NEWS ADVISORY

Grenoble, France, Nov. 18, 2022

Maud Vinet, CEA-Leti's Quantum Hardware Program Manager, Will Present a Plenary-Session Paper, "Enabling Full Fault Tolerant Quantum Computing with Silicon-Based VLSI Technologies", at the Dec. 3-7 Gathering

Presentations will include a tutorial on "Resistive Memories-Based Concepts for Neuromorphic Computing" and the latest results and insights on DNA nanotechnologies, memories, RFSOI technologies and other quantum computing research

In addition, a team of CEA-Leti scientists will host a workshop on highly efficient, innovative technologies for More than Moore solutions at 5:30pm, Dec. 4, at San Francisco's Hotel Nikko. The event will highlight key results on efficient computing (FD-SOI, chiplet, memories), radio-frequency devices and innovative co-integration with sensors. See the program, presenters and invitation here: Leti Devices Workshop**.**

CEA-Leti presentation dates, times (PST) & rooms for IEDM 2022

- **Dec. 3, 3pm, Continental 4:** Elisa Vianello, CEA-Leti's Edge AI Program Manager, will present one of three scheduled tutorials at the event on "Resistive Memories-based Concepts for Neuromorphic Computing"

- **Dec. 5, morning, Grand Ballroom B:** Maud Vinet, CEA-Leti's quantum hardware program manager, plenary session: "Enabling Full Fault Tolerant Quantum Computing with Silicon-based VLSI Technologies"

- **Dec. 6, 2:20pm, Continental 6: "**Methodology for an efficient characterization flow of industrial grade Si-based qubit devices" (technical session 22.1)

- **Dec. 6, 2:45pm, Imperial A: "**High-resolution DNA Binding Kinetics Measurements with Double Gate FD-SOI Transistors" (technical session 24.2)

- **Dec. 6, 4pm, Imperial A: "**Spike-based Beamforming Using pMUT Arrays for Ultra-Low Power Gesture Recognition" (technical session 24.4)

- **Dec. 7, 12:25pm, Continental 5**: "The Role of Interface Dynamics on the Reliability Performance of BEOL Integrated Ferroelectric HfO2 Capacitors" (technical session 32.8)

- **Dec. 7, 3:15pm, Continental 6**: "3-Tier BSI CIS with 3D Sequential and Hybrid Bonding Enabling a1.4um pitch,106dB HDR Flicker Free Pixel" (technical session 37.4)

- **Dec. 7, 4:05pm, Grand Ballroom B:** "FDSOI for CryoCMOS Electronics: Device Characterization Towards Compact Model" (technical session 34.6)

Note: *Simon Deleonibus will receive the IEEE Cledo Brunetti award 2022 for more than 35 years of contribution and leadership in nanoscale CMOS device and process technologies at Thomson Semiconductors (now STMicroelectronics) and CEA-Leti.*

About CEA-Leti

Leti, a technology research institute at CEA, is a global leader in miniaturization technologies enabling smart, energy-efficient and secure solutions for industry. Founded in 1967, CEA-Leti pioneers micro- & nanotechnologies, tailoring differentiating applicative solutions for global companies, SMEs and startups. CEA-Leti tackles critical challenges in healthcare, energy and digital migration. From sensors to data processing and computing solutions, CEA-Leti's multidisciplinary teams deliver solid expertise, leveraging world-class pre-industrialization facilities. With a staff of more than 1,900, a portfolio of 3,100 patents, 11,000 sq. meters of cleanroom space and a clear IP policy, the institute is based in Grenoble, France, and has offices in Silicon Valley and Tokyo. CEA-Leti has launched 70 startups and is a member of the Carnot Institutes network. Follow us on www.leti-cea.com and @CEA_Leti.

Technological expertise

CEA has a key role in transferring scientific knowledge and innovation from research to industry. This high-level technological research is carried out in particular in electronic and integrated systems, from microscale to nanoscale. It has a wide range of industrial applications in the fields of transport, health, safety and telecommunications, contributing to the creation of high-quality and competitive products.

For more information: www.cea.fr/english