Stanford

Rohith Soman

Research Engineer, Electrical Engineering

Bio

ACADEMIC APPOINTMENTS

- Research Engineer, Electrical Engineering

Publications

PUBLICATIONS

- **Negative capacitance overcomes Schottky-gate limits in GaN high-electron-mobility transistors.** *Science (New York, N.Y.)*
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- **Integration of top-side low-temperature diamond on AlGaN/GaN RF HEMT for device-level cooling** *APPLIED PHYSICS LETTERS*
  Soman, R., Malakoutian, M., Woo, K., Kim, J., Rodriguez, T., Martinez, R., DeJarld, M., Tahhan, M., Valliancourt, J., Chumbes, E. M., Laroche, J., Chowdhury, S.
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- **Integration of 150 nm gate length N-polar GaN MIS-HEMT devices with all-around diamond for device-level cooling** *APPLIED PHYSICS EXPRESS*
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- **Cooling future system-on-chips with diamond inter-tiers** *CELL REPORTS PHYSICAL SCIENCE*
  Malakoutian, M., Kasperovich, A., Rich, D., Woo, K., Perez, C., Soman, R., Saraswat, D., Kim, J., Noshin, M., Chen, M., Vaziri, S., Bao, X., Shih, et al
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- **Growth and mobility characterization of N-polar AlGaN channel high electron mobility transistors** *APPLIED PHYSICS LETTERS*
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- **Demonstration of N-Polar All-AlGaN High Electron Mobility Transistors With 375 mA/mm Drive Current** *IEEE ELECTRON DEVICE LETTERS*
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Zhou, X., Malakoutian, M., Soman, R., Bian, Z., Martinez, R., Chowdhury, S.
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- **Low Thermal Budget Growth of Near-Isotropic Diamond Grains for Heat Spreading in Semiconductor Devices** *ADVANCED FUNCTIONAL MATERIALS*
  Malakoutian, M., Zheng, X., Woo, K., Soman, R., Kasperovich, A., Pomeroy, J., Kuball, M., Chowdhury, S.
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