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Fabrication and characterization of ZnO nanostructures for sensing and photonic device applications

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Syed Muhammad Usman Ali received his B.E degree in Electronic Engineering from (DCET) NED University of Engineering & Technology Karachi, Pakistan in 1992-3 and he did MS (Electrical Engineering) in Power Electronics / Computer Systems in 2000 from NED University of Engineering & Technology Karachi, Pakistan. Syed M. Usman Ali completed his PhD studies from Department of Science and Technology (Physics, Electronics and Nanotechnology Division)

Campus Norrköping, Linköping University, SE- 601 74 Norrköping, Sweden. The objectives of his current research studies were to fabricate and characterize the miniaturized devices based on semiconductor ZnO at nanoscale for sensing and nano-photonics applications. He has designed an electronic circuit and successfully interfaced this circuit with the fabricated ZnO nanosensor for remotely monitoring the glucose levels. This design is suitable for wireless healthcare/industrial process parameters monitoring system.



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