THE CHINESE UNIVERSITY OF HONG KONG
Department of Electronic Engineering
Seminar

Novel information devices and integration based on 2D materials

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Date: 29 Aug 2023 (Tuesday)
Time: 4:00 p.m.
Place: Rm 222, Ho Sin Hang Engineering Building, CUHK

Abstract

Information devices and integrated hardware based on von Neumann architecture have been unable to meet the requirements of the next generation of information technology applications. Therefore, how to break through the bottleneck caused by the separated design of von Neumann architecture has become the frontier problem of science and technology in the world.

In order to break through the bottleneck of the von Neumann architecture limit, the applicant using the new layer of semiconductor, the new regulation mechanism, the new device structure, the new integration technology, put forward to replace separation design of functional integration design von device architecture, implements and silicon CMOS compatible "- calculate integrated" neuromorphic integrated hardware. It provides a new breakthrough path for the next generation of intelligent information device integration.

Biography

Lei Ye, as a professor in school of Integrated Circuit, Huazhong University of Science and Technology. He was graduated from EE in CUHK with his Ph.D. degree. His research interest is about novel information devices and integration. In the past five years, he has published 42 corresponding or first author papers (including Science, Nat. Commun., Adv. Mater., Optica, ACS Nano, Nano Lett., Adv. Funct. Mater., Matter, and so on), and won, and won the title of National Young Talent and the "Chutian scholar " talent plan from Hubei province.

***** ALL ARE WELCOME *****

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