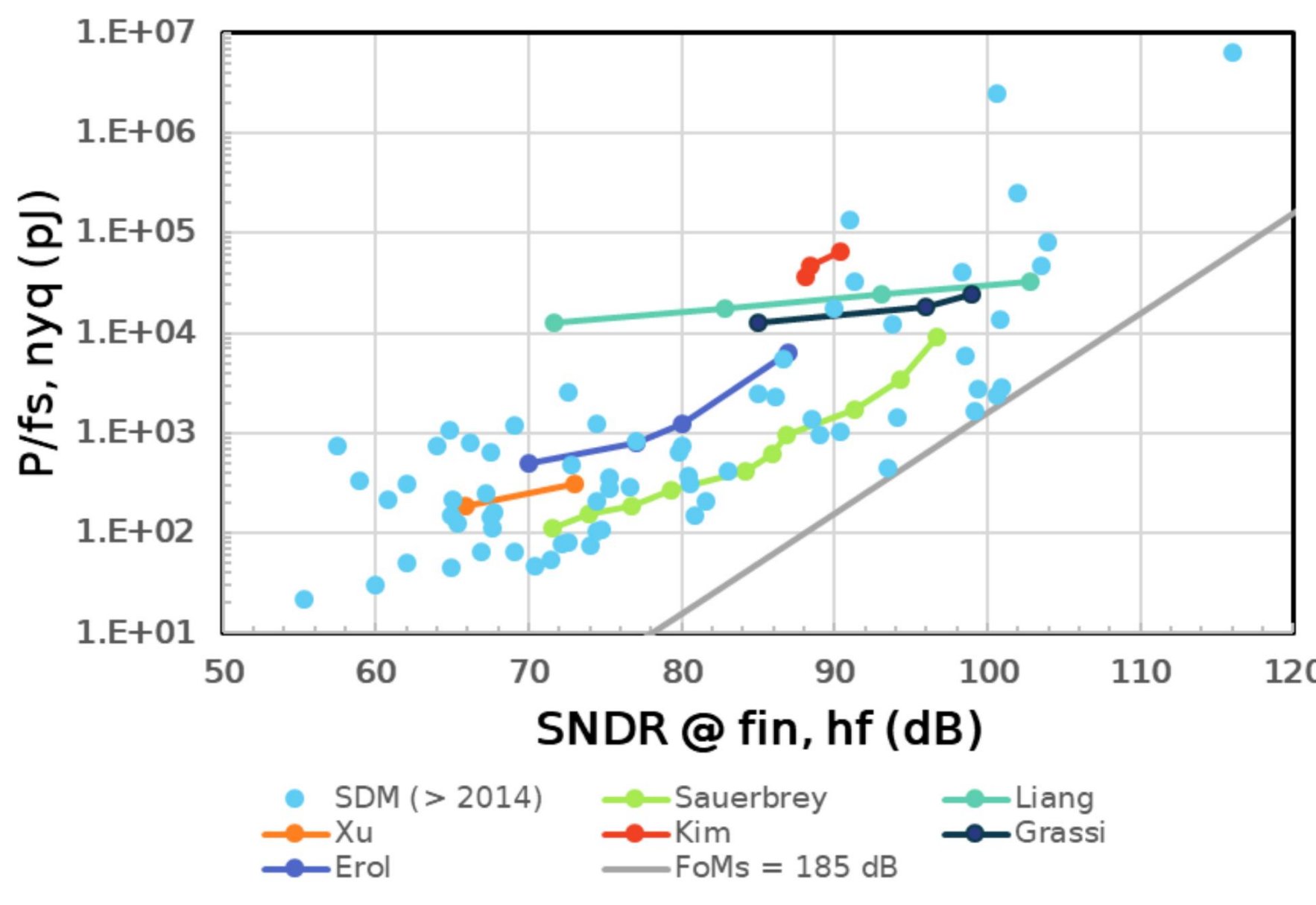
Available May 25



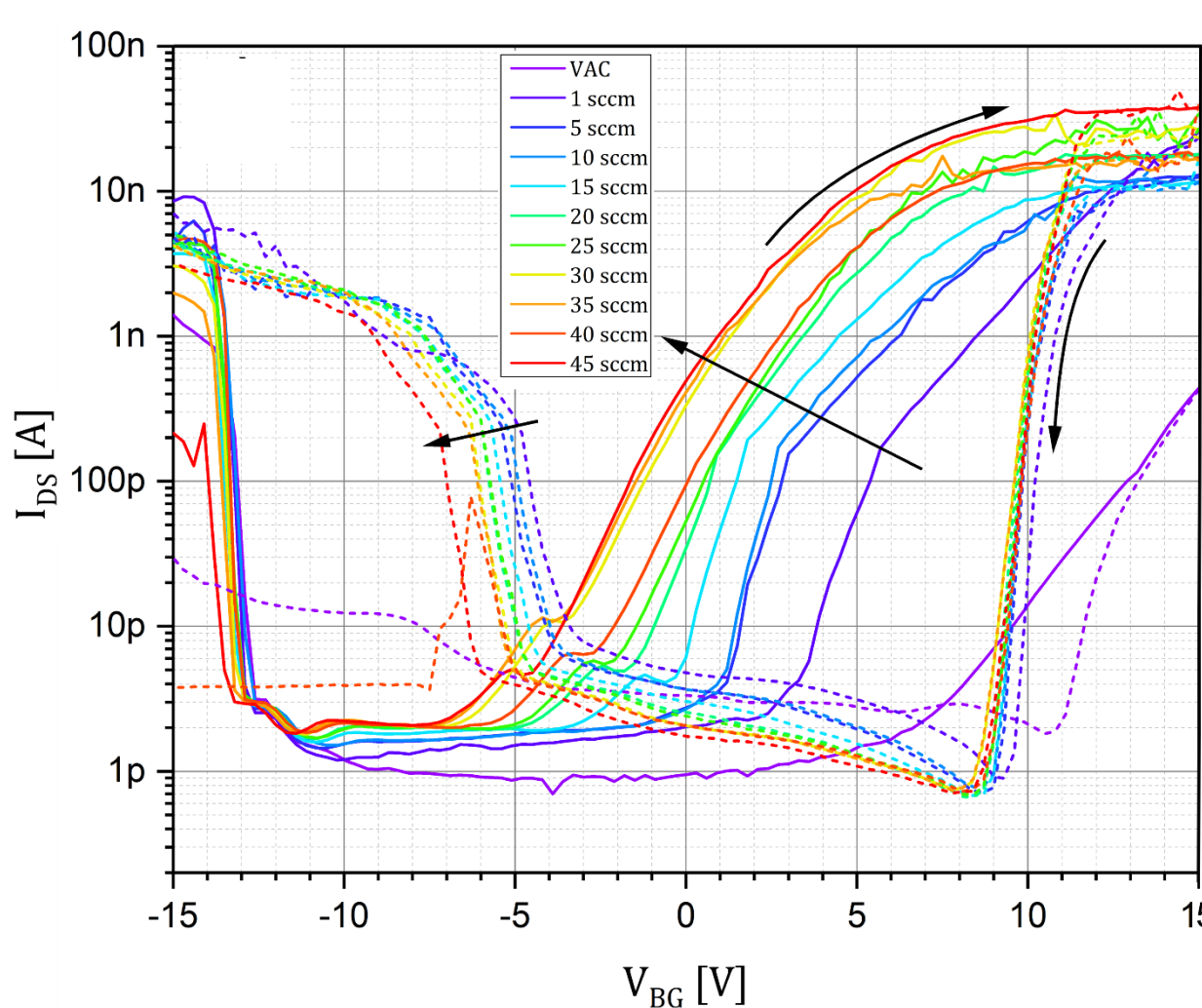
Room Temperature Negative Differential Resistance [5-7]



Adaptive Analog Elements and Amplifiers [8,9]



Reconfigurable Sigma-Delta Modulators [10]



Gas-Sensors [11] and Bio-Functionlization for Cancer Detection