APR14-2014-020178

Abstract for an Invited Paper for the APR14 Meeting of the American Physical Society

Transfer of the CMOS Image Sensor Technology from NASA/JPL to Your Cell Phone

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The talk will focus on the invention, development and commercialization of the CMOS image sensor technology. Invented in 1993 for space applications at the Caltech NASA Jet Propulsion Lab, it has almost completely supplanted the Charge-Coupled Device (CCD, Nobel Prize in Physics, 2009) in nearly all consumer applications, as well as in automotive, medical and machine vision markets. It was an uphill fight to displace the entrenched incumbent CCD technology despite a long list of compelling advantages for the CMOS image sensor.