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A PUBLICATION OF
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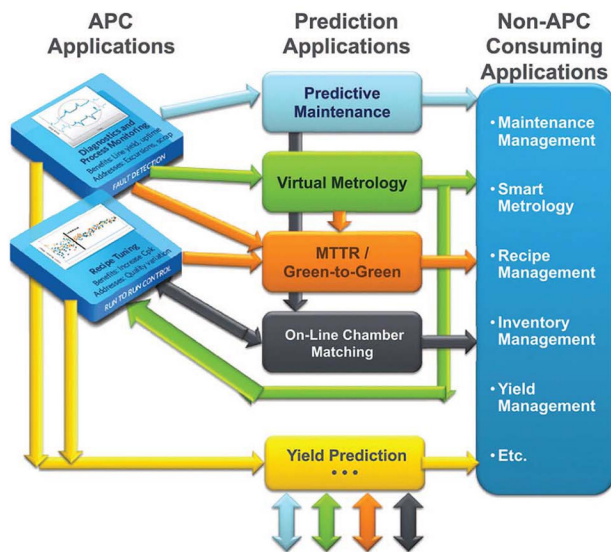
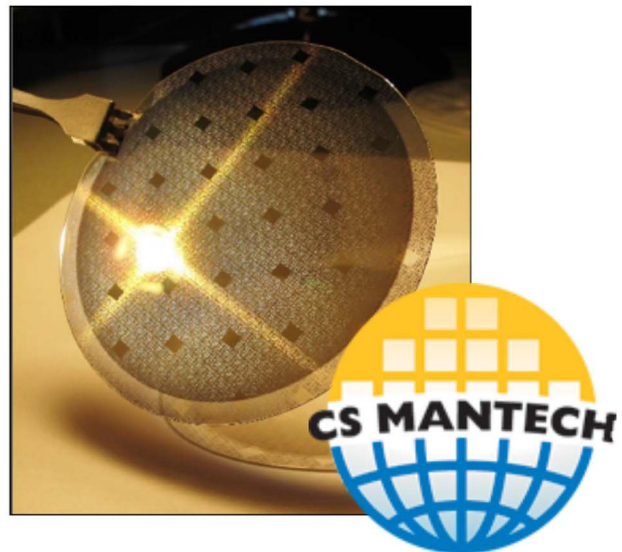


Illustration of the high level of interaction of prediction solution components with APC solutions components, indicating that prediction components are both consumers and producers of information from/to APC components. Note that only FD and R2R control APC components are listed here, however other APC components such as Equipment Performance Tracking (EPT) and Statistical Process Control (SPC) are also both producers and consumers to/from prediction applications. Yield prediction is expected to interact with all APC and other prediction applications.

SPECIAL SECTION ON THE 2016 INTERNATIONAL CONFERENCE ON COMPOUND SEMICONDUCTOR MANUFACTURING TECHNOLOGY



GaN HEMT wafer during processing.

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About the Cover (Left): The cover page image is taken from the paper “Big Data Capabilities Applied to Semiconductor Manufacturing Advanced Process Control,” by Moyne, et al. The combination of “Big Data” capabilities in the integrated factory, enterprise and supply chain are key parts of the Industry 4.0 “smart factory” culture, opening the door for significant opportunities in yield optimization and OEE improvements in commercial semiconductor device fabrication. High performance, robust, big data systems are expected to produce a new era of semiconductor manufacturing productivity, an era where APC capabilities, prediction solutions, and smart factory concepts will be pervasive.

About the Cover (Right): This is the logo for the International Compound Semiconductor Manufacturing Technology Conference with a photograph depicting GaN HEMT wafer (GaN on SiC) after processing.
